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**THE STELLAR CONTENT AND DYNAMICS OF SUPERBUBBLES
IN THE LARGE MAGELLANIC CLOUD**

by

Marion Siang-li Oey

A Dissertation Submitted to the Faculty of the
DEPARTMENT OF ASTRONOMY
In Partial Fulfillment of the Requirements
For the Degree of
DOCTOR OF PHILOSOPHY
In the Graduate College
THE UNIVERSITY OF ARIZONA

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DEDICATION

To my parents, Tinny and Giok Po Oey, and my brother David,
who always cause me to thrive and flourish.

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ABSTRACT

The interaction between massive stars and the ISM is a fundamental process determining the structure and composition of the ISM. This work examines the stellar content and resulting dynamics of superbubbles in the LMC.

We first show analytically that for 2 single-O star bubbles in M33, the evolution of wind power as the stars evolve is important in the bubble evolution. In a second prototype study, we find that the LMC superbubble DEM 152 shows evidence for sequential star formation, based on differing ages between the stars interior and exterior to the shell. We construct a numerical form of the standard Weaver *et al.* (1977) evolutionary model for wind-driven bubbles, and use the stellar census to compare the predicted shell evolution with the observed kinematics. There is a substantial discrepancy: shell's observed expansion velocity too large relative to its radius.

I then find that the CMDs of the associations within 7 LMC superbubbles and 5 classical H II regions are indistinguishable. The HRDs, constructed with spectral types for 6 superbubble clusters, also appear similar to those in classical H II regions, implying that the shell formation timescale is shorter than the cluster evolutionary timescale. The stellar winds of the 1–2 most massive stars must therefore dominate the shell formation. The star-forming events for the superbubble associations are also no more extended in duration than that of other OB associations. The IMF slopes appear normal.

Numerical modeling of the 6 superbubbles shows results falling into two distinct categories: “high-velocity” objects showing anomalous kinematics like DEM 152 and “low-velocity” objects which appear fairly consistent with the model. X-ray evidence suggests that the high-velocity objects have been accelerated by

SNR impacts. Results for both categories imply an overestimate in the growth rate equivalent to an effective input power of up to an order of magnitude too large. I find that the superbubbles are likely to be struck and “burst” by such SNR impacts if the prior stellar wind power is $\log L_w \lesssim 37.8 \text{ erg s}^{-1}$. The interior coronal gas is then expelled by the pressure differential with the environment, which could greatly enhance the dispersal and distribution of the hot ionized medium. A minority of superbubbles with stellar wind power above the threshold are more likely to grow to the sizes of supergiant shells.

Chapter 1

INTRODUCTION

1. Background

The strong stellar winds and supernovae of the most massive stars dominate the energy transfer from the stellar to the gaseous component of normal galaxies. This interaction is therefore a fundamental process determining the structure and composition of the interstellar medium (ISM), and driving star formation and galaxy evolution. Hence, the shells and bubbles that are the obvious manifestation of this phenomenon are key in understanding these processes.

Studies of 100-pc superbubbles and larger scale supergiant shells have hitherto been hindered by the lack of data on the parent stellar populations. Do ordinary OB associations generate superbubbles, or do unusual circumstances in star formation cause these dramatic nebular morphologies? How do superbubbles evolve, and what is the role of supernova (SN) explosions? Is the standard Weaver *et al.* (1977) model applicable, as we have assumed for 20 years, or are modifications necessary? What role do superbubbles play in the structure of the ISM? These are all questions that this work aims to address.

Although superbubbles have been studied kinematically for over a decade (*e.g.*, Georgelin *et al.* 1983; Meaburn *et al.* 1984), dynamical studies of these objects have been hampered by the lack of data on the parent OB associations. However, with the advent of CCD detectors, the stellar census within these massive star clusters has recently become quite accessible (*e.g.*, Massey *et al.* 1989a, b). Detailed studies of the resident massive stars can yield insight not only on the nature of the stellar population itself, but can also provide important constraints on the stellar wind and SN power input to the superbubbles. This work therefore examines the stellar content of superbubbles in the nearby Large Magellanic Cloud (LMC), which offers a clear view of both the nebular and stellar properties, free of the obscuration and distance uncertainties that plague such studies in the Galaxy.

2. Organization of This Work

This work begins with two prototype studies before undertaking the full-scale investigation of superbubbles. The first study examines two single-O star bubbles in the nearby galaxy M33. The nebular properties are compared to those predicted by the standard Weaver model, based on the inferred input wind power that is constrained by the stellar spectral types. Since these stars are on the H-burning main-sequence, the evolution of the stellar wind power can be approximated by a power law, and analytic formulations of the Weaver model are applied. This phase of the study is a collaborative effort with Philip Massey (NOAO), who provides the nebular images and stellar photometric data, and who classifies the stars and provides the relevant stellar parameters. My role is to assist in obtaining the spectroscopic data, and to apply the derived stellar parameters to the Weaver model and compare the observed nebular properties with the predictions.

Isolated massive stars are very rare, however, so the most common type of shells are the superbubbles found around ordinary OB associations. The next phase of the project consists of an analogous examination of an individual superbubble in the LMC, DEM 152. The H-R diagram of the enclosed association, LH 47/48, is constructed from *UBV* photometry and spectral classifications. As in the previous study, the masses inferred from the H-R diagram constrain the input wind power $L_w(t)$. However, the function of $L_w(t)$ is no longer simple with the presence of numerous stars and possible SNe. Hence, I construct a numerical version of the Weaver model that can accommodate any function of $L_w(t)$. The initial mass function of LH 47/48, the star formation history, and the superbubble dynamics are then examined. Once again, this study is a collaboration with Philip Massey, who provides all the stellar data, and who constructs the H-R diagram and initial mass function. My role was to examine the star formation history, construct the superbubble code, and apply the code to the stellar and nebular data.

The remainder of the project is entirely my own work. I then apply the same methods to a larger sample of superbubbles. *UBV* photometry was obtained for 7 superbubbles and 5 comparison classical H II regions. I compare the color-magnitude diagrams of these two morphologically distinct types of nebulae. H-R diagrams of the associations in 6 superbubbles and 1 classical H II region are constructed with the aid of spectral classifications. I then examine the initial mass functions and star formation histories, comparing the superbubble populations to the OB associations in classical H II regions.

I then apply the numerical version of the Weaver model to the 6 superbubbles, constraining the input $L_w(t)$ by the observed stellar population. X-ray and optical data provide additional insight on the patterns in the dynamics of the sample.

Finally, I investigate some consequences of the results in terms of interstellar shell structures and the hot phase of the ISM.

Chapter 2

PRESENT STUDY

The methods, results, and conclusions of this study are presented in the papers appended to this dissertation. The following is a summary of the most important findings in these papers.

1. Appendix A: O Star Giant Bubbles in M33

We have studied two remarkable, giant (130 pc diameter) H α bubble nebulae in M33, and have spectroscopically identified a single, dominant O9 star centrally located in each. We compare the nebular parameters with those predicted by the standard, analytic Weaver *et al.* (1977) model for wind-blown bubbles, taking into account the evolution of wind power from the parent stars. We show that this evolution of wind power is important in the bubble evolution. The agreement with the model is good, suggesting that these objects provide a compelling record of the effect that individual, normal OB stars have on the interstellar medium. The study of such nebulae can provide insight on the evolution of the parent star and

its winds.

2. Appendix B:

Triggered Star Formation and the Dynamics of a Superbubble in the LMC: the OB Association LH 47/48 in DEM 152

We examine the stellar population of an OB association, LH 47/48, which is associated with a superbubble H II region, DEM 152 in the N44 nebular complex of the Large Magellanic Cloud (LMC). With CCD photometry and spectroscopy of the massive stars, we find no evidence that an unusual stellar population gave rise to the shell morphology of the gas. The slope of the initial mass function (IMF), $\Gamma = -1.3 \pm 0.2$, is consistent with that of other OB associations in the LMC, and there is no significant difference in the IMF internal or external to the supershell. The inferred stellar ionizing flux is consistent with the observed nebular H α flux. We do find evidence for triggered star formation: the H-R diagram suggests an age of $\gtrsim 10$ Myr for the population interior to the bubble with more recent, $\lesssim 5$ Myr, star formation on the exterior. Using the detailed data on the stellar population, we compare a numerical form of the Weaver *et al.* (1977) evolutionary model for wind-driven bubbles with the observed shell kinematics, finding a substantial discrepancy: the observed shell radius is too small, and/or expansion velocity too large to be explained with this version of the model. We discuss possible explanations for the inconsistency.

3. Appendix C:

***UBV* Photometry of OB Associations within Superbubbles of the Large Magellanic Cloud**

This work presents *UBV* photometry of the stellar populations associated with 7 superbubble nebulae and 5 classical H II regions in the Large Magellanic Cloud. Although the nebular morphology of the superbubbles appears to be substantially evolved compared to the classical nebulae, the color-magnitude diagrams do not reveal any noticeable correlation between the resident stellar population and nebular morphology. The photometry presented here will be used in a forthcoming paper to examine further the stellar content and dynamics of these superbubbles.

4. Appendix D:

The Stellar Content of Superbubble H II Regions in the Large Magellanic Cloud

I examine the stellar population enclosed within a sample of 6 LMC superbubbles and compare these clusters with previously studied OB associations in classical H II regions. The H-R diagrams, constructed with spectral classifications of the most massive stars, do not reveal any systematic differences between OB associations resident within superbubbles and classical nebulae. The main-sequence turnoffs show stars as massive and luminous as those in classical H II regions, implying that the shell formation timescale is somewhat shorter than the cluster evolutionary timescale. The stellar winds and/or supernovae of the one or two most massive stars must therefore dominate the formation of the superbubbles. The star-forming events for the superbubble associations are also no more extended in duration than that of other OB associations. Finally, the IMF slopes are not

systematically different from those previously found. Since the OB associations within superbubbles appear normal, the shell structures must be the result of normal OB stellar influences. I also present a few spectrograms of interesting massive stars, including R67, a probable new B[e] supergiant.

5. Appendix E:

The Dynamics of Superbubbles in the Large Magellanic Cloud

Based on the stellar populations observed within this sample of LMC superbubbles, I use a numerical version of the standard Weaver *et al.* (1977) bubble model to investigate the shell dynamics. The results fall into two distinct categories corresponding to a subset of objects for which the observed expansion velocity is too large for the observed shell radius (“high-velocity” superbubbles), and a subset of objects which appears more dynamically consistent with the model (“low-velocity superbubbles”). Both subsets of objects imply an overestimate in the shell growth rate equivalent to an overestimate in input power by up to an order of magnitude. The high-velocity objects exhibit X-ray evidence of supernova activity, suggesting that the dynamical discrepancy is due to acceleration by SNR impacts.

6. Appendix F:

Bursting Superbubbles, Supergiant Shells, and the Hot Ionized Medium

The previous work suggests that impacts by supernova blastwaves frequently disrupt the superbubbles generated by massive star winds. I find that for a superbubble to survive the first SN explosions typically requires input wind power

of $\log L_w \sim 37.8 \text{ erg s}^{-1}$, which corresponds roughly to a radius $R_U \sim 60 - 70 \text{ pc}$. Superbubbles with radii $< R_U$ are therefore likely to be disrupted if struck by an internal SNR, while larger ones are more likely to evolve into supergiant shells with radii of $\gtrsim$ a few hundred pc. This threshold radius is consistent with the observed size distribution of shell structures in the LMC. For superbubbles that are burst by SNR impacts, the interior coronal gas is ejected upon disruption by the pressure differential with the environment. This may provide an important mechanism for high-efficiency dispersal and networking of the hot ionized medium.

Appendix A

O STAR GIANT BUBBLES IN M33

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O STAR GIANT BUBBLES IN M33^{1,2}

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ABSTRACT

We have studied two remarkable, giant (130 pc diameter) H α bubble nebulae in M33, and have spectroscopically identified a single, dominant O9 star centrally located in each. We compare the nebular parameters with those predicted by analytical models of wind-blown bubbles, taking into account the evolution of wind power from the parent stars. The agreement is good, suggesting that these objects provide a compelling record of the effect that individual, normal OB stars have on the interstellar medium. The study of such nebulae can provide insight on the evolution of the parent star and its winds.

Subject headings: ISM: bubbles — galaxies: individual (M33) — stars: early-type — stars: mass loss

1. INTRODUCTION

It has long been recognized that massive stars inject enormous amounts of energy into the interstellar medium (ISM) through strong stellar winds. The winds of Wolf-Rayet (W-R) stars have velocities of 1000–4000 km s⁻¹ with mass loss rates of $\dot{M} \sim 10^{-4}$ to $10^{-3} M_{\odot} \text{ yr}^{-1}$ (e.g., Conti, 1988); luminous blue variable stars have similar mass-loss rates (e.g., Wolf 1992). The action of the winds is manifested in the bubble nebulae often found around W-R and other evolved stars (e.g., Chu 1992). By the same token, main-sequence O and B stars are also well known to have strong stellar winds, but with lower mass-loss rates in the range of $\dot{M} \sim 10^{-5}$ to $10^{-6} M_{\odot} \text{ yr}^{-1}$, and wind velocities of ~ 1000 – 3000 km s⁻¹ (e.g., Garmany 1988). However, due to the much longer lifespan of the main-sequence evolutionary phase, normal O and B stars are expected to contribute as much energy to the ISM as the W-R phase (Leitherer, Robert, & Drissen 1992).

The effect of main-sequence OB winds on the ISM is not as readily apparent as that of W-R stars. There are a handful of observed bubble nebulae around individual O stars (Lozinskaya 1982), but these either have very small dimensions (e.g., NGC 7635), or are large and amorphous (e.g., α Cam). Giant (50–200 pc) H α superbubbles are usually related to OB associations, which are thought to give rise to the bubble structure through the action of stellar winds and supernovae (e.g., Weaver et al. 1977; Mac Low & McCray 1988). However, the individual effects of these components are unclear, since supernovae will quickly affect the energetics. Understanding of the physical nature of these objects remains sketchy because evaluation of their stellar contents is often difficult, and the effects of stellar multiplicity complicate interpretation of the gas dynamics and morphology.

2. OBSERVATIONS

With the exception of the Milky Way (e.g., Saken et al. 1992), all studies of such superbubbles until now have examined objects in irregular galaxies with turbulent and complex ISM (e.g., Meaburn 1980; Rosado 1986). In contrast, the nearby Local Group Sc galaxy M33 offers the advantage of a more uniform, better understood environment in which to study these objects. The presence of H α bubble-like structures has already been noted in M33 by Courtès et al. (1987). With the KPNO 0.6 m Burrell Schmidt telescope, P. M., T. Armandroff, and C. Neese obtained two wide-field (20 arcmin²) H α CCD images covering most of M33 on the night of 1988 October 11. These images obtained with the fast f -ratio of the Schmidt revealed a wealth of structural detail in a 20 minute exposure, being somewhat deeper than the Courtès et al. H α survey conducted on the 6 m Soviet telescope. The scale of the H α images is 1.75 pixel⁻¹, which, for an assumed distance to M33 of 0.84 Mpc (Freedman, Wilson, & Madore 1991), corresponds to 6.0 pc pixel⁻¹. On the eastern edge of the galaxy, we have identified two striking nebulae which are nearly identical and almost perfectly spherical, situated close together at the large galactocentric radii of 6.6 and 6.9 kpc, respectively (Fig. 1 [Pl. 19]).

These correspond to the nebulae Z362 and Z364 in the Courtès et al. H α survey. Remarkably, each of these nebulae measures ~ 130 pc in diameter, which is larger than typically observed around individual stars by roughly a factor of 4 (Chu 1992)! For comparison, the diameters of Wolf-Rayet ring nebulae in M33 identified by Drissen, Shara, & Moffat (1991) range from 10 to 40 pc in size.

We determined the sizes and shell thicknesses (ΔR) by computing radial profiles of the bubbles. ΔR is the FWHM of the observed shell profile, and the shell radius R , corresponds to the observed outer edge of the shell. Table 1 lists the position, size, and apparent ΔR of the bubbles, with uncertainties of about 15% and 25% in R , and ΔR , respectively. Since the Schmidt image is not of photometric quality, we measured the H α surface brightnesses of the nebulae by calibrating them with those of other H II regions in the same CCD frame. Using nine H II regions from Viallefond & Goss (1986), we derive the values of 9.6 and 9.8×10^{-17} ergs s⁻¹ cm⁻² for Z362 and

¹ Based in part on observations obtained with the Multiple Mirror Telescope, a facility operated jointly by the Smithsonian Institution and the University of Arizona.

² Based in part on observations made with the Burrell Schmidt telescope of the Warner and Swasey Observatory, Case Western Reserve University.

³ NOAO is operated by the Association of Universities for Research in Astronomy, Inc., under contract with the National Science Foundation.

No. 2, 1994

O STAR GIANT BUBBLES IN M33

with radiative outer shock (Weaver et al. 1977; Koo & McKee 1992). The stellar wind mechanical luminosity is given by

$$L_w = \frac{1}{2} \dot{M} V_\infty^2, \quad (1)$$

where $\dot{M}$ is the stellar mass-loss rate and V_∞ is the terminal velocity. For a changing wind luminosity where L_w may be parameterized as a power law in time,

$$L_w(t) = L_1 t^{\eta_{1w}}, \quad (2)$$

the growth of the bubble may be closely represented by a Sedov-Taylor-like, self-similar relation of the form $R_s \propto t^r$, as is the case for constant L_w . This corresponds to Case VII.A.2 in the review by Ostriker & McKee (1988), and we refer the reader to that work for the complete derivation of the expressions that follow.

We assume a uniform ambient density, ρ_0 , which implies a density power of $k_\rho = 0$ in Ostriker & McKee's notation. Following their equations (7.8a), (7.8c), and (7.9), we have for the growth of the outer shell radius:

$$R_s(t) = R_1(1) \left[\frac{\xi \Gamma L_w(1)}{\eta_{1w} \rho_0 R_1(1)^5} \right]^{1/3} t^r, \quad (3)$$

where the power-law exponent for R_s is related to that of the energy by

$$r = (2 + \eta_{1w})/5. \quad (4)$$

The input wind power at the fiducial radius $R_1(1)$ is

$$L_w(1) = L_1^{1/(2+\eta_{1w})} \left[\frac{\eta_{1w} \rho_0 R_1(1)^5}{\xi \Gamma} \right]^{(2+\eta_{1w})/(2+\eta_{1w})}. \quad (5)$$

For a uniform medium, the dimensionless similarity variable, ξ , given by their equation (7.17) becomes

$$\xi = \frac{15}{2\pi(2 + 3\eta_{1w} + \eta_{1s}^2)}. \quad (6)$$

Finally, the fraction of input energy retained by the bubble shell, Γ , becomes

$$\Gamma = \left(1 + \frac{2\pi\xi\eta^3}{\eta_{1w}} \right)^{-1}. \quad (7)$$

For a given power law of $L_w(t)$ (eq. [2]), we may now analytically follow the evolution of the bubble's outer shell.

We estimated $L_w(t)$ for the observed stars as follows. Maeder's (1990) evolutionary tracks provide a series of 13 grid points in the main-sequence evolution for 25, 40, and 60 $M_\odot$ stars, at which various stellar parameters are tabulated. For consistency, we adopt the mass-loss rate $\dot{M}$ given in Maeder's tables, since the evolutionary tracks are sensitive to the adopted $\dot{M}$. These values are parameterizations from the compilation of mass-loss rates by de Jager et al. (1988). Using the expression for escape velocity, V_{esc} , from Howarth & Prinja (1989, eq. [10]), and their correlation for V_∞/V_{esc} (their eq. [11]), we computed V_∞ and thereby L_w (eq. [1]) for each point in the three evolutionary tracks. In Figure 3 we show the presumed change in $\log L_w$ over the main-sequence stage, with different symbols denoting the different stellar masses.

However, it is apparent from Figure 3 that $L_w(t)$ tends to steepen beyond a simple, single-slope power law. R_s can therefore be more dependent on the most recent values of L_w than

FIG. 3.— $L_w(t)$ for the stellar models, with mass denoted by different symbols. The lines show the adopted power-law fits for each model (see text); solid lines indicate $Z = \frac{1}{2}Z_\odot$, and dashed lines indicate $Z = Z_\odot$. The inferred bubble age, t_{bub} , is indicated by the vertical tick marks; for 25 $M_\odot$, the ticks correspond to t_{bub} . The dotted line segment shows a slope of $\eta_{1w} = 3$ (see text, § 4).

its past history. Hence it is important to find a power law which represents the evolution of L_w at times up to, and near, the current age of the bubble. Each fit of the power-law η_{1w} was therefore tested by running the model for R_s (eq. [3]) and inferring an age for the observed radius of 66 pc. If the fitted power, η_{1w} , did not correspond well to $L_w(t)$ for the derived age, the fit was adjusted. These power-law fits to $L_w(t)$ are shown by the lines in Figure 3, and the model-derived ages of the observed shells ($R_s = 66$ pc) are noted by the tick marks on the fit. The age/fit correspondence is fairly robust, since the primary driver of R_s is the total integrated input energy, rather than the exact value of η_{1w} . The solid lines represent fits to $L_w(t)$ at $\frac{1}{2}Z_\odot$, and the dotted lines are derived for $Z = Z_\odot$, using the appropriate Maeder tracks. We note that the 25 $M_\odot$ models stall, as described below, before reaching the observed radius; the ticks on those models therefore represent the age at which these bubbles stall.

The resulting bubble growth is depicted in Figure 4 for the three different stellar masses. We assume an ambient density of $n_0 = 0.3 \text{ cm}^{-3}$ for neutral hydrogen from Deul & den Hartog (1990) as described above, and the line type corresponds to metallicity as in Figure 3. The $Z_\odot$ models use $\mu = 1.29m_H$. Note that one cannot make valid comparisons between the models at early t , due to the changing power, η_{1w} , as just described.

The bubble evolution is sensitive to the assumed ambient density and pressure. In Figure 5 we show the growth of the bubbles for 40 and 25 $M_\odot$ stars, assuming $n_0 = 0.1, 0.3$, and 0.5 cm^{-3} . We make the approximation that the growth stalls due to ambient pressure confinement if the shell velocity $V_s \sim C_0$, where C_0 is the ambient isothermal sound speed. The Ström-gren radii R_0 of the observed stars are both substantially larger than the observed bubble radii for $n_0 = 0.3 \text{ cm}^{-3}$ (Table 1), so it is probable that both shells are expanding into an ionized ambient medium, corresponding to $C_0 \approx 10 \text{ km s}^{-1}$.

It is apparent from Figure 5 that the maximum possible radius is especially sensitive to both factors, n_0 and C_0 , for $M \lesssim 25 M_\odot$, where stalling due to ambient pressure becomes

FIG. 4.—Evolution of $R_b(t)$ for the models, labeled by the stellar mass in $M_\odot$. Solid lines indicate $Z = \frac{1}{2}Z_\odot$, and dashed lines indicate $Z = Z_\odot$. The dotted line shows the observed bubble radius of 66 pc.

important. To demonstrate this sensitivity to the ambient pressure, Figure 6 shows the projected unimpeded deceleration of the shell compared to the assumed $C_0 = 10 \text{ km s}^{-1}$, where

$$V_s = \frac{dR_s}{dt} = \frac{R\eta}{t}. \quad (8)$$

We show $V_s(t)$ for the $25 M_\odot$ model at the same three ambient densities as in Figure 5. It is apparent that a change in C_0 of 10% can affect the stall time and radius by a considerably larger factor. We also caution that the similarity relation (eq. [3]) breaks down as the shell velocity $V_s \rightarrow C_0$, introducing additional uncertainty in the bubble evolution at that stage. In reality, $V_s(t)$ would probably slow near this point, although the shell would not truly "stall"; despite the dissipation of the outer shock, the shell would probably continue some expansion subsonically. The values for maximum size in these cases are therefore somewhat uncertain.

It is also interesting to compare surmised changes in L_∞ as a

FIG. 5.—Evolution of $R_b(t)$ for 40 and $25 M_\odot$, at $n_0 = 0.1, 0.3$, and 0.5 cm^{-3} as labeled on the $40 M_\odot$ models; the corresponding $25 M_\odot$ models follow the same sense. The dotted line again indicates the observed radius of 66 pc.

FIG. 6.— $V_s(t)$ for the $25 M_\odot$ models at the number densities labeled (cm^{-3}). These models do not assume pressure confinement at $V_s = C_0 = 10 \text{ km s}^{-1}$ (dotted line).

function of metallicity Z , among the models and observed bubbles. The reduced line-blanketing in metal-poor stars has been presumed to imply lower-mass-loss rates and wind velocities, phenomena which are supported by observations of OB stars in the Magellanic Clouds (Garmany & Conti 1985). Maeder's tracks assume a scaling of $\dot{M}(Z)/\dot{M}(Z_\odot) = (Z/Z_\odot)^{0.5}$ from the solar values. Figures 3 and 4 show the $Z_\odot$ models (dashed lines) alongside the $\frac{1}{2}Z_\odot$ set. The $Z_\odot$ models naturally predict substantially larger maximum sizes.

To make further comparison with our observations, we estimated the shell thickness and emission measure for the models. Following Mac Low et al. (1991), we computed the thickness ΔR as the ratio of the surface and volume densities, Σ/ρ_s , in the shell, where Σ is determined by the swept-up mass and surface area. The shell volume density is $\rho_s = \mu_s n_s$, where n_s is the shell number density, which can be estimated from thermal pressure consideration as $\rho_0 V_s^2/kT$. For the ionized shell, $\mu_s(\frac{1}{2}Z_\odot) = 0.64m_H$, $\mu_s(Z_\odot) = 0.67m_H$, and $T = 10,000 \text{ K}$. The emission measure through the center of the bubble, EM_0 , is then simply $2\Delta R n_s^2$. Likewise, EM_{rim} is by geometric pathlength $2n_s^2[\Delta R(2R_s - \Delta R)]^{1/2}$. The emission measures were then computed for each of the models we ran.

4. DISCUSSION

In Table 2 we tabulate various quantities estimated from the models. The stellar model and input power slope η_{in} (eq. [2]) are listed in the first two columns. Column (3) gives the radius at which the bubble stalls, whether due to the end of the stellar main-sequence phase or to ambient pressure (we are not concerned with post-main-sequence growth). The predicted bubble age at the observed $R_s = 66 \text{ pc}$ is provided in column (4). From Maeder's (1990) evolutionary tracks, columns (5) and (7) list the age at which the star is projected to have spectral type O9 ($\log T_{eff} = 4.52$), and the length of the main-sequence phase, respectively. The bubble stall time is given in column (6), and the last two columns list ΔR at $R_s = 66 \text{ pc}$, and corresponding EM_{rim} . All models assume $n_0 = 0.3 \text{ cm}^{-3}$ and $Z = \frac{1}{2}Z_\odot$ unless otherwise noted.

Table 2, along with Figures 4 and 5, demonstrates that for reasonable parameters, the observed nebular size of 66 pc is

TABLE 2
ANALYTICAL MODELS

M_* ($M_\odot$) (1)	η_{10} (2)	R_{shell} (3)	t_{sh} (4)	t_{O9} (5)	t_{shell} (6)	t_{rm} (7)	ΔR_{sh} (8)	EM_{rim} (9)
60	3.17	75	3.3	3.3	3.7	3.7	7	71
40	2.92	68	4.6	4.3	4.7	4.7	15	21
25	1.53	31	...	6.1	2.1	7.0	(13)	4
40 ($Z_\odot$)	2.06	82	3.5	3.8	4.5	4.5	12	31
25 ($Z_\odot$)	1.92	51	...	5.0	3.9	6.6	(21)	6

NOTE.—Distances are in pc, times in Myr, and EM_{rim} in pc cm^{-6} . The first three models correspond to $\frac{1}{2}Z_\odot$ metallicity, and the last two are at $Z_\odot$. ΔR_{sh} in parentheses are the values at R_{shell} .

gratifying consistent with the observed spectral type of O9 I for Z364. The 40 $M_\odot$ model provides a remarkable consistency between the predicted size, age, and shell thickness, which are corroborated by the observationally inferred stellar mass, stellar age, and nebular thickness. However, the predicted emission measure is low. This may imply a slightly higher ambient density; indeed, the model for $n_0 = 0.5 \text{ cm}^{-3}$ predicts $EM_{\text{rim}} = 45 \text{ pc cm}^{-6}$, in better agreement with the observations, although such a model does not quite attain the observed shell size (Fig. 5). Within the errors in the observed parameters, the model predictions are in excellent agreement with the observations.

We also emphasize the importance of considering the stellar wind evolution. As can be seen from Figure 3, assuming a wind luminosity L_w for an O9 I star over the entire stellar lifetime will substantially overestimate the input energy. We also ran a 40 $M_\odot$ model with a constant $L_w = 2.38 \times 10^{36} \text{ ergs s}^{-1}$, the value of L_w at the O9 stage. This produced a bubble age for $R_s = 66 \text{ pc}$ of only 2.3 Myr, half of that predicted in Table 2 using the more realistic representation of the stellar wind. In addition, the lower age would clearly be less compatible with the projected age of the O9 stage.

The consistency between the observations and the models is somewhat less for Z362. The observed shell size is barely within the range predicted by the 25 and 40 $M_\odot$, $n_0 = 0.3 \text{ cm}^{-3}$ models, and the EM_{rim} is disconcertingly low. The corresponding $n_0 = 0.1$ models allow an appropriate size and ΔR , but $EM_{\text{rim}} < 5 \text{ pc cm}^{-6}$. Taking the models at face value, Z364 should have a higher surface brightness than Z362 by perhaps a factor of 2, but this does not appear to be the case in Figure 1 or Table 1. The $Z = Z_\odot$ models generate more compatible values, particularly R_s and ΔR , although we caution that this is likely to be a parameterization effect in L_w for the evolutionary tracks, and not necessarily a true metallicity effect. With more refined data and modeling of such nebulae, it may be possible to pose greater constraints on our knowledge of $L_w(Z)$. This would have useful applications for chemical enrichment and galaxian evolution.

A 25 $M_\odot$, O9 star is projected by the evolutionary track to be much older than the bubble stall time for this model, and we note that in Figure 1 the shell appears more diffuse and thicker than that in Z364. In Table 1 we estimate that $\Delta R = 21 \text{ pc}$ for Z362, compared to 10 pc for Z364. It is probable that a stalled bubble would have a thicker shell due to the pressure of the ionized gas. However, in that case, although the path length through the shell increases slightly, EM_{rim} would decrease from the value it has when the bubble first stalls. This is due to the decrease in shell density as the shell material is redistributed

into a larger volume. The emission measure is inversely dependent on the square of the shell volume:

$$EM_{\text{rim}} = \frac{2[\Delta R(2R_s - \Delta R)]^{1/2} N^2}{\{ \frac{4}{3}\pi[R_s^3 - (R_s - \Delta R)^3] \}^2}, \quad (9)$$

where N is the total number of particles in the shell. For $\Delta r = \Delta R/R_s$,

$$EM_{\text{rim}} = \frac{9}{8\pi^2} \frac{(2\Delta r - \Delta r^2)^{1/2} N^2}{[1 - (1 - \Delta r)^3]^2} \cdot \frac{1}{R_s^2} \quad (10)$$

From this relation, the decrease in $EM_{\text{rim}}(\Delta r)$ for a stalled, thickening shell is roughly a factor of 2 for a similar increase in Δr . The unexpectedly high EM_{rim} of Z362 therefore does not support a stalled, thickening shell.

It is perhaps more likely that our approximation for the stalling condition is at fault. As demonstrated in Figure 6, if C_0 is reduced by a few km s^{-1} , the bubble growth of the 25 $M_\odot$ model may not be impeded at all. This produces the observed radius of 66 pc at $t_{\text{sh}} = 6.2 \text{ Myr}$ for the usual $n_0 = 0.3 \text{ cm}^{-3}$, in good agreement with the expected O9 age of $t_{\text{O9}} = 6.1 \text{ Myr}$.

With the current uncertainties, we do not believe there is a significant discrepancy between the observations and models for Z362. The most compelling inconsistency is the observed similarity in size and emission measures between the two nebulae, which contrasts with the rather different stellar luminosities. However, the thicker shell of Z362 does suggest a weaker shock and hence, weaker stellar wind. Furthermore, we note that the approximation for ΔR , and hence EM_{rim} , assumes a shell of constant thickness, which would not be the case in real objects (Różyczka 1985). Our values therefore represent upper limits on ΔR and lower limits on EM_{rim} . A more detailed simulation would improve the predictions for these quantities. It is also possible that the parameterization of $L_w(t)$ may not quite be correct for the 25 $M_\odot$ model, and certainly there is an intrinsic dispersion in the stellar wind power (eq. [1]) between individual stars of the same spectral type and luminosity class (e.g., Howarth & Prinja 1989). A deeper, higher resolution image and nebular kinematic data would help resolve this issue, as would improved observations of the stellar parameters. But with the current data, we believe there is a remarkable consistency between the observed nebular and stellar parameters for both Z362 and Z364.

Since these nebulae appear to be such compelling examples of the effects of normal O star winds, why are other large, single O star bubbles so exceedingly rare? Four obvious factors would be (1) the scarcity of single, isolated, nonrunaway O stars; (2) the constraint of finding a nebula that has had enough time to grow to large radii before the star's ionizing lifetime ends; (3) the requirement that the ambient medium be fairly uniform and rarefied; and (4) an emission measure high enough to be detected in current H α surveys. While the combination of these factors already seems quite daunting, we suggest a fourth as well. The strikingly circular shape of the two nebulae in Figure 1 suggests that dynamical instabilities have not become a significant factor in their evolution. We consider two instabilities in particular: Rayleigh-Taylor and differential shearing due to galaxian rotation.

We note in Table 2 that for the more massive stars, $\eta_{10} \sim 3$, the value at which the shell expansion would begin accelerating (e.g., Różyczka & Tenorio-Tagle 1985; Weaver et al. 1977). In an accelerating case, Rayleigh-Taylor instabilities would set in and distort the bubble-like appearance, although

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it is unclear what value of η_{in} would cause this to happen on a noticeable timescale. Numerical simulations are necessary to pin down the details of bubble disintegration. If the surmised evolution of $L_w(t)$ shown in Figure 3 is reasonably correct, η_{in} increases with time, and even the $25 M_\odot$ model develops $\eta_{in} > 3$ in the last Myr on the main sequence. Depending on the form of $\eta_{in}(t)$, the effective observable period for "perfect" nebulae may be only a fraction of the already short main-sequence lifetime for the more massive stars. The dotted line segment in Figure 3 shows a slope corresponding to $\eta_{in} = 3$ for comparison.

To determine the effect of differential shearing on the bubbles, we assume a circular velocity of 80 km s^{-1} , found by Zaritsky et al. (1989) for H II regions at similar galactocentric radii. Using the most conservative parameters for our objects, $t_{O9} (25 M_\odot) = 6.1 \text{ Myr}$ and a galactocentric distance of 6.6 kpc , the offset due to shearing between the inner and outer edges of the bubble is $< 10\%$ of the bubble diameter. Hence differential shearing is not expected to be an important effect at these large galactocentric distances, which is again confirmed in the nebular uniformity. However, if these giant bubbles had been located several times nearer to the nucleus, shearing could have caused significant distortion.

Several other giant O star nebulae have been previously reported (Lozinskaya 1982), but their more irregular morphology has left open the possibility of supernova or more complex origin, similar to the more familiar superbubbles created by multiple OB stars and supernovae. However, it is likely that they are also examples of O star bubbles which have developed instabilities or are located in an irregular ambient medium, situations which are much more likely to be observed. The large sizes of our objects also agree well with the radii of H I shells around individual O stars observed by Cappa de

Nicolau, Niemela, & Benaglia (1993). Since these sizes are considerably larger than those of typical W-R bubbles as noted earlier, this supports the hypothesis that the latter consist largely of stellar ejecta, as suggested by, e.g., Vilchez & Esteban (1992). Dopita et al. (1993) have found W-R stars in the LMC showing ejecta shells within progenitor O star bubbles, and Niemela & Cappa de Nicolau (1991) report evidence for presumed O star voids around Galactic W-R stars.

The two examples of giant O star bubbles presented here are remarkable confirmation of the action of normal O star winds. When the evolution of the input stellar wind is taken into account, both the striking morphology and observed nebular parameters are in agreement with the well-known observations of O star winds. These nebulae confirm that the inferred evolution of the stellar winds appears to be consistent over the evolution of the parent star to within current knowledge. Higher resolution images and kinematic data on the nebular expansion and stellar winds would help tighten the constraints imposed here, as would direct measurement of the wind parameters themselves. With deep H α imaging, the discovery of more examples of these objects could provide useful information on the changes in stellar winds and evolution of massive stars as a function of mass, age, metallicity, and other parameters.

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FIG. 1.—H α image subsection, 10' on each side, with the nebulae Z362 and Z364

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Appendix B

TRIGGERED STAR FORMATION AND THE DYNAMICS OF A SUPERBUBBLE IN THE LMC: THE OB ASSOCIATION LH 47 / 48 IN DEM 152

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**TRIGGERED STAR FORMATION AND THE DYNAMICS OF A SUPERBUBBLE
IN THE LMC: THE OB ASSOCIATION LH47/48 IN DEM 152**

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Triggered Star Formation and the Dynamics of a Superbubble in the LMC: the OB Association LH 47/48 in DEM 152

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ABSTRACT

We examine the stellar population of an OB association, LH 47/48, which is associated with a superbubble H II region, DEM 152 in the N44 nebular complex of the Large Magellanic Cloud. With CCD photometry and spectroscopy of the massive stars, we find no evidence that an unusual stellar population gave rise to the shell morphology of the gas. The slope of the initial mass function, $\Gamma = -1.3 \pm 0.2$, is consistent with that of other OB associations in the LMC, and there is no significant difference in the IMF internal or external to the supershell. The inferred stellar ionizing flux is consistent with the observed nebular $H\alpha$ flux. We do find evidence for triggered star formation: the H-R diagram suggests an age of $\gtrsim 10$ Myr for the population interior to the bubble with more recent, $\lesssim 5$ Myr, star formation on the exterior. Using the detailed data on the stellar population, we compare a numerical form of the Weaver *et al.* (1977) evolutionary model for wind-driven bubbles with the observed shell kinematics, finding a substantial discrepancy: the observed shell radius is too small, and/or expansion velocity too large to be explained with this version of the model. We discuss possible explanations for the inconsistency.

1. Introduction

Massive stars are the focal point of H II regions, being their source of ionization and the manifestation of current star formation. Due to their strong stellar winds and supernova explosions, these, more than any other stars, return energy to the interstellar medium (ISM). This process takes place on scales ranging from individual stellar wind bubbles (*e.g.*, Oey & Massey 1994; Chu 1992) to galaxian superwinds (*e.g.*, Heckman *et al.* 1990). A comprehensive understanding of the effect of massive stars on the ISM must therefore entail a detailed investigation of the stellar populations involved. Although many studies have addressed the phenomenon of superbubble nebulae around OB associations (*e.g.*, Georgelin *et al.* 1983; Braunsfurth & Feitzinger 1983), few have examined the shell dynamics in light of a complete examination of the associated massive star content. Saken *et al.* (1992) have carried out the most complete study in this regard, but their work on the Galactic superbubble around Cyg OB1 was limited by obscuration, distance and membership uncertainties. We present here a detailed examination of one OB association in the beautifully unobscured LMC, and investigate how these stars affect their environment.

As early as 1964, Shapley's Constellation I in the Large Magellanic Cloud (LMC) has been recognized as a prime example for studying the evolution of star forming regions (Bok 1964). The central stellar OB association is best known by its Lucke-Hodge designation, LH 47 and 48 (Lucke & Hodge 1970), although along with the surrounding nebulosity, it is also identified as NGC 1929, 1934–37. This group of massive stars appears to be associated with the prominent superbubble in the N44 nebular complex (Henize 1956). Figure 1 shows an H α image, kindly provided by R.C. Smith, of this region. The conspicuous shell morphology of the

H II region suggests that this is an example of an older nebula that has evolved into a shell configuration due to the action of the strong stellar winds, and possible supernovae, of the central cluster. In this paper, we will be concerned only with the most prominent superbubble, which has been designated Shell 1 by Meaburn & Laspias (1991). Since the N44 region encompasses many neighboring nebulosities, we will refer to the supershell as DEM 152 (Davies *et al.* 1976), which identifies Shell 1 itself.

The DEM 152 nebular system has been the subject of several previous studies. Meaburn & Laspias (1991) provide a detailed examination of the shell kinematics and structure; Chu *et al.* (1993) examine the X-ray properties; and Hunter (1994) includes nebular emission-line measurements of this H II region. With this fine array of nebular data, the current study on the stellar population of LH 47/48 provides the corresponding stellar parameters which are largely responsible for these nebular properties. These parameters are primarily the input wind and supernova power, and emitted ionizing flux. Given how sensitively these parameters depend on the stellar mass, our detailed observations of LH 47/48 will allow us to examine the dynamics of a superbubble with unprecedented rigor.

Since the nebular morphology is markedly more evolved than that of “typical” H II regions, one might expect to see a correspondingly evolved stellar association. On the other hand, it may be that the well-defined superbubble is due to an unusual stellar population with perhaps a larger proportion of high-mass stars. This paper will provide an age for the cluster and derivation of its initial mass function to examine this possibility. Finally, it may be that the accumulation of mass in these supershells propagates a second generation of star formation, as is suggested in other LMC star-forming regions (Lortet & Testor 1988; Walborn

& Parker 1992). DEM 152 exhibits bright H II knots on the periphery of the shell, suggesting that propagating star formation might also be occurring in this system. We will examine the spatial distribution of stellar ages to investigate this possibility.

2. Observations and Data Reduction

The LH 47/48 complex was included in the *UBV* CCD photometry study of the most exciting OB associations in the LMC and SMC carried out with the CTIO 0.9-m telescope in late 1985, as described by Massey *et al.* (1989a, 1989b). The photometry obtained from that survey have been used to select the bluest stars for spectroscopy during the subsequent years. Spectral types are needed for the bluest stars for meaningful placement in the H-R diagram: the broad-band colors are degenerate for $\log T_{eff} > 4.3$, resulting in errors in the masses derived from photometry alone by factors of 2 or more (see Fig. 1 in Massey *et al.* 1995.)

The *UBV* data for LH 47 were obtained in two overlapping 2.5×4.0 arcmin fields, and for LH48 in a third field. The placement of these fields is shown in Figure 1. The imaging data were all obtained on 1985 Nov 22, and complete details of the reduction and transformation can be found in Massey *et al.* (1989a). Altogether 582 stars matched in the *U*, *B*, and *V* exposures, and these are identified in Figures 2a – c. Their photometry is given in Table 1.

The intrinsically bluest stars were then selected on the basis of the reddening-free parameter $Q = (U - B) - 0.72 \times (B - V)$, with $Q < -0.75$ and $V < 16$. These criteria roughly correspond to a B1 V, $10M_{\odot}$ star. We identify these stars separately in Figures 3a – c. These stars served as the basis for our spectroscopic

observing program, carried out with the CTIO 4-m during 1992 Dec 12–14, using the RC spectrograph and the 350×1200 Reticon #3 CCD in the blue Air-Schmidt camera. Grating “F” (632 line/mm) was used in second-order with a BG-38 blocking filter. The wavelength coverage was $\lambda\lambda 3880 - 5000$, with a 3-pixel resolution of 2.8 Å. Multiple stars were observed at the same time by rotating the slit to line up with 2–3 stars of interest. Spectral types of 62 stars were obtained in this fashion. Well after this run, and while this paper was in preparation, we discovered to our chagrin that one of the brightest blue stars (LH 47-373A) lacked a spectral type; Andy Layden kindly obtained a spectrum of this star for us in late October 1994.

The spectra were classified independently by each author; in addition, several spectra were additionally classified by C. Lang as part of a study of stars in the field and associations of the Magellanic Clouds (Massey *et al.* 1995). The spectral types were generally in excellent agreement, with a few disagreements settled by mutual inspection of the material. The precepts of Walborn & Fitzpatrick (1990) were used throughout. We list the spectral types in Table 2.

Finally, we note that one additional star in this region has a spectral type: lh48-121A in our nomenclature is the star LH48:20 in Lucke’s (1972) thesis. A photographic spectrogram obtained by Conti, Garmany, & Massey (1986) resulted in the classification “F + neb”. Is this a foreground F dwarf, or an LMC F-type supergiant? Towards this end, we measured its radial velocity using the original Conti *et al.* (1986) spectrogram, and derived a heliocentric velocity of 291 km s^{−1}, demonstrating that this star is indeed a member of the LMC, and presumably of the LH 47/48 complex as well. The line strengths of *e.g.*, Sr II $\lambda 4078$, Fe II $\lambda 4179$, and Y II $\lambda 3983$ are also characteristic of F supergiants, as compared to the spectral

atlas of Yamashita *et al.* (1977).

The bright nebular knot N44C (Figure 1) has attracted attention due to a central He II zone (Stasińska *et al.* 1986). The central star of this high-excitation nebula is included in our sample as LH 47-338. With our spectral classification of O7 V((f)), we confirm the finding by Pakull & Motch (1989) that this star is unlikely to be the source of the He II ionization. We do not see any evidence that the star is abnormal in any way.

3. The Stellar Content of LH 47/48

We can use the data presented in the preceding sections to derive the physical H-R diagram ($\log T_{eff}$ vs. M_{bol}). By overplotting this with the theoretical evolutionary tracks of Schaerer *et al.* (1993) we can then determine the stellar masses and derive the present-day-mass function (PDMF). We can also determine how coeval star formation has been in the LH 47/48 complex. To the extent that star formation of the massive stars has been fairly coeval, the PDMF can be identified with the initial mass function (IMF). The slope of the IMF has recently been determined for massive stars in the associations and field of the Magellanic Clouds (Massey *et al.* 1995), and the data on LH 47/48 can be compared to these values. However, more interesting for the present study is how the masses and ages of stars compare inside and outside of the putative wind bubble; in addition, knowledge of the stellar content of this region will be used as the input for constructing the model of the gas. These topics are the subject of §§4 and 5 below.

In addition to determining the stellar content in this section, we will also see how consistent our knowledge of the population is with the observed $H\alpha$ luminosity.

If the observed $H\alpha$ flux is greater than the sources of ionization we have identified, we might worry that we have missed hot stars in our survey. If, on the other hand, we find that the $H\alpha$ flux is smaller than that expected for the amount of ionizing radiation we expect (given the stellar content), we would be forced to conclude either that the H II region is gas-bounded rather than ionization-bounded, or that there is a line-of-sight issue involved between the gas and some of the stars. Good agreement would suggest that we can proceed with confidence.

3.1. The H-R Diagram

With the spectral types and photometry in hand, our construction of the H-R diagram (HRD) is now straightforward. We follow the procedure of Massey *et al.* (1989b, 1995) and here repeat only the salient points.

For the stars with spectral types, we adopt the conversion between spectral type and $\log T_{eff}$ and bolometric corrections (BCs) given by Chlebowski & Garmany (1991) for the O-type stars, and Humphreys & McElroy (1984) for the early B-types. The absolute visual magnitude is determined using the star's photometry, after correcting for extinction by $A_V = 3.1 \times E(B - V)$, where $E(B - V)$ is determined for each star by adopting the spectral type to intrinsic color data of FitzGerald (1970). Thus in placing a star in the HRD the formal luminosity class of the stars given in Table 2 are of only secondary importance, in that they modify the spectral-type to $\log T_{eff}$, BC, and $(B - V)_0$ conversion. This is of some importance in the Magellanic Clouds, as the absolute line strengths of Si IV and Si III determine the luminosity class for the later O-type and early-B stars, and it is this quantity which is most affected by the lower metallicity of the LMC. The spectral types are the most crucial to getting the placement in the HRD,

and these are defined in terms of the relative line ratios of different ionization states of the *same* element; *i.e.*, He II to He I for the O-type stars, and Si IV to Si III for the early B-types (Walborn & Fitzpatrick 1990). We are, of course, making the assumption that the same spectral-type to physical property correspondence holds in the lower metallicity environment of the LMC, but this is a reasonable assumption. It does, in any event, allow direct intercomparisons to be made within the LMC.

For the stars with photometry alone we used the transformation equations of Table 7 of Massey *et al.* (1995) to derive $\log T_{eff}$, $(B - V)_0$, and the BC. These equations were derived with the same calibrations as those for the spectral types conversion, and use the reddening-free parameter Q for the bluest stars to give $\log T_{eff}$ and $(B - V)_0$; the BC is then a function of $\log T_{eff}$. (Stars whose photometry suggest an unreasonable color excess have been omitted.) For stars with $Q > -0.4$ we use the mean color excess $E(B - V) = 0.11$ (found for stars with spectral types) to derive intrinsic colors.

We have adopted a true distance modulus to the LMC of 18.4, in order to be consistent with the M_V -spectral-type calibration of O and early B stars (Massey *et al.* 1995).

The resulting HRD is given in Figure 4. Stars with spectral types are shown by solid points; stars whose placement in the HRD is by photometry are shown by open circles if the errors are < 0.07 mag, and by crosses if the photometric errors are worse. Overlaid are the evolutionary tracks of Schaerer *et al.* (1993). Isochrones have been computed for these tracks by a program kindly made available by G. Meynet, and are shown by dashed lines at 2 Myr intervals. The typical errors in placement of the stars in the HRD can be judged from the error bars shown in Fig.

1 of Massey *et al.* (1995) for stars misclassified by a spectral subtype or luminosity class (for stars with spectral subtypes), and for 0.02 mag errors in the colors for stars with only photometry.

We see immediately from this diagram that most of the stars are quite young, with ages of 0–4 Myr. There is some range in ages apparent, and indeed a comparison of the HRD here with those of other LMC associations given in Massey *et al.* (1995) shows a somewhat greater age spread for the LH 47/48 complex. There are a few evolved stars of $25 \mathcal{M}_{\odot}$ despite the presence of more massive stars near the zero-age main sequence (ZAMS), which is indicated by the start of the evolutionary tracks. In particular we note the clump of stars with spectral types near $\log T_{eff} = 4.3$ and $M_{bol} = -6.5$; we will return to these stars in §4. There are a few stars at low mass and red colors; some of these lie on the red giant branch of the underlying LMC background population, whose locus can be seen in the low-mass evolutionary tracks. An examination of the color-magnitude diagram with the Galactic model of Ratnatunga & Bahcall (1985) indicates that the remaining red, low mass stars are simply foreground stars. There is one exception, the F supergiant lh48-121A, mentioned above. At lower masses ($10 \mathcal{M}_{\odot}$) we see that the stars systematically deviate to lower effective temperatures than the ZAMS; this has been observed in the other LMC associations studied by Massey *et al.* (1995), who attribute it to a problem with the evolutionary models. (Such a problem is not seen if the $Z = 0.02$ models of Maeder & Meynet 1988 are used; see Massey *et al.* 1989a, 1989b, or Hill, Madore, & Freedman 1994.)

For the stars with spectral types, we have interpolated the evolutionary models and list in Table 2 the inferred initial masses. The mass of the highest mass stars seen in LH 47/48 is not as large as seen in other OB associations of the

Clouds; either stars with mass $> 50\mathcal{M}_{\odot}$ have evolved and died, or star formation was sufficiently sparse that no such stars were produced. We address this in the following section.

3.2. The Mass Function

Having transferred the data to M_{bol} and $\log T_{eff}$, we can now interpolate the evolution models to determine the (initial) masses for the stars in the HRD. These data then give us the present-day mass-function (PDMF), the slope of which is equivalent to that of the IMF to the extent that star-formation is coeval.

We begin by simply counting the number of stars within a given mass range; for convenience, we take the evolutionary tracks plotted in Figure 4. Correcting these numbers by the size of the mass bin then yields the quantity ξ in units of number of stars per kpc^2 per unit logarithmic (base 10) mass interval, which we tabulate in Table 3.

We show the run of $\log \xi$ with mass in Figure 5. We see that the highest mass bin does look as if it has been depleted; this is consistent with our belief that the highest mass stars have evolved and are no longer present. In computing the slope of this mass function, $\Gamma = -1.3 \pm 0.2$, we omit the lowest-mass bin in Table 3 from the fit, due to incompleteness. This IMF slope is quite consistent with those of other Magellanic Cloud OB associations, which are found to be $\Gamma = -1.4 \pm 0.2$ (LH9), $\Gamma = -1.1 \pm 0.1$ (LH10), $\Gamma = -1.4 \pm 0.2$ (LH58), and $\Gamma = -1.6 \pm 0.2$ (LH117/118), as given by Massey *et al.* (1995).

3.3. Comparison with H α Luminosity

It is of interest to compare the H α luminosity with that expected given the ionizing fluxes of the stars that have been identified. For other OB associations studied in the Clouds, the results have indicated reasonable agreement (Massey *et al.* 1989a, 1989b; Parker *et al.* 1992; Garmany *et al.* 1994), suggesting that these regions are ionization bounded and that (a) most of the hot stars are physically associated, and (b) that no significant population of hot stars has been missed. We now extend this comparison to LH 47/48 and DEM 152. Massey *et al.* (1989a) discuss the predicted Lyman continuum fluxes among different stellar atmosphere models. Using $M_{b,\odot} = 4.75$ (Lang 1992), we computed stellar radii and $\log g$ for all the stars with spectral classifications. The Kurucz (1979) atmospheres as tabulated by Massey *et al.* (1989a) then predict a Lyman continuum emission rate of $2.1 \times 10^{50} \text{ s}^{-1}$, with an uncertainty of 30–40%. This tally does not include the contribution from the WN3 star, Br25, located in the SW corner of the complex (LH 47-243 in Fig. 2b; Breysacher 1981), which might add a few $\times 10^{49}$ photons s^{-1} (Schmutz *et al.* 1992, but see also Garmany *et al.* 1994 and Conti 1988).

The H α flux of the complex has been measured by Kennicutt & Hodge (1986), who find a value of $950 \pm 75 \times 10^{-12} \text{ erg cm}^{-2} \text{ s}^{-1}$. Their 11' aperture also included the adjacent regions DEM 140 and 151. Although these extended regions are substantially fainter than DEM 152, they do include the bright knot N44F (Figure 1), which was not included in our stellar fields. Our adopted distance modulus of 18.4 implies an H α luminosity of $2.6 \times 10^{38} \text{ erg s}^{-1}$. Applying an extinction of $A_{H\alpha} = 0.3 \text{ mag}$, derived from our mean $E(B - V) = 0.11$, we find a total emission rate of H α photons of $1.1 \times 10^{50} \text{ s}^{-1}$, corresponding to a Lyman continuum emission of $2.4 \times 10^{50} \text{ s}^{-1}$.

The stellar and nebular ionization values compare extremely well, also allowing for the probable contribution from the WN3 star and the ionizing star(s) in N44F. This comparison clearly suggests that the massive stars in LH 47/48 are physically associated with the DEM 152 complex.

4. Star Formation History

We can use the information on LH 47/48 to examine the star formation history of the complex, and identify the stellar population responsible for the superbubble. It has been suggested (McCray 1988; Tenorio-Tagle & Bödenheimer 1988) that the accumulation of material in supershells can induce new condensations of star formation, for example, the large LMC supershell N11 appears to be such a case (Walborn & Parker 1992). The bright knots on the periphery of DEM 152, notably N44B and part of the NE extension from the shell, DEM 156 (Figure 1), suggest a similar history. In addition, although the overall IMF of LH 47/48 is identical to that of other OB associations, there is still a chance that the IMF interior to DEM 152 is unusual, and thereby the origin of the superbubble. We will now examine each of these issues.

4.1. The Stellar Age Distribution

Figure 1 shows a concentration of nebulosity on the W edge of the shell, and indeed, correlating Figures 3a – c to Figure 1 reveals that the association LH 47 is not centered within the superbubble, but offset to the W. The strong nebulosities suggest a large concentration of gas, and the *IRAS* maps shown by Meaburn & Laspias (1991) display corresponding strong far-infrared emission, which is known

to correlate with molecular gas (Schwering & Israel 1990). Both H I (Luks & Rohlfs 1992) and CO (Israel *et al.* 1993; Cohen *et al.* 1988) surveys reveal that DEM 152 is on the edge of one of the densest aggregations of cold gas in the LMC. This denser material to the W and SW suggests two possible evolution histories for the DEM 152 superbubble. The first scenario is that star formation occurred predominantly in the center of the bubble, driving the shell into the dense material, which has essentially stalled its western expansion. The second possibility is that star formation occurred predominantly in the dense material on the W, thus forcing the shell to expand primarily eastward, into the region of lower density. The stellar age distribution will help distinguish between these two possibilities.

To compare the stellar ages inside and outside the shell, we use only stars for which we have spectral classifications. Since the theoretical and observed main sequences diverge below $10 - 15 \mathcal{M}_{\odot}$ (Massey *et al.* 1995), stars below roughly this mass will have much higher errors in their age estimates. The uncertainty is compounded by the fact that the isochrones for ages ≤ 10 Myr converge on the main sequence near these tracks (Figure 4), making the ages harder to distinguish. We therefore use only stars with $M \geq 12 \mathcal{M}_{\odot}$ in our comparison. We also omit stars located on the bubble rim itself from the comparison.

Figure 6 shows the H-R diagram of these most massive stars, with those projected to be on the interior of the superbubble denoted by open triangles, and those on the exterior with filled squares. We return to the group of stars mentioned above, around $\log T_{eff} \sim 4.3$, $M_{bol} \sim -6.5$, which correspond to roughly type B1 III. As shown in Figure 6, these stars belong to the interior population, and seem to have noticeably evolved to the right edge of the main sequence. As shown by Massey *et al.* (1995; Fig. 1c), errors in spectral classification will primarily affect a

star's position *parallel* to the main sequence, thus a perpendicular, evolutionary offset will not be substantially affected.

Figure 7 shows a comparison of stellar ages for the interior and exterior populations. The two age distributions are clearly different, with the interior apparently exhibiting fairly continuous star formation over $\gtrsim 10$ Myr, while the exterior has experienced a more recent burst within the last ~ 5 Myr. As is evident from both Figures 6 and 7, a few older stars are present in the exterior regions as well, but the majority of that population has a younger origin. While the individual stellar ages, especially among the lower-mass stars, are subject to the errors described above, the qualitative difference in the two age distributions reflects the number of evolving members on the interior seen in Figure 6. We must view this contrast with due uncertainty, but this result does suggest an actual age difference. In particular, the positions of the $\sim B1$ III stars in Figure 6 suggest that they have evolved to a significant fraction of their expected lifetime of ~ 20 Myr.

With the older population found inside the superbubble, and a younger population outside, we suggest that DEM 152 may also be an example of a supershell triggering star formation. We therefore favor the first possibility for the origin of the supershell, in which the expansion is roughly symmetrical, triggering the formation of the younger stellar population on the W side. An age estimate of 2–4 Myr for LH 47/48, based on the HRD for the entire population, provides a lower limit for the age of the superbubble. As seen in Figure 7, its actual age could be $\gtrsim 10$ Myr.

4.2. The Interior and Exterior IMF

We now compare the initial mass function of the interior population to that of the exterior. Due to the evolved state of the association, the highest mass bins have no members, so it is helpful to redistribute the stellar counts into a larger number of bins between 10 and $50 \mathcal{M}_{\odot}$. Figure 8 shows the census of the two populations binned into $\Delta \log M / \mathcal{M}_{\odot} = 0.2$. If we assume that the star formation rate is fairly constant for the two populations, we can directly compare the slopes of the two mass functions. Figure 8 demonstrates that they are indeed remarkably similar. The plotted line is not a fit to the either subset, but represents $\Gamma = -1.3$, derived above for the entire association. We conclude that the IMF for the interior of DEM 152 is normal, although noting that no stars with $M > 40 \mathcal{M}_{\odot}$ survive. We find it unlikely that the superbubble is the result of an atypical stellar mass function.

5. Superbubble Modeling

In an earlier paper (Oey & Massey 1994, Paper I), we examined the evolution of single O star bubbles in light of the stellar evolution, which dictates an increasing input wind power (L_w) as the star’s luminosity increases with age. For individual O stars, it is possible to approximate the main-sequence $L_w(t)$ as a power of time t and use the analytical “Weaver model” (Weaver *et al.* 1977; Ostriker & McKee 1988) to examine the bubble evolution. However, in the more complex situation involving numerous and evolved stars, a more sophisticated approach is needed. We therefore use a numerical version of the model, similar to one described by Weaver *et al.* , but allowing an input $L_w(t)$ of any form. Shull & Saken (1995) use a similar analysis to explore the effects of an evolving IMF in supernova-dominated shells.

5.1. The Numerical Bubble Model

For a pressure-driven bubble, Newton's laws of motion for a thin, spherical shell give

$$\frac{dR_s}{dt} = v_s \quad (1)$$

and

$$\frac{d}{dt}(M_s v_s) = 4\pi R_s^2 (P_i - P_e) \quad (2)$$

(see, *e.g.*, Weaver *et al.* 1977), where R_s is the outer shell radius, v_s is the expansion velocity, and M_s is the mass of the shell. This model incorporates the effect of exterior pressure P_e , with P_i representing the pressure in the bubble interior. With

$$\frac{dM_s}{dt} = 4\pi R_s^2 \rho_0 v_s \quad , \quad (3)$$

where ρ_0 is the ambient density, the momentum equation (2) becomes

$$\frac{dv_s}{dt} = \frac{4\pi R_s^2}{M_s} (P_i - P_e - \rho_0 v_s^2) \quad . \quad (4)$$

In the Weaver model, the bubble evolves adiabatically with respect to the injected power, but has a radiative outer shock in which all of the energy entrained from the exterior is assumed to be radiated away. Thus P_i and the interior energy (U) are governed entirely by the input L_w . The energy equation is therefore simply

$$\frac{dU}{dt} = L_w - P_i \frac{dV}{dt} \quad , \quad (5)$$

where $V = \frac{4}{3}\pi R_s^3$ is the bubble volume and

$$U = \frac{P_i V}{\gamma - 1} \quad , \quad (6)$$

with $\gamma = 5/3$ for an adiabatic gas.

We also incorporate an ambient density which decreases as a function of R_s (Ostriker & McKee 1988), as might be expected for a dense, star-forming region:

$$\rho_0(R_s) = \rho_0(1) \left(\frac{R_s}{R_s(1)} \right)^{-k_\rho} , \quad (7)$$

where $R_s(1)$ is a fiducial radius and $\rho_0(1)$ is the ambient density at $R_s(1)$. The total mass in the shell is thus

$$M_s(R_s) = \frac{4\pi R_s^3}{3 - k_\rho} \rho_0(R_s) . \quad (8)$$

For the exterior pressure we have

$$P_e = \frac{c_s^2}{\gamma} \rho_0(R_s) , \quad (9)$$

where c_s is the sound speed, taken to be 10 km s^{-1} in the ionized medium of N44.

Equations (1), (4), and (5) are integrated numerically over an input $L_w(t)$. The initial conditions are given by the analytical version of the model at an initial time of 1×10^3 yr, assuming a constant ambient density corresponding to the value of ρ_0 at the initial R_s (Weaver, eqs. [21] & [22]). We find that the results are highly robust to the initial conditions. The analytical model provided by Ostriker & McKee (1988) incorporates the ambient density gradient and $L_w \propto t^{\eta_{in}-1}$, where η_{in} is the power index to the bubble input energy. We confirmed the precision of our code against this analytical model to 1% for a timestep of 0.02×10^6 yr.

For the injected L_w , we use the same basic prescription as in Paper I, but without approximating as a power law in time. L_w for a stellar wind is given by

$$L_w = \frac{1}{2} \dot{M} v_\infty^2 , \quad (10)$$

where v_∞ is the wind terminal velocity. We begin with the Geneva group evolutionary tracks corresponding to LMC metallicity (Schaerer *et al.* 1993), using

the tracks for stars with mass $M \geq 15 \mathcal{M}_{\odot}$. Since the computed stellar evolution is sensitive to the mass-loss rate $\dot{M}$, we adopt Schaerer's *et al.* corresponding, tabulated $\dot{M}$ for consistency. These values are parameterizations based on the compilation of empirical mass-loss rates for massive stars from de Jager *et al.* (1988), appropriately scaled for LMC metallicity. While the individual stellar models are in the H-burning phase, corresponding to times up to point 13 in the evolutionary tracks, we compute the wind terminal velocity from the stellar escape velocity using the empirical relations of Howarth & Prinja (1989), described in Paper I. Stellar ages beyond point 13 are considered evolved phases and correspond to Luminous Blue Variable (LBV), red supergiant (RSG), or Wolf-Rayet (WR) stars. If the effective temperature $\log T_{eff} \leq 4.5$ (Humphreys 1989), we assign $v_{\infty} = 150 \text{ km s}^{-1}$ (Lamers 1989) for the LBV phase. For simplicity, we retain this value for the RSG phase, although it may be a bit high (Ahmad & Stencel 1988). This formulation does not take into account LBV eruptions, which are poorly understood. For stars that evolve blueward to $\log T_{eff} > 4.5$, we assign $v_{\infty} = 2000 \text{ km s}^{-1}$ for the WR phase. There is a slight inconsistency in that Schaerer *et al.* assume $v_{\infty} = 2000 \text{ km s}^{-1}$, for a somewhat different definition of WR stars. The value of v_{∞} affects the computed opacity, which is used to derive the Schaerer *et al.* T_{eff} . However, given the overall uncertainties in late stellar evolution, we do not consider this inconsistency to be significant.

With these $\dot{M}$ and v_{∞} , we computed $L_w(t)$ from equation (10) for each of the massive star tracks, interpolating linearly to a timestep Δt of 0.02 Myr. For each of these tracks, we added a final supernova (SN) explosion of 1×10^{51} erg, which corresponds to $1.6 \times 10^{39} \text{ erg s}^{-1}$ over Δt . This treatment of the SN energy as an extended power injection may not be the best representation; we will discuss this issue in §6. We then summed the $L_w(t)$ of the individual stars for a given stellar

population.

Figure 9 shows the model evolution for an $85 \mathcal{M}_{\odot}$ star, assuming a uniform ambient medium in panel (a), and an ambient density gradient with $k_{\rho} = 2$ in panel (b). The long-dashed line represents the injected power, $L_w(t)$, in $10 \log(L_w/10^{35}) \text{ erg s}^{-1}$; the solid line traces the growth of the shell radius, $R_s(t)$, in pc; and the short-dashed line shows the shell expansion velocity $v_s(t)$ in km s^{-1} . Figure 9 demonstrates how the bubble dynamics are more sensitively revealed in the behavior of v_s rather than R_s . We also note that the models show periods of shell acceleration, which raise the issue of Rayleigh-Taylor instability. This must be explored with a hydrodynamics code, and will not be considered here; however, we caution that if such instabilities are important, the evolution of the shell would become unreliable at applicable periods of acceleration. As expected, Figure 9 shows that the model with an ambient density gradient (b) maintains an overall higher, accelerating shell velocity.

For the single $85 \mathcal{M}_{\odot}$ star, the wind power of the H-burning phase corresponds to $L_w(t < 3.12 \text{ Myr})$ in Figure 9. The LBV and RSG phases follow, yielding an order of magnitude less power, until $t \sim 3.30 \text{ Myr}$, at which point the star enters a WR stage. Finally, the SN event corresponds to the terminal spike in $L_w(t)$ at $t = 3.48 \text{ Myr}$. Upon comparison with actual mass-loss rates, the Schaerer *et al.* models often adopt an $\dot{M}$ that seems high by a factor of $\sim 2-3$ for the LBV (Lamers 1989) and WR (Howarth & Schmutz 1992) phases. This would result in a similar overestimation of L_w (eq. 10). Likewise, our adoption of the fixed v_{∞} for these evolved phases could be in error by up to 50%, which would result in another factor of 2.5 difference in L_w . Uncertainty during the H-burning phase is due to our adoption of the Howarth & Prinja (1989) v_{∞} relations for Galactic O

stars. Garmany & Conti (1985) find evidence for lower v_∞ in the LMC, although the scatter in observed values for both galaxies makes scaling impractical. Finally, observed values of $\dot{M}$ for O stars (Chlebowski & Garmany 1991; Howarth & Prinja 1989) also show scatter of up to an order of magnitude for any given stellar luminosity. We thus find it possible that $L_w(t)$ could be in error by a factor of several, possibly up to an order of magnitude, at any given stage of the stellar evolution.

5.2. Application to DEM 152

To apply the model to DEM 152, we first obtain the observed shell parameters. Using the flux-calibrated H α survey of Kennicutt & Hodge (1986), we find an emission measure, $EM \sim 3000 \text{ pc cm}^{-6}$ at points in the rim, and about 500 pc cm^{-6} at points near the center of the shell. Since $EM = \int_R n_e^2 dR$, where R is the column depth of emitting material and n_e is its electron density, we can find the density of a spherical shell by

$$n_e^2 = \frac{EM_{\text{rim}}}{2R_s \left[2\frac{\Delta R_s}{R_s} - \left(\frac{\Delta R_s}{R_s} \right)^2 \right]^{1/2}} \quad (11)$$

where ΔR_s is the shell thickness (Chu *et al.* 1995). Likewise, for a line of sight through the center of the shell, we have

$$n_e^2 = \frac{EM_{\text{center}}}{2\Delta R_s} \quad (12)$$

We measure a shell thickness $\Delta R_s = 3 \text{ pc}$ and outer radius $R_s = 30 \text{ pc}$ over the major axis. These values produce $n_e = 11 \text{ cm}^{-3}$ using the rim emission measure, and 9 cm^{-3} using the emission measure through the center, and we adopt $n_e = 10 \text{ cm}^{-3}$. This is consistent with Hunter's (1994) measurements of the [S II] $\lambda\lambda 6717, 31$ ratio, which she finds to be in the low-density limit, implying

$n_e < 300 \text{ cm}^{-3}$. The observed shell parameters are listed in Table 4. Given the shell density, we normalize the gradient in ρ_0 in the model to yield $n_H = 10 \text{ cm}^{-3}$ at $R_s = 30 \text{ pc}$, with $n_H = n_e$. We also assume a mean nucleon mass $\mu = 1.25m_H$, corresponding to the fractional metallicity $Z = 0.008$ used by the stellar models.

Based on the stellar age distribution as described in §4.1, it is likely that the stellar population projected on the interior of the superbubble is the one responsible for its input power. We therefore adopt the semi-major axis as the best representation of the current R_s . However, we note that if the shell expansion actually originated on the W side near N44B, the minor axis diameter would be more appropriate as R_s , which turns out to have a similar value, as seen in Table 4. In Table 5, we count the observed numbers of high-mass stars on the shell interior, using the masses derived in §3. As indicated in Table 5, these stellar mass bins will then be represented by the evolutionary models of $L_w(t)$ derived from the Schaerer *et al.* (1993) tracks as described above.

Figure 10a shows the evolution of the superbubble due to only the currently observed stellar population within DEM 152. We assume that all the stars were born together in one instantaneous burst, which provides the maximum amount of initial power available from the stellar population. This model also assumes a uniform ambient density ($k_\rho = 0$), which, for the observed shell parameters, corresponds to 2.5 cm^{-3} . Comparison with Table 4 demonstrates that the current stellar population alone can account for the observed $R_s \sim 30 \text{ pc}$ for a cluster age of 2 – 4 Myr. However, the shell expansion velocity was measured by Meaburn & Laspias (1991) to be $v_s \sim 35 - 40 \text{ km s}^{-1}$, using the Manchester echelle spectrometer. This is in reasonable agreement with an earlier Fabry-Perot measurement of 30 km s^{-1} found by Georgelin *et al.* (1983). The model in Figure

10a cannot explain this high velocity. In Figure 10b, we introduce a density gradient of $k_\rho = 2$. While v_s has increased, it is still a factor of 2 below the observed value during the relevant period before the $40 \mathcal{M}_\odot$ stars, which are currently observed, expire. On the other hand, R_s has expanded far beyond 30 pc when v_s finally reaches the observed values.

In §3 we found that LH 47/48 is a relatively evolved OB association, and that presumably a few more massive stars that existed previously have already exploded as SNe in the history of the complex. Applying our IMF slope of $\Gamma = -1.3$ to the subset of LH 47/48 found on the interior of the superbubble, we expect 3 stars in the mass range $1.7 < \log M < 1.9$ ($50 - 79 \mathcal{M}_\odot$) and 1 in the range $1.9 < \log M < 2.1$ ($77 - 126 \mathcal{M}_\odot$). Figure 11 shows the evolution of the superbubble, now including 3 additional $60 \mathcal{M}_\odot$ stars and one $85 \mathcal{M}_\odot$ star (Table 5). The $85 \mathcal{M}_\odot$ star is on the low side of its projected mass range, so we are conservatively estimating the extra wind power. As expected, the additional power causes R_s to grow far too large between 4 and 5 Myr, which corresponds to the observed absence of the high-mass stars. Yet even so, the shell velocity is still too low. The final WR and SN phases of the 85 and $60 \mathcal{M}_\odot$ stars cause a substantial jump in v_s , but it remains almost a factor of 2 below the observed value. Changing the density gradient only causes R_s to deviate even more rapidly. Adding even more stars will also exacerbate the discrepancy. Furthermore, if the model's interior energy is decreased by any means, whether via a decrease in L_w , or by assuming radiative losses, it would widen the already-existing gulf between v_s and its observed value. The same effect is produced by increasing the amount of swept-up material in the shell.

We suggested above the possibility of an extended period of star formation in the superbubble interior. Figure 12 shows the model evolution for a two-stage

starburst, with mass distributions for the two phases listed in Table 5. The first stage presumes that the group of five evolving stars around type B1 III, discussed in §4.1, is a main-sequence turnoff of an initial group of stars. We therefore derived the corresponding mass distribution based on our IMF slope $\Gamma = -1.3$. The second stage is born 5 Myr after the first, and consists of all the stars currently observed within the shell, minus the five evolving stars, which are in the $15 \mathcal{M}_{\odot}$ range. This implies an overall age of 8 – 10 Myr, allowing the early-stage massive stars to expire, while still leaving the second-stage $40 \mathcal{M}_{\odot}$ stars remaining. Once again, Figure 12 exhibits the same problem, that the shell radius grows far too large, while the expansion velocity remains too low. The net effect has been to extend the period of the high input power, which cannot reconcile the discrepancy.

The problem remains in the coupling of R_s and v_s through equation (1). Indeed, the bubble’s dynamical timescale of R_s/v_s is only 8×10^5 yr, which is much less than the expected lifetime of any star, or the inferred stellar age of the system found in §4.1. The only way to resolve this problem with the current model is to initially maintain a much lower L_w , which keeps R_s small, then adding a sudden strong increase in power to quickly elevate v_s before R_s reacts. Given the uncertainties in stellar wind parameters described in §5.1, there is a possibility that the form of $L_w(t)$ is substantially different in reality. It is apparent that with the current models for $L_w(t)$, this version of the Weaver model for a wind-driven bubble cannot explain the observations of DEM 152.

6. Discussion

Recalling the highly asymmetrical distribution of the gas around DEM 152, it is clear that the spherical model is not optimized to such geometry. The bubble

would obviously expand more rapidly on the lower-density E side, while expanding quite slowly on the high-density W side. However, considering the extreme case of a solid resistance on the W side, the net effect would be to halve the volume into a hemisphere, which would only serve to increase the interior pressure by a factor of 2 at any given time. Presumably an actual situation would follow an evolution between that of a spherical and hemispherical configuration, thus the fact of asymmetry in and of itself is unlikely to reconcile the model and observations.

The only way for geometry to solve the discrepancy is to invoke a special viewing angle, namely, one that would allow a high expansion velocity along the line of sight while yielding a relatively small observed shell. This corresponds to a tube morphology viewed endwise, which Meaburn & Laspias (1991) rule out on the basis of the kinematic profile. We also found above that the nebular emission measures agree with that of a limb-brightened shell. However, the possibility remains that we are witnessing the formation of a “chimney” at a very early stage. Based on our models, it is almost certain that the high observed expansion velocity is due to a rapid, recent acceleration. An extremely sudden, localized drop in density may be able to induce such an acceleration.

However, it is also possible to accelerate the shell, either uniformly or asymmetrically, with the supernova events. By treating the SNe as enhancements of stellar winds instead of instantaneous energy depositions, our model assumes complete thermalization of the SN energy. This is reasonable for evolved, supernova-dominated superbubbles (Mac Low & McCray 1988), but not for smaller, wind-dominated shells. Tenorio-Tagle *et al.* (1990) demonstrate that for a single-star bubble, the SN blastwave is expected to reaccelerate the outer shell.

To determine the likelihood of SN reacceleration in DEM 152, we evaluate the

expression for the fractional bubble radius at which a SN blastwave is expected to become subsonic (Mac Low & McCray, eq. [23]):

$$\frac{r}{R_s} \approx 0.47 \left(\frac{E_{sn}}{U} \right)^{1/3}. \quad (13)$$

For the blastwave to remain supersonic requires $U \sim 1.3 \times 10^{50}$ erg for $E_{sn} = 1 \times 10^{51}$ erg. Our models have $U \sim 2 \times 10^{50}$ erg at $R_s = 30$ pc, yielding $\frac{r}{R_s} \sim 0.8$. Hence, a SN need only be removed from the bubble center by roughly 20% to be able to reaccelerate the shell. Given the approximations and overall uncertainties, it is quite possible that even a centered SN shockwave could strike the shell and uniformly reaccelerate it.

Franco *et al.* (1991) estimate that the dose of kinetic energy imparted from the SN to the superbubble shell is $0.1 - 0.3 E_{sn}$ in their simulations. The observed density and radius for DEM 152 imply a shell mass of $1.0 \times 10^4 \mathcal{M}_\odot$, which, for 0.2×10^{51} erg, corresponds to an equivalent velocity $v_{KE} = 45 \text{ km s}^{-1}$. Instantaneously adding this kinetic energy to a typical v_s of 15 km s^{-1} corresponds to adding v_s and v_{KE} in quadrature, yielding a new expansion velocity of 47 km s^{-1} . Presumably the fraction of E_{sn} available to reaccelerate the shell varies and could be much lower than 0.2, depending on the actual parameters and how far the blastwave travels within the superbubble. In addition, if the supersonic shockwave reaches R_s , over 50% of the SN's thermal energy is radiatively lost (Tenorio-Tagle *et al.* 1990), and should be excluded from L_w .

Provided that at least one of the SN shockwaves reached the superbubble shell of DEM 152, and recalling that v_s generally decays (for $k_p = 0$), it is reasonable to expect 1 – 4 SNe over its history, which agrees with the number expected from the initial mass function. It is extremely unlikely, as suggested by Meaburn & Laspas (1991), that of order 280 SNe have occurred in this region. However, the presence

of bright X-ray emission in DEM 152 does testify that at least one recent SN event has struck the shell, as reported by Chu *et al.* (1993).

There still remains the problem of R_s growing too large, especially over the lifetimes of the massive stars required for the implied supernovae. Again barring a different form for $L_w(t)$, the only other evolutionary parameter in our models is the ambient density ρ_0 . It is possible that the DEM 152 shell is only partially ionized, which would imply a more massive shell than is currently assumed. For an originally uniform ambient density of 2.5 cm^{-3} , the Strömgren radius for the LH 47/48 association is 70 pc, which encompasses the nebular complex quite well. Surrounding low-level, diffuse H α emission also suggests that the shell is fully ionized. However, given the strong density inhomogeneities, we cannot rule out the possibility of a neutral shell around DEM 152.

But R_s is a weak function of ρ_0 , and more than tripling the assumed shell thickness, to $\Delta R = \frac{1}{3}R_s$, causes $< 20\%$ deviation in the shell growth. So again, the only way for the current form of the Weaver model to explain the observations is to invoke an incipient chimney. This might indeed be the case, and the recent SN could be a catalyst for such a breakout event. Although Chu *et al.* (1993) already identify a “blowout feature” in the SE of the shell (Figure 1), it is remotely possible that a component of this possible blowout is occurring toward the line of sight. However, DEM 152 is located near the edge of the H I “L-component” (Luks & Rohlfs 1992), which complicates the possibility of a traditional disk blowout.

It could also be that some other process inhibits the growth of R_s . Magnetic fields have long been suspected of playing a significant role, and have recently received much attention (*e.g.*, Slavin & Cox 1992; Ferrière *et al.* 1991). But at this relatively early stage of superbubble evolution, magnetic fields are unlikely

to confine the shell growth, since in our models P_i is still an order of magnitude greater than the expected magnetic pressure $B^2/8\pi \sim 1 \times 10^{-12}$ dyne cm $^{-2}$.

An energy sink mechanism may be a more likely possibility, for example, heat conduction between the hot interior and the shell, which would allow radiation of internal energy (Weaver *et al.* 1977). Radiation by engulfed clouds may also provide a drain on U (McKee *et al.* 1984), as could other proposed processes that enhance radiative cooling (see D’Ercole 1992 for a summary). Any such mechanism would also decrease v_s , but if SN impacts can indeed cause the surmised accelerations, the predicted 1 – 4 such events can still easily account for the observations.

7. Summary

We found that the stellar content of the association LH 47/48 is essentially Salpeter (1955), with an IMF slope of $\Gamma = -1.3 \pm 0.2$, consistent with that of other OB associations in the LMC. This holds for the population inside and outside the superbubble DEM 152. It is therefore unlikely that an exotic stellar population generated the well-defined shell. The H α luminosity agrees well with the inferred ionizing flux from the association, confirming that most of the massive stars are accounted for, and that the nebular complex is indeed physically associated with the stars.

The age distribution of LH 47/48 suggests the action of propagating star formation. Regions exterior to the superbubble have ages $\lesssim 5$ Myr, whereas the interior population appears to span an age range up to some 10 Myr. Thus, the age of the shell is likely to be older than the lower limit of 2 – 4 Myr inferred for a coevally-born complex.

This detailed information on the stellar content of DEM 152 allows us to estimate the input wind power to the superbubble with reasonable confidence. We compared a numerical version of the Weaver *et al.* (1977) evolutionary model for wind-driven bubbles to the observed shell size and expansion velocity. There is a fundamental inconsistency between this version of the model and the observations, such that the observed shell radius is too small and/or the expansion velocity is too large, for the subset of massive stars interior to the bubble. There are several possible reasons for the discrepancy: (a) the superbubble is an incipient chimney, accelerating primarily along the line of sight; (b) the form of the input power $L_w(t)$ is qualitatively substantially different; (c) the inferred supernova blastwaves have reached the shell, causing a reacceleration, in combination with an energy sink mechanism that inhibits shell growth. A combination of these factors could also be at work. An examination of the dynamics of a larger sample of such OB/superbubble complexes (Oey 1995) will help clarify the dominant processes.

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Table 1a
Photometry of Stars in LH47

Star	x	y	V	B-V	U-B	Star	x	y	V	B-V	U-B	Star	x	y	V	B-V	U-B
1	207.5	9.0	15.60	-0.15	-0.94	75	25.1	106.6	15.95	-0.20	-0.69	150	160.5	193.4	16.60	-0.15	-0.87
2	314.7	9.8	17.48	-0.08	-0.65	76	159.9	106.7	19.27	0.00	-0.57	151	328.2	195.1	17.01	-0.21	-0.91
3	184.7	13.2	19.02	0.01	-0.29	77	238.6	109.3	18.03	-0.06	0.07	152	104.7	196.1	18.51	-0.16	-0.63
4	74.9	13.8	19.36	-0.23	-0.31	78	141.7	109.6	16.57	-0.22	-0.78	153	323.3	196.5	16.64	-0.24	-0.84
5	217.3	14.1	15.71	-0.22	-0.83	79	203.3	110.3	18.30	-0.21	-0.66	154	169.5	197.3	13.09	-0.19	-0.99
6	110.3	14.5	17.56	-0.21	-0.55	80	171.3	114.3	16.58	-0.09	-0.52	155	284.0	197.8	17.48	-0.28	-0.26
7	227.9	17.3	15.85	-0.14	-0.73	81	206.4	117.8	19.67	0.32	-0.30	156	222.5	198.0	18.06	-0.30	-0.70
8	144.8	19.4	17.93	-0.24	-0.60	82	107.0	118.1	18.49	-0.13	-0.33	157	315.0	198.0	15.37	-0.56	-0.85
9	136.0	21.1	18.62	-0.14	-0.32	83	12.7	118.6	18.58	0.01	-0.14	158	198.8	198.1	16.92	-0.13	-0.68
10	7.8	22.3	17.96	-0.13	-0.68	84	142.4	120.8	15.83	-0.28	-0.92	159	129.4	198.3	19.04	-0.05	0.64
11	231.2	22.9	17.49	-0.09	-0.57	85	129.4	122.9	17.14	-0.30	-0.70	160	7.4	199.2	15.43	-0.19	-0.85
12	228.8	27.2	17.97	-0.07	-0.34	86	224.0	123.4	19.12	0.00	0.45	161	262.0	199.8	16.77	-0.01	-0.50
13	89.9	29.7	19.11	-0.08	0.28	87	278.8	124.0	18.01	0.00	-0.66	162	307.0	200.1	15.48	-0.22	-0.86
14	7.7	30.2	15.23	-0.26	-0.91	88	426.0	124.0	16.03	-0.14	-0.98	163	522.7	200.2	16.75	-0.07	-0.69
15	257.2	32.4	14.26	-0.05	-0.97	89	238.7	125.2	16.28	-0.15	-0.74	164	112.1	200.5	18.03	-0.16	-0.34
16	96.3	33.4	18.36	-0.20	-0.32	90	47.6	126.3	18.03	0.08	-0.56	165	241.0	201.3	17.29	-0.16	-0.58
17	59.1	34.0	14.40	-0.27	-0.77	91	11.9	128.7	17.89	-0.22	-0.51	166	105.1	201.4	18.44	-0.01	-0.82
18	290.5	34.3	18.80	0.10	-0.27	92	183.1	128.7	15.02	-0.23	-0.86	167	96.1	202.9	17.22	-0.22	-0.55
19	83.3	34.3	18.74	-0.21	-0.53	93	85.4	130.7	18.94	-0.39	-0.24	168	316.2	203.0	15.66	-0.25	-0.64
20	165.3	36.2	17.50	-0.04	-0.44	94	162.4	133.9	14.03	0.16	0.09	169	307.3	203.9	16.07	0.02	-0.98
21	102.1	37.6	18.39	-0.13	-0.47	95	229.0	134.4	18.82	-0.05	-0.55	170	304.4	204.7	15.08	-0.29	-0.89
22	209.9	40.3	17.57	-0.24	-0.68	96	142.9	137.2	15.71	-0.19	-0.75	171	273.2	205.0	16.98	-0.10	-0.86
23	10.2	43.0	18.72	-0.26	-0.68	97	236.6	138.8	19.38	-0.12	0.31	172	359.7	206.9	17.12	-0.01	-0.93
24	194.1	47.5	18.04	-0.11	-0.75	98	152.7	138.9	17.75	-0.25	-0.30	173	113.0	207.0	18.19	-0.12	-0.81
25	147.1	50.1	16.25	-0.22	-0.80	99	168.7	138.9	17.78	0.23	0.57	174	152.9	207.0	18.79	-0.31	-1.30
26	45.2	51.6	17.47	1.30	2.05	100	213.3	140.8	16.80	0.49	0.09	175	225.3	207.1	18.67	-0.20	-0.97
27	93.8	57.7	19.04	-0.21	-0.24	101	190.6	143.8	17.50	-0.22	-0.76	176	315.9	207.1	15.99	-0.46	-0.43
28	109.8	57.8	17.80	-0.19	-0.42	102	227.5	144.5	16.45	1.25	0.68	177	301.3	207.4	15.96	-0.09	-0.86
29	69.8	57.8	16.19	-0.20	-0.76	103	23.9	148.1	17.88	-0.23	-0.58	178	183.2	208.5	16.87	-0.24	-0.49
30	27.0	57.8	17.62	-0.23	-0.57	104	196.6	148.5	18.83	0.00	-0.45	179	139.8	208.9	17.42	-0.13	-0.43
31	63.9	60.2	18.33	-0.19	-0.15	105	169.1	149.0	18.39	-0.14	-0.55	180	169.8	209.0	19.11	-0.25	-0.98
32	39.1	60.6	16.14	-0.24	-0.79	106	148.0	151.7	19.66	0.23	-0.84	181	144.6	209.0	18.49	-0.29	-0.21
33	131.1	60.6	19.12	-0.18	-0.16	107	126.6	154.7	18.68	-0.18	-0.64	182	433.9	209.3	14.56	0.13	-0.95
34	167.2	61.6	15.91	-0.17	-0.94	108	185.6	156.3	17.25	-0.15	-0.67	183	310.0	209.5	14.69	-0.16	-0.90
35	32.7	63.3	18.63	-0.12	-0.36	109	233.6	156.4	19.01	0.15	-1.12	184	293.0	212.3	14.82	0.02	-0.88
36	255.5	63.6	19.36	-0.18	-0.17	110	66.0	162.8	13.89	-0.14	-0.93	185	260.6	214.5	16.30	-0.28	-0.94
37	126.1	63.6	18.59	0.31	-0.33	111	220.5	162.9	18.12	-0.16	-0.41	186	283.2	216.1	13.94	-0.20	-1.01
38	247.4	63.8	18.75	0.03	0.32	112	125.4	163.7	15.57	-0.26	-0.88	187	56.3	216.7	16.53	-0.24	-0.84
39	223.5	69.4	16.39	-0.22	-0.73	113	171.0	163.8	18.49	-0.01	-0.40	188	123.8	216.7	16.40	-0.28	-0.75
39A	202.6	70.0	11.95	0.71	0.69	114	161.6	165.2	19.10	0.10	0.22	189	212.4	217.1	18.32	-0.19	-0.49
40	92.9	70.7	17.08	-0.20	-0.62	115	151.2	168.0	16.97	-0.19	-0.54	190	275.0	217.5	15.35	-0.20	-0.91
41	250.9	72.2	18.95	-0.29	-0.50	116	139.9	166.4	14.72	-0.16	-0.94	191	316.1	217.6	14.48	-0.17	-0.96
42	134.0	73.2	16.04	-0.17	-0.66	117	293.4	169.5	17.15	-0.22	-0.72	192	314.2	218.7	14.14	-0.09	-1.06
43	233.1	73.7	15.05	-0.18	-0.84	118	108.7	169.8	16.77	-0.24	-0.84	193	63.4	220.7	14.77	0.58	0.32
44	213.9	74.0	17.94	-0.18	0.03	119	229.2	171.1	19.03	-0.16	-0.73	194	319.8	221.6	16.24	-0.04	-0.77
45	236.0	74.6	16.40	0.26	-0.54	120	36.7	171.6	18.72	0.11	-0.42	195	189.2	223.7	18.46	-0.21	-0.44
46	39.1	75.5	16.78	-0.27	-0.79	121	25.0	174.2	15.57	-0.24	-0.79	196	288.0	223.7	16.15	-0.20	-0.59
47	77.6	76.4	13.49	-0.14	-0.96	122	170.8	175.0	18.21	-0.15	-0.61	197	199.4	223.8	18.69	-0.04	0.09
48	292.6	76.8	17.77	-0.17	-0.33	123	274.1	175.2	17.88	-0.20	-0.42	198	183.0	223.8	17.73	-0.31	-0.50
49	45.4	77.4	17.70	-0.20	-0.62	124	207.7	176.1	17.80	-0.15	-0.38	199	294.8	224.1	17.39	-0.41	-0.56
50	230.3	77.5	17.30	-0.03	-1.05	125	57.7	177.0	15.93	-0.26	-0.91	200	160.2	226.8	19.78	0.01	-0.10
51	143.6	77.6	19.18	0.12	-0.61	126	278.8	179.1	17.12	-0.12	-0.82	201	301.6	228.1	16.47	-0.27	-0.62
52	133.8	80.4	16.91	-0.11	-0.42	127	67.3	179.9	18.77	-0.15	-0.39	202	213.0	230.3	16.68	-0.22	-0.67
53	274.2	80.5	17.32	-0.25	-0.65	128	178.0	180.0	18.91	-0.17	-0.65	203	205.6	232.7	15.89	-0.32	-0.92
54	221.5	80.9	17.02	-0.28	-0.78	129	218.5	180.3	16.09	-0.28	-0.79	204	278.6	233.1	17.86	-0.22	-0.57
55	185.4	83.0	15.94	-0.21	-0.87	130	258.0	180.3	17.98	-0.05	-0.45	205	130.0	233.9	17.71	-0.26	-0.53
56	114.8	83.7	18.83	-0.14	-0.77	131	309.0	182.1	15.23	-0.22	-0.95	206	304.1	235.1	17.09	0.16	-0.68
57	58.1	84.9	18.01	-0.24	-0.49	132	412.9	182.2	16.57	0.24	-0.66	207	186.6	235.2	18.69	-0.08	-0.26
58	162.6	86.5	14.10	-0.07	-0.91	133	251.2	184.4	15.79	-0.24	-0.89	208	242.8	235.3	14.20	-0.18	-0.90
59	109.8	87.1	18.11	-0.17	-0.25	134	230.2	184.4	17.10	-0.05	-0.17	209	167.9	235.6	18.35	-0.31	-0.45
60	256.2	87.6	17.83	-0.30	-0.22	135	171.5	185.2	19.01	-0.32	-0.86	210	192.5	236.3	16.59	-0.32	-0.76
61	204.2	88.5	16.83	-0.22	-0.69	136	291.6	185.3	17.81	-0.19	-0.66	211	75.9	236.8	19.47	-0.42	-0.23
62	98.4	90.2	15.86	-0.17	-0.80	137	137.9	186.1	18.81	-0.03	-0.02	212	145.8	237.3	19.13	-0.22	-0.37
63	268.5	91.3	16.37	-0.08	-0.74	138	239.1	187.7	14.29	-0.17	-0.96	213	125.5	237.5	18.99	-0.23	-0.29
64	237.0	92.6	16.91	-0.12	-0.70	139	150.0	187.8	18.51	-0.05	-0.32	214	212.2	242.1	18.08	0.02	-0.56
65	246.0	94.0	16.99	-0.11	-0.79	140	34.5	187.9	17.02	-0.25	-0.73	215	180.1	242.6	19.04	-0.20	0.77
66	219.2	97.1	14.65	-0.17	-0.99	141	227.9	188.2	15.62	-0.21	-0.87	216	254.2	244.7	17.52	-0.22	-0.75
67	131.0	98.8	15.32	-0.26	-0.89	142	298.5	188.6	16.03	-0.22	-0.86	217	72.3	247.7	14.33	-0.13	-0.96
68	313.5	100.1	17.99	0.11	-0.80	143	275.4	188.6	18.07	-0.10	0.04	218	146.7	249.8	17.82	-0.22	-0.50
69	155.9	102.1	19.72	-0.21	-0.59	144	23.0	190.6	19.08	-0.14	-0.24	219	48.9	249.8	18.25	-0.40	-0.80
70	145.9	103.2	18.31	-0.21	-0.49	145	283.5	191.3	18.29	-0.01	-1.32	220	177.4	250.0	18.44	-0.05	-0.12
71	255.3	104.5	15.34	0.03	-0.85	146	308.5	191.9	16.61								

Table 1—Continued

Star	x	y	V	B-V	U-B	Star	x	y	V	B-V	U-B	Star	x	y	V	B-V	U-B
225	264.4	253.4	16.69	-0.04	-0.94	300	248.1	337.9	18.14	-0.08	-0.04	374	89.5	419.6	18.29	-0.04	-0.19
226	457.9	253.8	17.01	-0.04	-0.69	301	223.8	337.9	18.48	-0.23	-0.42	375	203.1	420.6	17.05	-0.64	-0.14
227	291.0	255.3	18.00	-0.20	-0.51	302	160.8	338.0	19.65	-0.38	-0.31	376	427.6	420.8	16.26	-0.07	-0.79
228	247.8	256.9	16.13	-0.30	-0.87	303	242.8	338.5	17.99	-0.10	-0.22	377	222.4	420.9	15.83	-0.26	-0.89
229	160.1	257.8	16.47	-0.30	-0.77	304	315.7	339.1	18.58	-0.25	-0.01	378	283.0	421.0	18.10	-0.29	-0.62
230	210.8	258.8	14.35	-0.09	-0.95	305	27.0	340.5	16.20	-0.24	-0.76	379	70.5	421.9	18.91	-0.05	-0.28
231	105.6	260.0	18.66	-0.14	-0.36	306	147.6	340.7	17.85	-0.17	-0.54	380	49.3	423.3	18.85	-0.06	-0.20
232	278.7	260.1	17.64	-0.12	-0.51	307	256.2	340.8	16.70	-0.20	-0.66	381	259.8	426.2	13.27	-0.17	-1.07
233	423.7	261.1	15.49	-0.12	-0.65	308	237.9	344.5	15.78	-0.30	-0.91	382	245.7	430.8	18.31	-0.52	0.05
234	238.2	263.5	18.58	0.16	-0.15	309	195.8	344.8	19.12	-0.18	-0.19	383	309.5	434.4	17.56	-0.24	-0.65
235	312.5	264.4	17.55	0.10	-0.70	310	288.0	345.0	16.93	-0.21	-0.48	384	199.6	434.9	19.24	-0.26	-0.21
236	38.9	265.5	18.45	-0.22	-0.75	311	12.4	347.7	16.18	-0.17	-0.81	385	281.7	436.0	13.16	-0.16	-1.04
237	53.9	265.9	12.68	-0.07	-0.95	312	117.3	348.1	17.76	-0.16	-0.32	386	171.1	437.3	16.63	-0.21	-0.76
238	275.1	266.1	17.95	0.01	-0.79	313	27.2	349.4	18.90	-0.06	-0.35	387	161.8	437.4	15.20	-0.05	-0.93
239	31.0	266.5	16.67	-0.11	-0.63	314	290.5	351.8	17.80	-0.25	-0.67	388	240.8	438.4	17.99	-0.22	-0.74
240	352.8	267.9	16.98	0.30	-0.84	315	164.4	352.5	16.20	-0.22	-0.83	389	42.5	438.9	18.39	-0.20	-0.50
241	244.5	269.6	17.50	0.03	-0.58	316	239.8	352.9	18.12	-0.14	-0.52	390	252.2	439.2	18.86	-0.32	-0.29
242	415.7	270.6	16.81	0.17	-1.10	317	178.5	354.0	19.87	-0.08	-0.03	391	275.8	439.4	15.45	-0.20	-0.89
243	499.4	271.2	15.36	-0.19	-0.47	318	204.8	356.0	16.33	-0.12	-0.86	392	383.0	441.5	16.04	-0.19	-0.92
244	130.1	271.2	17.86	-0.33	-0.44	319	56.5	358.0	16.78	-0.21	-0.78	393	162.7	441.6	16.94	-0.14	-0.67
245	248.0	273.1	18.62	-0.15	-0.21	320	202.0	358.4	14.47	-0.19	-0.97	394	262.0	442.6	17.12	-0.10	-0.83
246	273.2	274.1	18.74	-0.01	0.14	321	234.8	359.6	16.17	-0.24	-0.85	395	30.8	445.7	17.92	-0.18	-0.42
247	29.3	274.8	17.64	-0.10	-0.51	322	124.1	359.7	18.50	0.71	1.86	396	189.0	446.1	19.61	-0.19	-0.12
248	281.5	275.0	15.68	-0.03	-0.71	323	222.6	360.4	18.38	-0.18	-0.55	397	217.7	448.4	16.97	-0.22	-0.70
249	136.3	275.5	16.19	-0.25	-0.64	324	276.1	360.8	14.89	-0.25	-0.96	398	46.8	449.4	18.56	-0.17	-0.26
250	163.8	275.9	14.98	-0.29	-0.88	325	104.8	362.8	18.66	-0.31	0.04	399	80.9	451.1	15.36	1.14	0.59
251	228.4	277.5	16.07	-0.26	-0.88	326	229.8	363.0	19.03	-0.05	-0.40	400	206.3	452.4	16.19	-0.26	-0.84
252	240.8	278.6	18.75	-0.10	-0.44	327	97.9	364.0	18.37	-0.04	-0.67	401	223.3	452.5	15.53	-0.29	-0.88
253	221.9	279.0	18.35	-0.07	0.19	328	132.7	365.7	15.90	-0.24	-0.82	402	339.3	455.5	14.41	-0.26	-1.12
254	143.1	279.0	16.55	-0.28	-0.77	329	179.5	368.9	19.05	-0.18	0.12	403	249.5	455.6	18.85	-0.05	-0.12
255	188.9	280.0	17.30	-0.29	-0.71	330	207.9	370.2	17.71	-0.23	-0.53	404	76.6	456.3	15.30	-0.21	-0.80
256	123.1	281.0	16.17	-0.21	-0.73	331	79.2	371.0	19.18	-0.21	-0.48	405	288.9	456.4	17.38	0.04	-0.53
257	210.5	284.1	19.31	-0.84	-0.63	332	73.1	371.3	18.49	-0.09	-0.45	406	39.6	456.7	16.25	-0.21	-0.57
258	257.0	284.6	19.27	-0.39	-0.63	333	307.6	377.4	16.41	-0.26	-0.95	407	217.1	458.2	13.84	-0.17	-1.00
259	84.0	285.5	18.03	-0.19	-0.48	334	233.1	378.6	19.52	-0.07	-0.11	408	125.4	458.7	16.77	-0.12	-0.72
260	278.0	289.1	16.79	-0.14	-0.70	335	163.6	378.8	15.07	-0.25	-0.98	409	189.5	459.6	18.74	-0.22	-0.13
261	169.1	289.3	17.95	-0.23	-0.42	336	284.2	379.2	18.60	-0.18	-0.03	410	97.7	460.5	18.20	-0.25	-0.36
262	101.2	289.3	16.38	-0.20	-0.35	337	143.7	379.5	16.49	0.49	0.10	411	121.7	461.3	16.85	-0.19	-0.64
263	237.6	289.6	18.63	-0.05	-0.70	338	439.5	380.9	14.20	-0.22	-1.10	412	35.5	461.5	17.29	-0.31	-0.62
264	268.9	290.3	17.97	-0.21	-0.47	339	454.4	381.3	13.56	1.06	1.59	413	225.6	461.9	17.59	-0.37	-0.52
265	126.3	290.3	14.19	-0.01	-1.01	340	286.6	381.3	18.60	-0.18	0.83	414	195.2	463.3	18.59	-0.36	0.38
266	306.3	293.0	16.59	0.08	-0.76	341	50.1	384.2	19.02	0.00	-0.37	415	191.0	464.1	19.28	-1.26	1.05
267	122.9	293.7	14.30	-0.19	-1.01	342	387.8	386.9	16.88	-0.07	-0.80	416	234.8	468.5	18.89	-0.20	0.03
268	248.5	294.4	13.80	-0.12	-0.96	343	180.7	387.2	16.36	-0.26	-0.83	417	6.4	469.4	16.86	-0.22	-0.80
269	272.2	295.9	17.49	-0.17	-0.63	344	139.9	387.6	16.95	-0.12	-0.49	418	291.6	470.0	18.58	-0.10	-0.01
270	222.0	296.0	18.04	-0.27	-0.76	345	488.7	390.0	16.86	-0.20	-0.24	419	105.0	470.5	13.99	-0.12	-0.82
271	143.5	299.6	15.44	-0.17	-0.77	346	134.4	391.5	17.36	0.04	-0.50	420	312.8	470.6	17.69	-0.22	-0.49
272	228.1	300.1	19.53	0.92	-2.75	347	116.7	392.4	18.42	-0.11	-0.62	421	226.3	472.2	18.41	-0.13	-0.40
273	303.0	300.2	19.68	0.28	-0.15	348	151.6	392.8	17.53	-0.23	-0.71	422	191.2	472.5	18.43	-0.22	-0.44
274	169.8	301.9	18.31	-0.18	-0.63	349	491.3	394.5	17.33	-0.18	-1.02	423	84.1	474.0	16.84	1.20	1.56
275	125.2	305.6	13.88	-0.15	-1.05	350	223.2	396.1	18.97	-0.02	-0.52	424	244.8	474.7	19.06	-0.08	-0.23
276	184.4	305.8	19.27	-0.01	0.45	351	159.0	396.3	19.29	-0.04	-0.62	425	254.6	476.3	18.41	0.23	0.01
277	388.9	306.9	15.04	-0.15	-1.02	352	209.7	396.5	17.50	-0.27	-0.52	426	198.0	476.5	18.54	0.01	0.09
278	127.8	307.0	14.01	-0.19	-0.96	353	111.7	397.5	16.51	-0.06	-0.57	427	273.3	477.3	17.27	-0.05	-0.57
279	153.6	307.5	17.35	-0.26	-0.76	354	302.7	398.2	17.49	-0.01	-0.44	428	159.2	478.7	17.35	-0.15	-0.43
280	211.1	307.9	13.43	-0.20	-1.02	355	487.7	398.3	15.32	-0.13	-1.01	429	305.0	479.0	18.93	-0.03	-0.02
281	25.8	308.0	17.60	-0.08	-0.30	356	187.2	399.0	20.07	-0.23	0.65	430	148.7	479.0	19.04	-0.12	-0.35
282	199.1	310.2	18.56	-0.19	-0.62	357	221.7	401.5	18.56	-0.19	-0.01	431	210.1	480.2	18.81	0.06	-0.32
283	168.6	310.5	16.92	-0.19	-0.29	358	228.5	402.3	18.85	-0.17	-0.31	432	527.9	480.6	16.25	-0.10	-0.54
284	84.5	313.1	17.87	-0.13	-0.55	359	268.6	402.8	14.68	-0.20	-1.02	433	375.8	482.4	14.15	-0.21	-1.15
285	170.3	318.2	14.65	-0.15	-0.97	360	99.3	404.1	16.28	-0.01	-0.58	434	291.6	483.3	17.88	-0.16	-0.64
286	203.3	318.8	18.50	0.16	-0.49	361	210.6	404.1	18.81	-0.10	-0.27	435	114.6	485.6	17.71	-0.13	-0.28
287	19.2	319.5	17.11	-0.22	-0.75	362	191.9	405.7	16.89	-0.27	-0.74	436	257.1	491.5	18.88	-0.22	-0.20
288	26.8	319.8	19.12	0.04	0.04	363	124.3	406.3	19.15	-0.19	-0.27	437	34.8	491.6	18.24	-0.15	-0.68
289	124.5	320.3	15.98	-0.18	-0.84	364	150.1	407.1	18.05	-0.22	-0.54	438	269.1	492.4	18.47	-0.21	-0.32
290	184.8	324.0	19.16	-0.15	0.10	365	197.5	407.1	16.26	-0.21	-0.81	439	312.2	493.1	18.61	-0.34	-0.25
291	144.0	324.4	19.34	-0.01	-0.38	366	157.8	407.5	19.88	0.08	-0.74	440	209.7	497.4	15.57	-0.21	-0.87
292	165.7	325.8	15.39	-0.15	-0.88	367	231.8	410.0	16.16	-0.24	-0.74	441	217.2	498.0	17.37	-0.18	-0.84
293	421.0	326.7	16.41	0.65	-0.44	368	11.2	410.9	17.45	0.53	0.59	442	242.7	501.4	14.64	-0.19	-0.96
294	462.7	328.2	16.50	-0.17	-0.96	369	214.2	411.7	17.39	-0.21	-0.56	443	304.9	510.6	17.15	-0.12	-0.62
295	299.0	330.1	18.63	-0.29	0.06	370	187.4	414.2	17.58	-0.							

Table 1b
Photometry of Stars in LH48

Star	x	y	V	B-V	U-B	Star	x	y	V	B-V	U-B	Star	x	y	V	B-V	U-B
1	216.4	7.7	18.34	0.02	-0.59	66	300.1	231.0	18.24	0.03	-0.37	131	86.7	357.0	15.69	-0.09	-0.79
2	61.0	8.3	16.73	-0.01	-0.54	67	171.6	231.7	19.63	0.03	-0.27	132	308.7	357.8	18.19	0.36	-0.06
3	224.7	13.5	16.08	0.00	-0.68	68	215.9	234.5	17.74	-0.02	-0.35	133	255.0	358.6	17.33	0.25	-0.68
4	169.0	13.7	14.24	-0.25	-0.89	69	33.0	234.8	17.79	0.05	-0.33	134	95.4	358.6	18.88	-0.03	-0.14
5	190.9	15.5	16.98	-0.06	-0.74	70	128.6	236.8	17.04	1.28	0.31	135	160.7	363.9	18.26	0.15	-0.09
6	257.0	16.7	16.94	0.14	-0.58	71	175.2	237.8	18.88	-0.06	-0.20	136	166.0	366.3	17.81	0.14	-0.26
7	192.1	26.6	18.80	0.07	-0.23	72	26.5	238.6	18.22	0.08	-0.17	137	73.1	366.7	15.25	-0.19	-0.92
8	35.5	31.9	16.98	-0.04	-0.56	73	252.4	240.8	19.39	0.01	-0.16	138	192.4	366.7	18.00	0.31	0.08
9	283.0	33.3	17.64	-0.04	-0.77	74	213.1	241.0	18.36	-0.18	-0.30	139	179.2	367.0	16.08	0.06	-0.66
10	201.6	46.4	18.71	0.02	-0.37	75	169.6	245.1	19.16	2.49	-2.36	140	69.3	368.3	17.54	0.06	-0.60
11	316.9	48.4	15.28	0.83	-0.96	76	234.1	248.3	18.87	0.05	-0.43	141	75.4	368.7	17.76	-0.17	-1.10
12	99.3	52.6	17.45	1.52	2.41	77	215.6	249.1	17.06	-0.02	-0.59	142	196.3	372.2	16.68	0.69	-0.46
13	45.8	52.9	18.56	0.21	0.40	78	181.4	252.9	18.11	-0.04	-0.06	143	217.9	378.6	15.75	0.04	-0.70
14	239.6	53.7	14.13	-0.25	-0.93	79	222.5	256.9	17.76	-0.01	-0.41	144	52.2	380.7	17.91	-0.02	-0.29
15	253.1	62.0	19.05	0.16	0.13	80	132.0	257.7	16.99	0.02	-0.76	145	136.2	380.7	18.72	0.41	-0.18
16	50.8	63.1	17.80	-0.04	-0.46	81	230.7	259.6	14.99	-0.09	-0.91	146	238.3	382.1	18.62	0.16	-0.61
17	293.6	67.9	18.32	0.01	-0.77	82	152.7	260.4	18.15	-0.02	-0.47	147	36.9	382.4	18.50	-0.04	-0.24
18	71.6	71.1	16.39	-0.09	-0.66	83	149.2	264.8	18.94	0.17	-0.65	148	176.9	382.7	19.64	0.15	0.09
19	55.3	74.1	17.56	-0.02	-0.25	84	236.2	266.7	16.73	-0.02	-0.67	149	123.4	384.1	17.31	0.02	-0.51
20	204.7	77.1	18.28	0.04	-0.49	85	132.7	271.6	18.18	0.14	-0.57	150	154.7	385.0	17.47	-0.06	-0.52
21	26.8	80.5	17.96	0.03	-0.34	86	185.5	274.8	18.59	0.02	-0.62	151	70.4	389.6	16.71	-0.05	-0.74
22	212.1	80.6	18.35	0.05	-0.47	87	272.2	277.6	18.93	-0.10	0.10	152	156.2	392.7	14.80	-0.05	-0.80
23	56.5	82.4	17.56	0.01	-0.28	88	86.1	278.3	15.71	1.29	1.33	153	102.7	394.0	19.42	0.90	-0.63
24	3.7	86.4	18.26	0.01	-0.12	89	270.4	282.0	18.37	1.45	2.04	154	152.1	394.8	15.53	0.01	-0.61
25	233.9	91.3	16.78	0.03	-0.62	90	150.0	282.2	17.73	-0.01	-0.62	155	163.1	395.3	15.96	-0.07	-0.76
26	216.6	93.3	14.09	-0.21	-0.95	91	199.4	282.7	17.65	0.11	-0.40	156	90.9	396.3	17.12	-0.05	-0.79
27	90.6	100.3	17.17	0.04	-0.41	92	45.5	283.5	17.82	0.09	-0.06	157	127.6	397.6	16.32	-0.04	-0.63
28	229.4	103.0	14.20	-0.23	-0.94	93	128.8	284.6	15.21	0.01	-0.79	158	91.9	404.6	17.58	0.79	0.56
29	144.0	105.2	17.22	0.11	-0.43	94	116.3	284.7	15.91	-0.02	-0.73	159	162.9	406.8	17.67	0.08	-0.56
30	204.3	105.8	19.33	0.09	-0.57	95	15.6	285.5	17.82	-0.04	-0.71	160	167.4	407.2	15.32	-0.07	-0.85
31	255.8	115.6	17.99	-0.03	-0.66	96	193.3	288.3	17.54	0.08	-0.40	161	153.9	407.7	19.12	0.07	-0.67
32	87.3	118.3	17.02	-0.01	-0.30	97	240.1	289.1	17.14	0.06	-0.63	162	142.0	408.1	16.34	-0.01	-0.63
33	240.1	119.9	14.23	-0.26	-0.97	98	218.9	289.9	18.61	0.21	-0.43	163	173.2	409.3	15.91	-0.02	-0.75
34	80.2	120.7	19.17	-0.06	-0.23	99	52.4	293.8	14.19	-0.17	-0.87	164	138.3	411.5	16.31	-0.15	-0.69
35	233.2	126.6	18.23	-0.02	0.58	100	299.5	299.3	18.83	0.32	-0.14	165	136.4	414.7	15.69	-0.17	-0.64
36	287.0	127.0	17.19	0.10	-0.54	101	180.7	301.2	14.82	1.62	2.24	166	190.0	417.2	15.02	-0.03	-0.90
37	73.2	131.2	16.65	-0.02	-0.54	102	237.2	302.5	14.95	-0.19	-0.80	167	143.3	417.6	16.28	-0.25	-0.72
38	241.5	131.6	19.10	-0.13	0.23	103	196.2	304.4	16.95	0.12	-0.59	168	149.8	419.0	17.72	-0.02	-0.16
39	86.1	132.9	17.07	0.05	-0.35	104	144.0	307.3	18.16	0.06	-0.57	169	158.6	422.8	16.40	-0.04	-0.85
40	37.8	134.7	18.18	-0.01	-0.54	105	299.5	308.6	17.35	0.04	-0.44	170	273.3	423.0	16.36	0.49	-0.68
41	211.9	135.0	19.18	0.14	-0.15	106	180.6	310.9	19.02	0.18	-0.06	171	176.7	423.6	18.67	0.18	-0.59
42	196.6	142.6	17.87	-0.05	-0.44	107	148.9	312.0	19.44	0.34	-0.66	172	7.3	423.9	18.67	0.11	0.03
43	252.6	143.3	16.02	-0.17	-0.83	108	273.4	315.3	18.44	0.10	-0.32	173	130.4	424.4	17.98	0.03	-0.33
44	122.0	148.0	19.22	0.02	-0.12	109	196.3	317.8	17.30	0.67	-0.91	174	117.8	425.0	15.85	-0.08	-0.76
45	101.1	151.0	17.55	0.07	-0.34	110	220.8	318.9	16.00	0.02	-0.68	175	8.6	430.3	17.60	0.07	-0.48
46	232.0	152.7	18.72	0.12	-0.37	111	201.7	320.9	14.43	-0.12	-0.85	176	173.8	434.0	18.02	-0.03	-0.34
47	155.5	159.1	18.20	0.05	-0.28	112	154.9	321.4	17.40	0.06	-0.54	177	123.2	437.6	14.99	-0.08	-0.82
48	274.4	160.2	14.21	-0.18	-0.93	113	184.7	321.5	17.74	0.32	-0.46	178	168.0	438.8	18.55	0.16	-0.28
49	145.9	163.2	18.79	0.09	-0.63	114	138.4	322.5	18.30	0.05	-0.19	179	288.2	440.2	18.45	0.36	-0.27
50	113.3	170.6	18.02	-0.05	-0.61	115	191.8	326.5	16.92	0.23	-0.67	180	45.3	445.9	18.44	0.16	-0.15
51	165.8	173.4	19.01	-0.05	-0.53	116	300.7	327.4	18.23	0.30	-0.30	181	30.3	456.1	17.72	-0.02	-0.59
52	209.1	173.5	17.42	0.01	-0.61	117	160.7	328.9	16.92	0.22	-0.36	182	215.3	457.3	17.97	0.16	-0.03
53	279.7	173.6	18.97	0.04	-0.60	118	81.0	329.4	17.82	0.09	-0.25	183	102.0	458.8	18.74	-0.04	0.02
54	76.3	176.8	17.32	0.04	-0.64	119	94.9	332.9	18.78	0.06	-0.13	184	237.4	461.0	18.80	0.25	-0.34
55	116.3	184.2	19.07	-0.08	-0.38	120	109.5	335.2	17.88	0.11	-0.53	185	96.7	463.6	19.76	0.00	-0.10
56	86.2	186.6	17.10	-0.07	-0.76	121	303.3	336.7	17.81	0.15	-0.42	186	81.5	463.9	17.00	-0.02	-0.56
57	255.5	192.1	17.71	-0.02	-0.68	122	48.7	341.1	15.70	-0.13	-0.86	187	180.9	466.2	18.95	0.35	-0.40
58	247.9	194.0	18.29	0.16	-0.22	123	185.4	342.5	16.09	0.64	-0.76	188	184.4	472.8	18.54	0.04	-0.31
59	225.2	197.9	15.30	-0.10	-0.75	124	275.7	344.6	17.31	0.05	-0.58	189	116.5	473.4	19.63	0.27	-0.44
60	298.5	199.8	18.22	0.16	-0.17	125	161.1	345.8	17.50	0.31	-0.42	190	89.9	481.2	18.92	-0.12	-0.60
61	187.1	202.4	19.24	0.02	-0.21	126	218.4	346.3	15.04	0.27	-0.64	191	51.8	483.2	15.14	0.80	0.48
62	130.8	203.6	18.25	0.03	-0.47	127	167.1	348.5	17.53	0.56	-0.38	192	84.2	492.0	17.45	-0.04	-0.50
63	205.2	205.7	18.98	0.00	-0.28	128	24.3	350.6	16.59	-0.08	-0.81	193	216.1	493.1	16.99	0.01	-0.76
64	157.4	213.3	18.64	0.08	-0.42	129	62.3	351.3	17.34	-0.01	-0.42	194	44.4	495.1	17.25	0.00	-0.60
65	138.4	227.3	12.92	-0.20	-0.94	130	238.9	357.0	18.97	0.21	-0.06	195	66.9	496.2	16.99	-0.07	-0.78

Table 2
Derived Parameter Stars With Spectral Types

Star	x	y	α_{2000}	δ_{2000}	V	B-V	U-B	Q	$\log T_{eff}$	M_{bol}	Mass	Type	Comment
lh47-154	169.5	197.3	05 21 58.01	-67 56 25.3	13.09	-0.19	-0.99	-0.85	4.603	-9.5	48	O7 V((f))	
lh47-182	433.9	209.3	05 21 59.19	-67 58 34.5	14.56	0.13	-0.95	-1.04	4.625	-9.2	45	O6 V((f))	
lh48-65	138.4	227.3	05 22 13.58	-67 53 37.9	12.92	-0.20	-0.94	-0.80	4.531	-9.1	38	O9 III	
lh47-280	211.1	307.9	05 22 07.63	-67 56 45.2	13.43	-0.20	-1.02	-0.88	4.581	-9.0	38	O7 III(f)	
lh47-381	259.8	426.2	05 22 17.94	-67 57 08.6	13.27	-0.17	-1.07	-0.95	4.544	-9.0	36	O8.5 III(f)	
lh47-192	314.2	218.7	05 21 59.94	-67 57 36.0	14.14	-0.09	-1.06	-1.00	4.626	-8.9	40	O5 III(f)	
lh47-47	77.6	76.4	05 21 47.47	-67 55 40.8	13.49	-0.14	-0.96	-0.86	4.543	-8.8	34	O9.5 V	
lh48-111	201.7	320.9	05 22 21.75	-67 54 08.4	14.43	-0.12	-0.85	-0.76	4.646	-8.6	40	O5 V((f*))	
lh47-385	281.7	436.0	05 22 18.80	-67 57 19.2	13.16	-0.16	-1.04	-0.92	4.481	-8.6	29	B0 III	
lh47-275	125.3	305.6	05 22 07.38	-67 56 03.3	13.88	-0.15	-1.05	-0.94	4.568	-8.6	32	O8.5 V	
lh47-373A	234.6	419.7	05 22 17.36	-67 56 56.3	11.97	-0.06	-0.93	-0.89	4.307	-8.6	25	B1 Ib	
lh47-186	283.2	216.1	05 21 59.70	-67 57 20.8	13.94	-0.20	-1.01	-0.87	4.592	-8.5	33	O7.5 V +ne	
lh47-15	257.2	32.4	05 21 43.73	-67 57 08.7	14.26	-0.05	-0.97	-0.93	4.555	-8.4	30	O9 V	
lh47-407	217.1	458.3	05 22 20.69	-67 56 47.6	13.84	-0.17	-1.00	-0.88	4.543	-8.4	29	O9.5 V	
lh47-338	439.5	380.9	05 22 14.12	-67 58 36.6	14.20	-0.22	-1.10	-0.94	4.603	-8.3	32	O7 V((f))	
lh47-237	53.9	265.9	05 22 03.89	-67 55 28.5	12.68	-0.07	-0.95	-0.90	4.364	-8.3	23	B0.5 I	
lh47-191	316.1	217.6	05 21 59.85	-67 57 36.9	14.48	-0.17	-0.96	-0.84	4.626	-8.3	35	O5 III(f)	
lh47-58	162.6	86.5	05 21 48.38	-67 56 22.3	14.10	-0.07	-0.91	-0.86	4.517	-8.2	28	O9.5 III	
lh47-278	127.8	307.0	05 22 07.50	-67 56 04.5	14.01	-0.19	-0.96	-0.82	4.531	-8.1	25	O9 III	
lh47-71	255.3	104.5	05 21 49.99	-67 57 07.5	15.34	0.03	-0.85	-0.87	4.625	-8.1	33	O8: V((f))	
lh47-402	339.3	455.5	05 22 20.53	-67 57 47.3	14.41	-0.26	-1.12	-0.93	4.615	-8.1	32	O6.5 V((f))	
lh47-138	239.1	187.7	05 21 57.21	-67 56 59.4	14.29	-0.17	-0.96	-0.84	4.568	-8.1	28	O8.5 V +ne	
lh48-33	240.1	119.9	05 22 04.26	-67 54 26.6	14.23	-0.28	-0.97	-0.78	4.580	-8.0	27	O8: V:	
lh48-26	216.6	93.3	05 22 01.94	-67 54 15.3	14.09	-0.21	-0.95	-0.80	4.543	-8.0	25	O9.5 V	
lh48-14	239.6	53.7	05 21 58.50	-67 54 26.2	14.13	-0.25	-0.93	-0.75	4.588	-8.0	27	O8.5 V	
lh47-433	375.8	482.4	05 22 22.90	-67 58 05.0	14.15	-0.21	-1.15	-1.00	4.543	-7.9	25	O9.5 V	
lh48-28	229.4	103.0	05 22 02.79	-67 54 21.4	14.20	-0.23	-0.94	-0.77	4.555	-7.9	25	O9 V	
lh48-4	169.0	13.7	05 21 55.00	-67 53 52.3	14.24	-0.25	-0.89	-0.71	4.555	-7.8	25	O9 V	
lh47-66	219.2	97.1	05 21 49.33	-67 56 49.9	14.65	-0.17	-0.99	-0.87	4.555	-7.7	24	O9 V	
lh47-320	202.0	358.4	05 22 12.01	-67 56 40.6	14.47	-0.19	-0.97	-0.83	4.543	-7.7	23	O9.5 V	
lh47-217	72.3	247.7	05 22 02.33	-67 55 37.8	14.33	-0.13	-0.96	-0.87	4.471	-7.6	20	B0 V	
lh47-222	166.5	252.0	05 22 02.75	-67 56 23.6	14.71	-0.23	-1.06	-0.89	4.580	-7.6	25	O8 V	
lh47-110	66.0	162.6	05 21 54.94	-67 55 34.8	13.89	-0.14	-0.93	-0.83	4.405	-7.5	18	B0.5 V	
lh47-184	293.0	212.3	05 21 59.38	-67 57 25.6	14.82	0.02	-0.88	-0.89	4.449	-7.4	18	B0-B0.5::	
lh47-277	368.9	306.9	05 22 07.64	-67 58 02.4	15.04	-0.15	-1.02	-0.91	4.543	-7.2	21	O9.5 V	
lh47-183	310.0	209.5	05 21 59.14	-67 57 33.9	14.69	-0.16	-0.90	-0.78	4.471	-7.1	18	B0: V + ne	
lh47-116	139.9	166.4	05 21 55.31	-67 56 10.9	14.72	-0.16	-0.94	-0.82	4.471	-7.1	18	B0 V	
lh47-359	268.6	402.8	05 22 15.91	-67 57 13.0	14.68	-0.20	-1.02	-0.88	4.471	-7.0	17	B0 V	
lh47-265	126.3	290.3	05 22 06.05	-67 56 03.8	14.19	-0.01	-1.01	-1.00	4.324	-7.0	15	B1 IIIe	
lh48-99	52.4	293.8	05 22 19.34	-67 52 56.8	14.19	-0.17	-0.87	-0.75	4.383	-7.0	15	B1 V	
lh47-355	487.7	398.3	05 22 15.66	-67 59 00.1	15.32	-0.13	-1.01	-0.92	4.543	-7.0	20	O9.5 V	
lh47-335	163.6	378.8	05 22 13.76	-67 56 21.7	15.07	-0.25	-0.98	-0.80	4.543	-6.9	20	O9.5 V	
lh47-371	198.6	416.2	05 22 17.03	-67 56 38.7	14.42	-0.16	-0.95	-0.83	4.383	-6.8	14	B1: V	
lh47-444	319.3	522.5	05 22 26.34	-67 57 37.3	13.79	-0.20	-1.08	-0.94	4.364	-6.8	14	B0.5 I	
lh47-131	309.0	182.1	05 21 56.76	-67 57 33.5	15.23	-0.22	-0.95	-0.79	4.543	-6.8	19	O9.5 V	
lh47-324	276.1	360.8	05 22 12.27	-67 57 16.8	14.89	-0.25	-0.96	-0.78	4.471	-6.7	16	B0 V	
lh47-14	7.7	30.3	05 21 43.44	-67 55 06.7	15.23	-0.26	-0.91	-0.72	4.543	-6.7	19	O9.5 V	
lh47-419	105.0	470.5	05 22 21.68	-67 55 52.7	13.99	-0.12	-0.82	-0.73	4.301	-6.6	13	B1.5 III	
lh47-230	210.8	258.8	05 22 03.37	-67 56 45.3	14.35	-0.09	-0.95	-0.89	4.324	-6.6	13	B1 III	
lh48-122	48.7	341.1	05 22 23.45	-67 52 55.0	15.70	-0.13	-0.86	-0.77	4.543	-6.6	19	O9.5: V	
lh47-268	248.5	294.4	05 22 06.48	-67 57 03.6	13.80	-0.12	-0.96	-0.87	4.307	-6.5	13	B1 Ib	
lh47-447	272.2	570.1	05 22 30.44	-67 57 14.0	14.58	-0.25	-1.03	-0.85	4.405	-6.5	13	B0.5 V	
lh47-442	242.7	501.4	05 22 24.45	-67 56 59.9	14.64	-0.19	-0.96	-0.82	4.413	-6.5	13	B0.5 III	
lh47-299	291.1	334.0	05 22 09.95	-67 57 24.2	14.49	-0.16	-0.89	-0.77	4.338	-6.4	12	B1.5 V	
lh47-190	275.0	217.5	05 21 59.82	-67 57 16.8	15.35	-0.20	-0.91	-0.77	4.471	-6.4	15	B0: V +neb	
lh48-48	274.4	160.2	05 22 07.78	-67 54 43.1	14.21	-0.18	-0.93	-0.80	4.324	-6.4	12	B1 III	
lh48-121A	178.6	338.6	05 22 23.28	-67 53 57.3	11.94	-0.39	-0.36	-0.08	3.869	-6.4	12	Ffe	
lh47-208	242.8	235.3	05 22 01.35	-67 57 01.0	14.20	-0.18	-0.90	-0.77	4.324	-6.4	12	B1 III	
lh47-84	142.4	120.8	05 21 51.35	-67 56 12.3	15.83	-0.28	-0.92	-0.72	4.543	-6.1	16	O9.5 V	
lh47-440	209.7	497.4	05 22 24.08	-67 56 43.8	15.57	-0.21	-0.87	-0.72	4.405	-5.6	11	B0.5 V	
lh47-446	321.1	569.3	05 22 30.41	-67 57 37.9	15.74	-0.20	-1.03	-0.89	4.405	-5.5	11	B0.5 V	
lh47-321	234.8	359.6	05 22 12.14	-67 56 56.6	16.17	-0.24	-0.85	-0.68	4.471	-5.4	13	B0 V	
lh47-32	39.1	60.6	05 21 46.08	-67 55 22.0	16.14	-0.24	-0.79	-0.62	4.471	-5.4	13	B0V	
lh47-377	222.4	420.9	05 22 17.46	-67 56 50.3	15.83	-0.26	-0.89	-0.70	4.383	-5.2	10	B1 V	
lh47-160	7.4	199.2	05 21 58.08	-67 55 06.0	15.43	-0.19	-0.85	-0.71	(4.357)	(-5.4)	(10)	Be	

Table 3. Mass Function LH 47/48

Masses	N	$\log \xi$
40-60 $\mathcal{M}_{\odot}$	2	-0.41
25-40 $\mathcal{M}_{\odot}$	19	0.50
15-25 $\mathcal{M}_{\odot}$	31	0.68
7-15 $\mathcal{M}_{\odot}$	110	1.05
5-7 $\mathcal{M}_{\odot}$	80	1.27

Table 4. DEM 152 Shell Parameters

Major axis diameter	$2R_s$	59 pc
Minor axis diameter	$\dots$	35 pc
Shell thickness	ΔR	3 pc
Expansion velocity ^a	v_s	35 – 40 km s ⁻¹
Shell electron density	n_e	10 cm ⁻³

^aMeaburn & Laspias (1989)

Table 5. Stellar Population Models

$\log M/\mathcal{M}_\odot$ bin	2.1 – 1.9	1.9 – 1.7	1.7 – 1.5	1.5 – 1.3	1.3 – 1.1
Stellar Model ($\mathcal{M}_\odot$)	85	60	40	25	15
Model lifetime (Myr)	3.48	4.12	5.26	7.84	14.2
Observed at present	0	0	4	11	12
Inferred from IMF	1	3	4	11	12
Phase 1 of 2-stage	0	1	2	3	5
Phase 2 of 2-stage	0	0	4	11	7

Note. — Table represent numbers of stars in each mass bin.

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Fig. 1.— $H\alpha$ image showing part of the N44 region (courtesy R.C. Smith). The prominent supershell is DEM 152, and various other nebulosities are identified. The outlines show the positions of the $4' \times 2.5'$ CCD frames taken for UBV photometry.

Fig. 2a.— The northern section of LH 47. Stars marked with white dots have photometry in Table 1; the brighter stars are also labeled where space permits. The identifications of other stars can be inferred from the x and y values in Table 1.

Fig. 2b.— Same as Figure 2a but for the southern section of LH 47.

Fig. 2c.— Same as Figure 2a but for LH48.

Fig. 3a.— The brighter and intrinsically blue stars are marked in this image of the northern part of LH 47.

Fig. 3b.— Same as Figure 3a but for the southern part of LH 47.

Fig. 3c.— Same as Figure 3a but for LH48.

Fig. 4.— Theoretical H-R diagram of LH 47/48. The filled circles have been placed in the HRD based upon their spectral types; the open circles are stars with good photometry, while the plus signs are stars with photometric errors > 0.07 mag. The evolutionary tracks of Schaerer *et al.* (1993) are overlaid in solid lines. The dashed lines correspond to isochrones for 2, 4, 6, 8, and 10 Myr.

Fig. 5.— The mass function for LH 47/48.

Fig. 6.— Same as Fig. 4 for stars with spectral types, with those interior to the superbubble denoted by open triangles, and those exterior with filled squares. In comparing with Fig. 4, stars on the shell rim are omitted.

Fig. 7.— Histograms of stellar ages inside and outside the superbubble.

Fig. 8.— Comparison of the IMF for stars inside and outside the superbubble. The line represents a slope of $\Gamma = -1.3$, found for the entire association.

Fig. 9.— Bubble models for $85M_{\odot}$ star. Long-dashed line shows modeled input power in $10 \log(L_w/10^{35})$. Solid line shows growth of shell radius, and short-dashed line follows expansion velocity. Panel (a) shows evolution for constant ambient density, and (b) assumes a radial density gradient with exponent $k_{\rho} = 2$.

Fig. 10.— Models for coeval burst of present stellar population (Table 5), corresponding to (a) constant ambient density; and (b) density gradient with $k_\rho = 2$. Line types are as in Figure 9. Since no stars in this model have expired, the observing window is roughly 0 – 5 Myr.

Fig. 11.— Model for a coeval burst of the currently observed population, plus stars with $M \geq 60 M_{\odot}$ inferred from the IMF (Table 5). Since the latter stars have expired, the observing window is between roughly 4 and 5 Myr. A constant ambient density ($k_{\rho} = 0$) is assumed.

Fig. 12.— Model for a 2-stage starburst (Table 5) at $k_p = 0$, with a delay of 5 Myr. The observing window is between roughly 8 and 10 Myr.

Appendix C

***UBV* PHOTOMETRY OF OB ASSOCIATIONS WITHIN SUPERBUBBLES OF THE LARGE MAGELLANIC CLOUD**

Submitted for publication in *The Astrophysical Journal Supplement Series*.

***UBV* Photometry of OB Associations within Superbubbles
of the Large Magellanic Cloud**

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ABSTRACT

This work presents *UBV* photometry of the stellar populations associated with 7 superbubble nebulae and 5 classical H II regions in the Large Magellanic Cloud. Although the nebular morphology of the superbubbles appears to be substantially evolved compared to the classical nebulae, the color-magnitude diagrams do not reveal any noticeable correlation between the resident stellar population and nebular morphology. The photometry presented here will be used in a forthcoming paper to examine further the stellar content and dynamics of these superbubbles.

Subject headings:

1. Introduction

It is commonly accepted that “superbubble” nebulae are evolved H II regions that have assumed a shell morphology due to the stellar winds and supernovae of enclosed massive stars. While previous studies have examined the nebular kinematics of these superbubbles (*e.g.*, Meaburn *et al.* 1980; Georgelin *et al.* 1983), there has been no systematic investigation of their resident stellar population as a whole. Since the associated H II regions have a distinctly evolved appearance, have the enclosed stellar clusters aged accordingly? Or could the nebular morphology be due to an unusual stellar population, with perhaps a higher proportion of extremely massive stars? Do the nebular kinematics agree with the kinetic energy input implied by the observed stellar population? I have carried out a comprehensive study of superbubble systems in the Large Magellanic Cloud (LMC) to address these questions. A prototype study (Oey & Massey 1995, Paper I) has already been conducted on the DEM 152 superbubble, which contains the cluster LH47/48.

This second paper in the series presents photometry of the OB associations in 7 superbubbles and 5 comparison, classical H II regions, while a third paper (Oey 1995a, Paper III) will present corresponding spectral classifications, H-R diagrams, and mass functions for most of these clusters. Finally, in a fourth paper (Oey 1995b, Paper IV), I will use these stellar data to model the evolution of the superbubbles and compare with the observed nebular kinematics.

2. Observations

The sample of superbubble H II regions is listed in Table 1, which provides identifications for the nebulae and stellar associations, and values for nebular diameters. The selection of these objects was based on the availability of nebular kinematic data, while also including a variety in size and morphology. In addition to the 7 superbubbles, I also obtained data for 5 comparison, classical H II regions, and 1 Wolf-Rayet bubble nebula.

I obtained *UBV* photometry for the sample at the 60-cm Helen Sawyer Hogg Telescope of the University of Toronto Southern Observatory. The data were obtained using the 516×516 Ford UV-enhanced CCD during the nights of 1992 November 19 – December 9. The spatial scale of these images is $0.44 \text{ arcsec px}^{-1}$, which corresponds to 0.10 pc px^{-1} for a distance modulus of 18.4 to the LMC. Due to the relatively small, 3.8×3.8 field, several objects required multiple, mosaicked observations. In addition, a few fields were observed under non-photometric conditions, and were then calibrated to shorter, photometric exposures of the same fields. There were 13 photometric nights during this observing run.

The first two columns in Table 1 give the nebular identification from the

Davies, Elliott, & Meaburn (1976) and Henize (1956) $H\alpha$ catalogs, respectively, while the third column identifies the corresponding OB association from the Lucke & Hodge (1970) catalog. Column 4 provides the nebular coordinates from Davies *et al.* (1976), and column 5 gives the nebular diameter in arcminutes. Column 6 lists the number of mosaicked fields obtained to cover the nebula, while the number of short, “tie” calibration exposures is given in column 7.

As dictated by the telescope’s small aperture, I used 61 standard stars from the list of Menzies *et al.* (1989), that defines the Johnson-Cousins E-region photometric system. For supplementary coverage in the blue, I also used 7 additional Landolt (1983) standards, but adopting photometry by Menzies *et al.* (1991) who observed these stars with the same instrumentation as Menzies *et al.* (1989). The number of standard star observations per night ranged from 6 to 26, with an average of 16 being typical. The individual standards were varied between nights to reduce any systematic errors introduced by slight inaccuracies in the photometry of the standard stars. Nevertheless, I relied heavily on a few standards, in particular Feige 11, which was essentially the only one accessible with $B - V < -0.2$. Since the program OB associations were overwhelmingly blue, I emphasized blue standard stars, yielding the most reliable transformation in the range $-0.2 \lesssim B - V \lesssim 0.5$. Both the bluest and reddest standards were observed at airmasses bracketing those of the program observations, to ensure reliable determination of extinction coefficients. The airmasses for the standard stars ranged up to about 1.7.

Instead of recording the CCD bias pedestal in an overscan strip, the mean of the latest “reference” bias frame was recorded in the image headers. These bias levels were plotted as a function of time during each night, and found to stabilize quickly to within 1 or 2 ADU. The typical mean bias level was 418 ADU. Slight bias

drifts were then corrected by subtracting the recorded mean of the reference bias, while any bias structure was removed by subtracting the usual, nightly average bias frame, adjusted to a mean of 0. Twilight sky flatfield exposures, taken in the direction opposite the sun, were used to remove pixel-to-pixel sensitivity variations. Typically 8–12 exposures, each with count levels of $\sim 3.5 \times 10^4 \text{ e}^-$, were combined for the flatfields in each filter.

3. Data Reduction

The data were reduced using the IRAF version of DAOPHOT; the reduction procedure was similar to that described in detail by Massey *et al.* (1989) and Hill *et al.* (1994a). A single point-spread function (PSF) was determined for each program CCD frame and fit to all detected stars. This resulted in instrumental magnitudes based on a small aperture, typically 4 pixels in radius, but occasionally up to 6 or even 7 pixels. The aperture was adjusted depending on the PSF size generated by the seeing and guiding, in order to optimize the S/N of the photometry. An aperture correction was then applied to normalize these instrumental magnitudes to the large, 20-pixel radius used to measure the standard star fluxes. The adopted aperture corrections are averages determined from individual suitable stars in each frame, weighted by the stellar counts.

The instrumental magnitudes were then transformed to final apparent magnitudes using transformation equations of the form

$$mV = V + v_1 + v_2X + v_3(B - V) + v_4(B - V)X \quad (1)$$

$$mB = B + b_1 + b_2X + b_3(B - V) + b_4(B - V)X \quad (2)$$

$$mU = U + u_1 + u_2X + u_3(U - B) + u_4(U - B)X \quad , \quad (3)$$

where mV , mB , and mU are the instrumental magnitudes of the standard stars; V , B , and U are the derived apparent magnitudes; and X is the airmass. The transformations for each night were first fit allowing all the coefficients to vary. Examination of the fit residuals vs. color never showed improvement with the inclusion of the second-order extinction coefficients (v_4 , b_4 , and u_4), so these were subsequently set to 0 and deemed negligible. Since the color terms (v_3 , b_3 , and u_3) represent the difference of the instrumental response from the standard (Johnson) photometric system, these terms are highly stable and the mean values for the entire run were adopted. The zero-point terms (v_1 , b_1 , and u_1) are largely dependent on the atmospheric transparency, and are expected to vary somewhat; however, I also determined their mean values for the run. Allowing the zero-point to vary did not appreciably change the standard deviation of the residuals. The final fits to determine the transformations for each night therefore allowed only the first-order extinction coefficients to vary. The adopted color coefficients and zero points are given in Table 2, while Table 3 lists the extinction coefficients and rms errors to the transformation fits for each photometric night. The number of standard star observations is also provided for each night in Table 3.

For associations with mosaicked observations, I compared the resulting photometry for individual stars in the overlap regions. The results almost always agreed to well within the absolute uncertainties, which for this sample, are around 0.03 mag for a typical frame. One or two larger discrepancies were corrected by determining the mean systematic offset, weighting by the inverse of the photometric errors, and then adjusting the zero-point of each frame to the midpoint of the offset. Note that correcting the color differences in this manner is not strictly appropriate since the transformations have color terms (equations 1 – 3); however, these coefficients were fixed for the entire run and their values are too small

(Table 2) to be important.

The resulting photometry for the OB associations is provided in Table 4² – m^2 , with V images shown in Figure 1³ – m^3 . Table 4 includes all stars detected in both V and B , and lists the star ID; epoch 2000.0 coordinates; and V , $B - V$, and $U - B$ photometry along with corresponding errors. These are the photometric errors computed by DAOPHOT, and do not include systematic effects such as those introduced by aperture corrections and transformation errors. As an example, Figure 2 displays the photometric V errors for DEM 106 as a function of magnitude. The data for the sample include many bright stars from Sanduleak's (1969) catalog; these are identified in Table 5 and cross-referenced with other commonly used identifications. I will present spectroscopic data for some of the interesting members of this subset in Paper III.

4. Comparison with Independent Work

It is useful to compare these results with photometry performed independently by other researchers. Hill *et al.* (1994a) observed the associations LH 54 (DEM 192) and LH 83 (DEM 243). In addition, a set of unpublished photometry has kindly been made available for comparison: LH 54 has also been observed by M.G. Petr *et al.* (1995). All of these datasets have been obtained by CCD imaging. Figure 3 shows the difference, as a function of magnitude, between my data and that of these other researchers for the visual magnitude and colors.

The comparisons of the photometry are summarized in Table 6, which lists

²Table 4 is available on the AAS CD-ROM series, Vol. *

³Figure 1 is available on the AAS CD-ROM series, Vol. *

the mean differences ΔV , $\Delta(B - V)$, and $\Delta(U - B)$, along with the standard deviations in these differences. These statistics have been tabulated from the stars with $V < 17.0$, weighting inversely by the photometric errors, and with values deviating by more than 3σ in omitted. Most of these anomalous stars result from poor photometry in densely crowded clumps where the two datasets might infer different numbers of components. The comparisons generally agree within the expected absolute uncertainties. However, there is an unusually large discrepancy with the photometry of Hill *et al.* (1994a) in V for LH 54 (note the difference in $B - V$ merely reflects the large ΔV ; ΔB alone is -0.033). On the other hand, the excellent agreement with Petr *et al.* (1995) for the same association lends confidence to the reliability of the data presented here. Furthermore, in Hill *et al.* (1994b), these authors comment on the “large number of stars which apparently have negative color excesses” in LH 54. Indeed, their mean $E(B - V)$ of 0.02 appears rather unreasonably low, considering that Galactic foreground reddening must be a factor, as can be seen in *e.g.*, Massey *et al.* (1995). The $H\alpha$ images of DEM 192 show non-negligible material in the line of sight to these stars. In contrast, I find a mean $E(B - V) = 0.08$ (Paper III), which compares favorably with Petr’s *et al.* value of 0.10 (M.G. Petr, private communication).

Many of the brightest stars in the various OB associations have been observed photoelectrically, and I also compared my photometry with that compiled in the catalog of Rousseau *et al.* (1978) for 15 stars. The photoelectric observations were originally obtained by Ardeberg *et al.* (1972), Brunet *et al.* (1973), and Isserstedt (1975). The comparison for these stars is also shown in Table 6, and is perhaps surprisingly good for V and $B - V$, considering that a large fraction of these “stars” were actually composite objects for which I combined the individual magnitudes.

5. Color-Magnitude Diagrams

Figure 4 shows the color-magnitude diagrams (CMDs) of $(B - V)$ vs. V for the clusters associated with superbubbles, while Figure 5 shows the data for those within classical H II regions. DEM 231, whose CMD is included in Figure 4, is apparently a Wolf-Rayet bubble (*e.g.*, Chu & Lasker 1980), so should not be considered in either category. The open circles in Figures 4 and 5 represent stars whose photometric errors from DAOPHOT are ≤ 0.07 for $(B - V)$ and $(U - B)$, and those with higher errors are denoted by the plus symbols. Triangles correspond to stars that are either components of spectroscopic binaries, or whose photometry has been taken from the literature (see Paper III). Isochrones for 3, 6, 9, and 12 Myr are overlaid, which have been computed from the stellar evolutionary models of Schaerer *et al.* (1993), using a program kindly provided by D. Schaerer and G. Meynet. The isochrones have been adjusted for the median reddening of each association, computed in Paper III. Although the stellar models used to compute these isochrones do correspond to LMC metallicity, the colors and magnitudes were derived with the Galactic conversion. Therefore, the absolute ages implied by these isochrones should be regarded with caution, and I show these primarily to compare *relative* cluster ages.

The main sequence appears well-defined down to about 18th magnitude, at which point the quality of the data blurs the photometry. The well-known degeneracy in the colors of the upper main sequence (*e.g.*, Massey *et al.* 1989) is also clearly apparent. Another population of stars can be seen around 18th magnitude and to the red of the main sequence, which corresponds to the red giant branch of the background LMC population. All the CMDs also exhibit stars in the region to the red of the main sequence but brighter than the red giant branch;

the model of Ratnatunga & Bahcall (1985) indicates that these are virtually all Galactic foreground stars. However, occasional LMC members are also present, as will be seen in Paper III.

A qualitative comparison between Figure 4 and Figure 5 shows that the stellar populations of the superbubble and classical H II regions are perhaps surprisingly similar. Most of the associations in Figure 4 do show stars as blue and bright as those in Figure 5. Further comparison with CMDs published by *e.g.*, Hill *et al.* (1994a) show the same results. In addition, there is no excess of evolved, red supergiants in the superbubble sample, implying a similarly short duration of $\sim 1 - 2$ Myr (*e.g.*, Massey *et al.* 1989) in the star forming events for both sets of clusters. However, it does appear that the associations in the classical H II regions are more consistent with the youngest two isochrones, whereas the superbubble populations may be more consistent with the second and third isochrones. The distinction is not obvious, and is no doubt affected by factors such as differential extinction and uncertainties in the photometry.

I will examine these issues more carefully in Paper III, where I will present spectral classifications of the most massive stars and construct H-R diagrams to quantitatively investigate the stellar populations of the superbubbles. I will also examine the initial mass functions to examine whether they differ from that of other associations in the Magellanic Clouds. Paper IV will then use the data on the most massive stars to study the dynamics of the superbubbles themselves.

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TABLE 1
SAMPLE OF H II / OB ASSOCIATIONS

DEM	Henize	LH	DEM coords (1950.0)	Diameter (')	Fields	Tie Obs.
Superbubbles						
25	N185	...	04 54 10.0, -70 04 00	6.2	4	1
31	N9	6	04 55 20.1, -67 13 40	7.5	2	2
50	N186 CE	...	05 00 11.8, -70 15 49	7.5	5	3
106	N30 BC	38	05 13 56.3, -67 30 27	4.4	1	...
192	N51 D	51, 54	05 25 58.0, -67 32 19	8.3	4	...
226	N148 GI	73	05 32 06.0, -68 43 00	4.1	1	...
231 ^a	N57 C	...	05 33 16.1, -67 44 49	3.5 ^b	1	...
301	N70	114	05 43 35.6, -67 52 25	7.8	4	...
Classical H II Regions ^b						
10B	N79 CE	2	04 52 28.1, -69 25 35	3.3	1	...
66	N23 A	...	05 04 59.8, -68 07 26	5.5	1	...
197	N143	57	05 26 48.2, -69 21 32	5.0	1	1
243	N63 A	83	05 35 27.0, -66 04 26	7.5	1	...
293	N214 C	110	05 42 23.9, -71 21 06	3.8	1	...

^aWolf-Rayet bubble.

^bDiameter from Davies *et al.* (1976).

Table 2. Fixed Transformation Coefficients

Coefficient	V	B	U
Zero-point (v_1, b_1, u_1)	6.287	6.663	8.355
Color term (v_3, b_3, u_3)	-0.043	-0.115	-0.156

Table 3. Extinction Coefficients and Transformation Errors

Date	Stds	v_2	b_2	u_2	rms(V)	rms(B)	rms(U)
1992 Nov 19	9	0.22	0.33	0.54	0.008	0.008	0.013
1992 Nov 20	6	0.21	0.32	0.51	0.014	0.012	0.021
1992 Nov 26	12	0.20	0.30	0.51	0.018	0.017	0.019
1992 Nov 28	12	0.22	0.31	0.51	0.024	0.028	0.025
1992 Nov 29	17	0.21	0.31	0.52	0.009	0.014	0.014
1992 Nov 30	13	0.20	0.30	0.50	0.013	0.010	0.018
1992 Dec 1	14	0.19	0.30	0.50	0.011	0.016	0.023
1992 Dec 4	20	0.21	0.31	0.51	0.013	0.013	0.017
1992 Dec 5	19	0.24	0.34	0.55	0.024	0.020	0.025
1992 Dec 6	21	0.19	0.30	0.50	0.014	0.010	0.013
1992 Dec 7	26	0.18	0.28	0.49	0.011	0.011	0.013
1992 Dec 8	20	0.18	0.27	0.47	0.011	0.011	0.013
1992 Dec 9	14	0.19	0.29	0.49	0.016	0.012	0.015

TABLE 4a-m, OEY 1995a, ApJS submitted

These tables provide the photometry for the OB associations of the sample, including both superbubbles and diffuse H II regions. The Fortran format for the data is as follows:

ID, (2000.0) coordinates, V, V err, B-V, B-V err, U-B, U-B err
(A10,1X,A24,1X,F6.3,1X,F5.3,2X,F6.3,1X,F5.3,2X,F6.3,1X,F5.3)

Note that stars with a and b components are spectroscopic binaries, whose V magnitude has been estimated as described in the text. However, the colors listed for both components are the original, combined colors determined for the composite object. The DAOPHOT errors for these objects are misleading, and have been deleted.

The contents of the tables are as follows:

Table 4a	DEM 25
Table 4b	DEM 31
Table 4c	DEM 50
Table 4d	DEM 106
Table 4e	DEM 192
Table 4f	DEM 226
Table 4g	DEM 231
Table 4h	DEM 301
Table 4i	DEM 10b
Table 4j	DEM 66
Table 4k	DEM 197
Table 4l	DEM 243
Table 4m	DEM 293

Notes to individual objects:

DEM 31: Photometry for D31-2001 (Sk -67 17) listed from Ardeberg et al. (1972).

DEM 106: Stars with prefix D106A- have V photometry from a separate, short exposure.

DEM 192: Stars with prefix D192A- have V photometry from a separate, short exposure.

DEM 301: Photometry for D301-1005 listed from Massey et al. (1995).

Table 4a

D25NE-1	4	54	01.15	-69	59	47.4	12.547	0.009	-0.155	0.012	-1.022	0.011
D25NE-2	4	54	00.73	-69	59	46.4	14.689	0.016	-0.172	0.022	-1.023	0.022
D25NE-3	4	53	50.58	-69	59	45.6	14.927	0.005	-0.186	0.008	-0.982	0.010
D25NE-4	4	53	57.39	-69	58	38.3	14.942	0.006	-0.183	0.011	-0.967	0.013
D25NE-5	4	54	11.89	-69	59	24.7	15.178	0.005	-0.049	0.008	-0.700	0.012
D25SE-2	4	54	01.15	-70	00	43.4	15.492	0.004	1.673	0.018	0.074	0.000
D25SE-3	4	53	41.18	-70	02	25.2	15.658	0.005	-0.003	0.008	-0.552	0.011
D25SE-4	4	53	44.03	-70	01	52.2	15.665	0.004	-0.075	0.008	-0.636	0.011
D25NW-4	4	53	16.23	-69	58	11.4	15.780	0.009	-0.065	0.014	-0.862	0.016
D25SE-5	4	53	52.32	-70	01	55.7	15.799	0.005	1.402	0.017	...	...
D25NE-7	4	53	57.46	-69	58	55.2	15.834	0.009	-0.152	0.016	-0.772	0.042
D25SE-6	4	54	07.29	-70	02	59.8	15.845	0.005	0.991	0.017	1.180	0.110
D25NE-8	4	54	17.10	-69	59	17.7	15.916	0.006	-0.110	0.010	-0.707	0.014
D25NE-9	4	53	45.60	-69	59	16.1	15.918	0.006	-0.160	0.012	-0.940	0.018
D25NE-10	4	54	01.06	-69	59	06.2	15.941	0.009	-0.171	0.012	-0.933	0.015
D25SE-7	4	54	17.26	-70	03	16.7	16.117	0.005	1.748	0.030	...	...
D25NE-11	4	54	27.52	-69	58	38.7	16.163	0.008	1.018	0.024	1.009	0.100
D25SE-8	4	54	13.41	-70	00	52.6	16.187	0.007	-0.017	0.027	-0.569	0.037
D25SE-9	4	53	38.13	-70	03	35.4	16.227	0.008	-0.088	0.013	-0.577	0.022
D25SE-10	4	53	57.86	-70	03	35.8	16.241	0.006	-0.095	0.011	-0.666	0.019
D25SWt-10	4	53	35.81	-70	03	00.4	16.351	0.022	0.026	0.030	-0.514	0.034
D25SE-11	4	53	43.75	-70	01	44.4	16.395	0.010	1.828	0.029	...	...
D25NE-12	4	53	45.99	-69	59	02.6	16.484	0.005	0.757	0.016	0.077	0.062
D25NE-13	4	53	58.93	-69	58	50.5	16.558	0.020	-0.267	0.031	-0.829	0.039
D25NW-7	4	53	43.59	-70	00	07.4	16.570	0.010	1.833	0.045	...	...
D25NE-15	4	54	16.05	-69	57	44.4	16.582	0.008	-0.094	0.014	-0.800	0.027
D25SE-12	4	53	51.31	-70	01	04.3	16.583	0.008	1.504	0.029	...	...
D25SWt-13	4	53	12.78	-70	01	02.1	16.604	0.020	-0.085	0.027	-0.658	0.037
D25NE-14	4	54	07.39	-69	59	37.6	16.611	0.009	0.860	0.021	0.441	0.077
D25NW-9	4	53	27.93	-69	57	22.3	16.652	0.009	-0.008	0.016	-0.706	0.034
D25NE-17	4	53	51.10	-69	59	55.5	16.654	0.007	-0.103	0.016	-0.678	0.026
D25NE-18	4	53	56.72	-70	00	01.4	16.659	0.010	-0.130	0.020	-0.742	0.030
D25SWt-15	4	53	14.21	-70	02	19.8	16.666	0.021	-0.072	0.030	-0.685	0.033
D25NE-19	4	53	54.81	-70	00	05.3	16.684	0.008	-0.131	0.018	-0.736	0.030
D25NE-16	4	54	09.54	-69	59	20.8	16.693	0.009	1.499	0.033	...	...
D25NE-20	4	54	03.43	-69	59	13.4	16.704	0.008	-0.140	0.018	-0.745	0.028
D25SE-14	4	53	51.38	-70	00	59.8	16.715	0.181	-0.277	0.205	-0.600	0.035
D25SE-13	4	53	45.02	-70	03	21.2	16.738	0.009	1.641	0.037	...	...
D25SWt-16	4	53	28.89	-70	00	30.0	16.743	0.021	1.565	0.080	...	...
D25NE-21	4	54	02.65	-69	59	56.5	16.744	0.011	-0.156	0.017	-0.740	0.022
D25NE-22	4	53	52.22	-69	57	15.1	16.769	0.011	-0.076	0.024	-0.746	0.039
D25NE-23	4	54	02.13	-69	59	45.9	16.772	0.018	-0.038	0.038	-0.805	0.077
D25SWt-17	4	53	12.64	-70	03	46.6	16.793	0.018	1.741	0.083	...	...
D25SE-15	4	54	21.24	-70	02	43.5	16.799	0.009	1.446	0.035	...	...
D25NW-11	4	53	37.27	-69	58	37.8	16.808	0.010	1.310	0.037	...	...
D25NW-10	4	53	48.10	-69	56	42.9	16.810	0.011	1.694	0.052	...	...
D25NW-12	4	53	13.51	-69	58	18.9	16.823	0.010	1.591	0.043	...	...
D25SWt-24	4	53	36.16	-70	01	35.5	16.831	0.024	-0.109	0.033	-0.728	0.037
D25SE-17	4	54	06.53	-70	01	43.5	16.838	0.010	1.386	0.036	...	...
D25SWt-19	4	53	36.02	-70	03	46.0	16.847	0.023	1.696	0.087	...	...
D25SE-16	4	53	39.38	-70	02	22.0	16.852	0.011	1.713	0.047	...	...
D25NE-24	4	54	20.42	-69	59	02.4	16.862	0.011	1.717	0.046	...	...
D25NW-13	4	53	16.22	-69	58	13.8	16.863	0.012	1.202	0.040	...	...
D25SE-18	4	53	41.95	-70	00	57.3	16.864	0.008	1.704	0.044	...	...
D25SE-21	4	53	45.81	-70	03	08.9	16.878	0.010	1.346	0.030	...	...
D25SE-19	4	53	57.65	-70	02	49.3	16.886	0.011	1.807	0.052	...	...
D25SE-25	4	54	19.42	-70	03	23.6	16.888	0.010	0.511	0.021	0.227	0.084
D25SE-20	4	53	49.57	-70	01	36.7	16.894	0.011	1.755	0.039	...	...
D25SE-24	4	54	07.44	-70	02	21.8	16.906	0.010	1.406	0.036	...	...
D25SE-22	4	54	10.87	-70	02	24.2	16.907	0.014	1.746	0.048	...	...
D25SE-23	4	53	48.87	-70	00	38.6	16.915	0.011	1.634	0.041	...	...
D25NE-25	4	54	15.04	-69	58	29.7	16.916	0.010	0.661	0.028	-0.006	0.060
D25SE-27	4	54	08.96	-70	02	59.1	16.925	0.013	-0.097	0.019	-0.561	0.029
D25NW-14	4	53	27.97	-69	58	46.5	16.942	0.009	1.290	0.033	...	...

D25SE-26	4	54	18.28	-70	02	36.9	16.950	0.012	1.603	0.043	...	...
D25SWt-25	4	53	32.24	-70	01	20.2	16.988	0.020	1.642	0.088	...	...
D25SE-28	4	53	52.04	-70	03	15.1	17.018	0.013	1.568	0.041	...	...
D25SWt-28	4	53	08.35	-70	03	20.1	17.018	0.029	-0.024	0.041	-0.648	0.052
D25SWt-27	4	53	37.58	-70	02	27.7	17.022	0.019	0.716	0.050	-0.010	0.138
D25SE-29	4	54	18.03	-70	01	27.9	17.033	0.026	0.323	0.244	-0.851	0.302
D25NE-27	4	54	00.11	-69	58	15.5	17.042	0.011	0.329	0.022	0.110	0.069
D25NE-26	4	53	56.30	-69	57	26.6	17.046	0.013	1.189	0.042	...	...
D25NE-28	4	54	19.11	-69	57	23.4	17.056	0.010	0.605	0.025	-0.069	0.078
D25SWt-33	4	53	08.02	-70	00	39.5	17.057	0.028	-0.089	0.042	-0.020	0.073
D25NE-29	4	54	25.49	-69	57	36.7	17.061	0.012	0.018	0.024	-0.273	0.043
D25SWt-34	4	53	09.85	-70	03	59.4	17.064	0.028	0.060	0.044	-0.701	0.065
D25NE-30	4	54	09.01	-69	57	41.0	17.064	0.013	-0.034	0.027	-0.550	0.038
D25SWt-31	4	53	37.16	-70	04	02.1	17.094	0.024	1.032	0.060	...	...
D25NW-17	4	53	22.59	-69	59	57.3	17.099	0.012	0.095	0.036	-0.758	0.055
D25NE-31	4	54	00.24	-69	59	56.4	17.110	0.012	0.882	0.030	0.435	0.129
D25SWt-35	4	53	28.89	-70	01	37.7	17.112	0.029	0.461	0.048	-0.136	0.101
D25SWt-30	4	53	21.51	-70	03	36.7	17.117	0.023	1.884	0.140	...	...
D25NW-15	4	53	10.30	-69	58	49.8	17.121	0.011	1.578	0.048	...	...
D25SE-30	4	53	46.88	-70	02	07.6	17.123	0.010	1.482	0.043	...	...
D25NW-19	4	53	43.69	-69	58	48.1	17.169	0.011	0.007	0.022	-0.771	0.041
D25NW-18	4	53	18.55	-69	59	33.0	17.170	0.012	1.671	0.043	...	...
D25NW-16	4	53	20.05	-69	56	52.9	17.171	0.022	2.028	0.067	...	...
D25SE-34	4	54	00.66	-70	02	40.7	17.182	0.029	0.593	0.066	-0.432	0.105
D25SE-31	4	53	40.95	-70	03	00.0	17.183	0.013	1.858	0.060	...	...
D25SWt-38	4	53	31.26	-70	01	24.7	17.185	0.027	0.512	0.048	0.006	0.151
D25NE-32	4	54	21.19	-69	58	29.1	17.195	0.011	1.131	0.041	...	...
D25SE-35	4	53	51.20	-70	02	18.5	17.202	0.012	1.032	0.034	...	...
D25SWt-37	4	53	10.09	-70	03	31.1	17.205	0.024	1.283	0.073	...	...
D25NE-34	4	53	59.12	-70	00	00.6	17.206	0.012	1.110	0.038	...	...
D25NE-37	4	54	26.39	-70	00	28.1	17.209	0.013	-0.077	0.025	-0.742	0.036
D25NE-39	4	54	02.59	-69	59	24.5	17.215	0.014	-0.124	0.021	-0.706	0.032
D25NE-33	4	54	05.42	-69	59	28.4	17.219	0.017	1.513	0.056	...	...
D25NW-21	4	53	08.19	-69	57	58.5	17.221	0.012	1.000	0.037	0.101	0.171
D25SE-33	4	53	54.00	-70	03	07.3	17.221	0.012	1.665	0.052	...	...
D25NW-20	4	53	43.81	-69	56	59.0	17.225	0.012	1.118	0.035	...	...
D25SWt-39	4	53	10.97	-70	00	32.7	17.229	0.026	1.283	0.081	...	...
D25NE-35	4	53	44.64	-69	58	33.6	17.237	0.014	1.686	0.052	...	...
D25NE-36	4	53	48.03	-69	56	43.0	17.240	0.134	1.727	0.171	...	...
D25NW-22	4	53	31.21	-69	58	48.8	17.245	0.013	1.326	0.041	...	...
D25NW-26	4	53	20.06	-69	58	27.5	17.254	0.014	0.018	0.025	-0.677	0.052
D25NE-38	4	54	17.69	-69	57	15.0	17.258	0.012	1.016	0.034	...	...
D25NW-24	4	53	19.79	-69	58	24.4	17.259	0.014	0.922	0.084	0.461	0.265
D25NE-41	4	54	08.78	-69	58	52.9	17.259	0.016	-0.116	0.027	-0.711	0.040
D25NW-25	4	53	40.74	-69	56	38.1	17.311	0.015	1.699	0.059	...	...
D25SE-36	4	53	43.82	-70	03	27.4	17.316	0.014	1.602	0.062	...	...
D25NE-40	4	54	17.32	-70	00	07.4	17.319	0.015	1.502	0.059	...	...
D25SWt-41	4	53	34.67	-70	02	55.8	17.320	0.028	1.515	0.109	...	...
D25NW-30	4	53	16.86	-69	58	18.9	17.324	0.011	-0.006	0.024	-0.684	0.048
D25NE-42	4	54	15.26	-69	59	26.7	17.328	0.012	0.888	0.029	0.422	0.155
D25SWt-43	4	53	10.07	-70	03	03.4	17.331	0.036	0.059	0.058	-0.657	0.069
D25NW-27	4	53	14.68	-69	59	33.2	17.335	0.013	1.092	0.042	...	...
D25SE-38	4	53	38.60	-70	03	43.8	17.351	0.014	-0.045	0.024	-0.486	0.048
D25NW-28	4	53	40.47	-69	57	34.5	17.354	0.013	1.314	0.046	...	...
D25NE-45	4	54	12.59	-69	59	43.2	17.360	0.017	-0.109	0.027	-0.747	0.040
D25SWt-42	4	53	32.03	-70	01	50.4	17.361	0.027	1.462	0.095	...	...
D25NE-43	4	54	07.24	-69	57	06.5	17.369	0.012	1.071	0.034	...	...
D25NE-44	4	53	48.62	-70	00	08.3	17.376	0.011	0.886	0.041	0.384	0.164
D25NE-46	4	54	27.49	-69	58	40.2	17.376	0.013	-0.079	0.032	-0.620	0.050
D25SWt-46	4	53	31.61	-70	03	48.6	17.378	0.038	-0.111	0.054	-0.471	0.070
D25SWt-45	4	53	22.54	-70	02	36.7	17.382	0.036	0.023	0.051	-0.713	0.062
D25NW-29	4	53	39.01	-69	59	22.2	17.384	0.014	1.694	0.066	...	...
D25NW-32	4	53	39.34	-69	56	47.2	17.384	0.015	0.015	0.027	-0.598	0.067
D25NE-48	4	53	50.68	-69	58	57.4	17.405	0.012	-0.105	0.026	-0.849	0.036
D25SE-40	4	54	02.26	-70	02	23.1	17.431	0.015	-0.140	0.024	-0.539	0.045
D25SE-39	4	53	40.40	-70	02	41.7	17.432	0.015	0.861	0.035	...	...

D25NE-49	4	54	09.60	-70	00	03.6	17.442	0.016	0.577	0.033	-0.095	0.084
D25NE-52	4	54	09.80	-69	57	54.0	17.444	0.015	-0.108	0.025	-0.773	0.044
D25NE-47	4	54	13.60	-69	58	28.5	17.445	0.017	1.349	0.062	...	...
D25SWt-47	4	53	08.19	-70	01	32.8	17.446	0.024	1.406	0.113	...	...
D25NW-35	4	53	35.23	-70	00	17.9	17.450	0.016	0.074	0.033	-0.746	0.067
D25NE-51	4	54	12.50	-69	57	16.0	17.481	0.017	1.399	0.062	...	...
D25NE-55	4	53	45.86	-69	58	24.7	17.481	0.016	-0.086	0.029	-0.692	0.048
D25NW-38	4	53	42.33	-69	59	34.6	17.490	0.015	-0.003	0.032	-0.620	0.062
D25NE-50	4	54	06.79	-69	58	49.2	17.493	0.013	1.703	0.063	...	...
D25SWt-51	4	53	34.95	-70	03	16.8	17.496	0.035	0.067	0.056	-0.022	0.118
D25SE-41	4	54	17.65	-70	01	23.3	17.500	0.014	0.394	0.032	-0.071	0.097
D25NE-53	4	53	53.21	-69	58	05.7	17.503	0.014	1.143	0.052	...	...
D25NW-36	4	53	35.03	-69	59	03.4	17.511	0.014	1.001	0.049	...	...
D25SWt-52	4	53	25.61	-70	02	14.0	17.528	0.033	-0.080	0.050	-0.628	0.076
D25NE-56	4	53	58.11	-70	00	17.4	17.529	0.032	0.909	0.080	0.034	0.160
D25SWt-54	4	53	27.81	-70	03	14.1	17.534	0.031	-0.117	0.051	-0.509	0.076
D25NE-54	4	53	51.19	-69	57	36.4	17.536	0.014	1.413	0.068	...	...
D25SE-43	4	53	38.73	-70	00	57.4	17.547	0.015	0.128	0.030	0.173	0.104
D25SWt-55	4	53	28.39	-70	00	39.4	17.553	0.088	-0.147	0.107	-0.699	0.078
D25NW-43	4	53	15.44	-69	56	47.5	17.561	0.015	0.461	0.038	-0.432	0.112
D25SWt-53	4	53	10.90	-70	01	25.4	17.561	0.025	0.644	0.060	...	...
D25NW-39	4	53	43.54	-69	57	09.1	17.572	0.016	1.248	0.057	...	...
D25SE-42	4	53	47.41	-70	01	09.1	17.577	0.019	1.031	0.044	...	...
D25NE-58	4	54	03.21	-69	59	41.2	17.582	0.018	-0.158	0.036	-0.740	0.047
D25SWt-58	4	53	35.99	-70	01	00.8	17.584	0.040	-0.079	0.060	-0.552	0.076
D25NE-59	4	54	20.72	-69	58	55.7	17.588	0.013	-0.032	0.028	-0.698	0.051
D25NW-42	4	53	16.98	-69	57	42.8	17.590	0.015	1.438	0.063	...	...
D25NW-47	4	53	09.61	-69	56	58.5	17.594	0.016	0.016	0.029	-0.794	0.063
D25NW-44	4	53	25.16	-69	59	17.5	17.600	0.026	1.317	0.057	...	...
D25SE-46	4	54	21.06	-70	02	16.3	17.600	0.021	0.479	0.038	0.213	0.131
D25SE-47	4	53	45.38	-70	01	51.3	17.601	0.016	-0.068	0.029	-0.433	0.051
D25SWt-57	4	53	12.22	-70	01	47.8	17.603	0.035	0.512	0.073	-0.140	0.163
D25NE-60	4	53	58.21	-69	56	46.3	17.608	0.014	0.018	0.030	-0.628	0.051
D25SWt-56	4	53	19.52	-70	02	47.1	17.615	0.036	1.261	0.107	...	...
D25SE-44	4	53	56.13	-70	00	40.5	17.620	0.016	1.344	0.061	...	...
D25NE-57	4	53	56.76	-69	58	00.6	17.620	0.021	1.314	0.090	...	...
D25NE-61	4	54	10.34	-69	56	44.0	17.620	0.013	-0.029	0.035	-0.085	0.081
D25NW-45	4	53	18.89	-69	57	18.5	17.621	0.015	1.591	0.075	...	...
D25SE-45	4	54	08.03	-70	01	17.8	17.627	0.017	1.292	0.056	...	...
D25NW-46	4	53	31.58	-69	59	42.6	17.635	0.016	1.780	0.072	...	...
D25SE-49	4	54	12.30	-70	01	08.6	17.641	0.015	-0.043	0.031	-0.456	0.064
D25NE-66	4	54	09.21	-69	59	52.8	17.669	0.014	-0.084	0.029	-0.659	0.047
D25NW-50	4	53	17.10	-69	59	07.9	17.674	0.019	0.118	0.034	-0.385	0.089
D25NE-67	4	54	13.28	-69	57	24.2	17.674	0.016	-0.047	0.033	-0.622	0.056
D25NE-65	4	54	00.40	-69	59	47.6	17.679	0.165	0.165	0.219	-0.863	0.199
D25NE-68	4	54	22.91	-69	57	29.5	17.684	0.014	-0.078	0.028	-0.597	0.054
D25SE-53	4	54	02.55	-70	00	39.8	17.686	0.028	-0.135	0.043	-0.435	0.061
D25SWt-62	4	53	40.94	-70	03	57.1	17.686	0.053	0.911	0.108	...	...
D25SWt-61	4	53	21.98	-70	02	04.0	17.689	0.041	1.293	0.111	...	...
D25NE-62	4	54	26.34	-69	58	00.4	17.700	0.013	1.388	0.062	...	...
D25SE-50	4	54	17.56	-70	02	36.0	17.703	0.025	1.379	0.084	...	...
D25NE-64	4	53	53.10	-69	59	35.3	17.706	0.017	0.873	0.043	0.204	0.199
D25NE-71	4	53	44.88	-69	58	54.1	17.710	0.011	-0.098	0.022	-0.609	0.047
D25NW-53	4	53	28.17	-69	56	40.1	17.711	0.020	0.013	0.037	-0.817	0.066
D25NE-63	4	54	19.24	-69	59	50.5	17.711	0.015	1.243	0.049	...	...
D25NW-49	4	53	18.62	-69	56	50.6	17.722	0.019	1.364	0.057	...	...
D25SE-52	4	53	41.91	-70	02	54.9	17.724	0.026	1.136	0.059	...	...
D25NW-51	4	53	39.26	-69	57	03.3	17.733	0.019	1.106	0.054	...	...
D25SE-51	4	54	15.23	-70	03	04.7	17.739	0.017	1.554	0.074	...	...
D25NE-74	4	53	59.61	-69	58	28.8	17.742	0.017	-0.012	0.033	-0.671	0.066
D25NE-70	4	54	09.79	-69	58	24.0	17.747	0.024	1.099	0.057	...	...
D25NE-69	4	54	10.86	-69	57	59.6	17.749	0.014	1.336	0.053	...	...
D25NW-59	4	53	12.31	-69	58	14.8	17.751	0.044	0.083	0.066	-0.730	0.085
D25NW-54	4	53	32.53	-69	58	56.2	17.766	0.020	1.100	0.059	...	...
D25NW-52	4	53	38.64	-69	59	45.3	17.768	0.033	1.379	0.076	...	...
D25NE-76	4	53	44.95	-69	57	28.2	17.768	0.020	-0.039	0.034	-0.648	0.060

D25NW-55	4	53	43.10	-69	57	28.5	17.774	0.056	1.280	0.086	...	...
D25SE-54	4	53	53.65	-70	02	19.8	17.776	0.023	0.773	0.076	...	...
D25SE-55	4	53	43.12	-70	03	06.5	17.776	0.023	-0.113	0.036	-0.338	0.069
D25NW-56	4	53	28.24	-69	57	08.0	17.778	0.017	1.139	0.056	...	...
D25NE-72	4	54	10.91	-69	59	42.0	17.782	0.015	1.157	0.055	...	...
D25NE-73	4	54	05.71	-69	58	24.7	17.782	0.019	1.098	0.046	...	...
D25NW-58	4	53	15.16	-69	57	01.3	17.790	0.021	1.166	0.066	...	...
D25NW-64	4	53	41.76	-69	59	50.6	17.793	0.022	0.037	0.037	-0.349	0.091
D25NW-60	4	53	38.08	-69	59	53.1	17.799	0.020	1.040	0.054	...	...
D25NE-75	4	54	03.21	-69	58	46.8	17.799	0.017	1.243	0.050	...	...
D25NE-82	4	54	28.26	-69	58	12.3	17.812	0.018	-0.044	0.032	-0.672	0.047
D25NE-77	4	53	49.97	-69	57	03.3	17.821	0.021	1.067	0.054	...	...
D25NE-83	4	54	03.20	-69	57	52.7	17.822	0.021	0.002	0.035	-0.698	0.054
D25NW-63	4	53	20.23	-69	58	04.3	17.826	0.020	1.028	0.057	...	...
D25NE-78	4	54	11.94	-69	57	33.2	17.832	0.016	0.698	0.046	...	...
D25SE-56	4	53	48.63	-70	02	04.6	17.833	0.018	1.004	0.061	...	...
D25SWt-65	4	53	28.13	-70	00	35.6	17.842	0.042	1.134	0.128	...	...
D25NE-85	4	53	50.31	-69	59	27.4	17.842	0.017	-0.045	0.039	-0.763	0.064
D25SE-59	4	53	49.86	-70	03	35.1	17.845	0.018	-0.047	0.032	-0.450	0.070
D25NW-68	4	53	43.30	-69	59	12.2	17.849	0.019	-0.022	0.037	-0.736	0.087
D25NE-81	4	54	03.72	-69	59	58.7	17.855	0.017	1.009	0.066	...	...
D25SE-57	4	54	02.25	-70	03	09.4	17.862	0.149	0.830	0.265	...	...
D25NE-79	4	54	06.92	-69	57	19.7	17.864	0.017	1.297	0.074	...	...
D25SE-60	4	53	54.32	-70	03	42.3	17.869	0.018	-0.029	0.038	-0.270	0.088
D25SE-61	4	53	49.75	-70	02	22.0	17.870	0.021	-0.007	0.035	-0.234	0.090
D25NE-80	4	54	01.33	-69	58	47.0	17.870	0.015	1.369	0.060	...	...
D25NE-84	4	53	46.68	-70	00	08.2	17.876	0.015	1.223	0.059	...	...
D25NW-70	4	53	24.40	-69	57	54.1	17.886	0.020	0.639	0.052	-0.024	0.220
D25SWt-72	4	53	13.26	-70	02	05.4	17.892	0.045	0.785	0.090	...	...
D25SE-58	4	54	03.84	-70	02	58.0	17.897	0.020	1.318	0.069	...	...
D25NE-87	4	53	53.25	-69	58	28.4	17.897	0.018	0.003	0.029	-0.487	0.063
D25NW-69	4	53	26.85	-70	00	03.0	17.904	0.019	1.132	0.068	...	...
D25SE-66	4	53	47.22	-70	02	25.9	17.907	0.019	-0.084	0.034	-0.548	0.072
D25NW-67	4	53	35.49	-69	59	21.2	17.908	0.017	1.547	0.079	...	...
D25NE-88	4	54	25.26	-69	58	40.2	17.909	0.022	-0.021	0.045	-0.754	0.074
D25NE-89	4	53	50.61	-69	59	28.0	17.909	0.020	-0.022	0.034	-0.401	0.072
D25SE-62	4	54	09.86	-70	02	03.5	17.914	0.019	0.991	0.057	...	...
D25NW-71	4	53	13.87	-69	56	56.3	17.920	0.021	1.122	0.058	...	...
D25SE-63	4	54	14.31	-70	00	34.8	17.923	0.035	0.867	0.064	...	...
D25NE-90	4	53	50.24	-69	59	01.5	17.926	0.022	0.054	0.040	-0.646	0.069
D25SWt-77	4	53	11.20	-70	03	28.9	17.930	0.041	0.663	0.103	...	...
D25NW-72	4	53	18.01	-69	56	39.1	17.932	0.022	1.085	0.060	...	...
D25NE-86	4	54	13.99	-69	57	50.9	17.936	0.021	1.063	0.053	...	...
D25SE-64	4	54	18.99	-70	01	13.1	17.938	0.019	1.080	0.060	...	...
D25SE-68	4	53	39.75	-70	01	14.2	17.940	0.020	-0.022	0.037	-0.216	0.082
D25NW-75	4	53	14.26	-69	57	31.0	17.946	0.022	0.188	0.043	-0.526	0.095
D25NE-93	4	53	51.70	-69	57	54.7	17.946	0.025	0.146	0.044	-0.039	0.107
D25SE-69	4	54	01.43	-70	03	00.5	17.948	0.031	0.138	0.047	0.105	0.128
D25NE-94	4	54	06.40	-69	59	16.6	17.953	0.019	-0.045	0.038	-0.522	0.057
D25SWt-80	4	53	29.19	-70	03	28.3	17.954	0.036	-0.033	0.059	-0.424	0.109
D25SE-67	4	53	58.71	-70	03	30.2	17.959	0.020	0.987	0.058	0.229	0.281
D25NE-95	4	54	00.36	-69	58	20.0	17.964	0.017	-0.088	0.031	-0.605	0.050
D25NE-92	4	53	51.16	-70	00	28.6	17.966	0.021	0.728	0.048	-0.179	0.122
D25SE-74	4	53	56.96	-70	01	10.5	17.980	0.022	0.067	0.043	-0.102	0.116
D25NE-91	4	53	46.34	-69	57	36.8	17.982	0.015	1.165	0.057	...	...
D25SWt-85	4	53	12.43	-70	03	43.7	17.984	0.049	0.020	0.081	-0.307	0.131
D25NW-78	4	53	40.40	-70	00	08.6	17.990	0.023	0.044	0.040	-0.596	0.085
D25NW-73	4	53	32.20	-69	58	51.6	17.995	0.029	1.432	0.084	...	...
D25SE-73	4	53	55.13	-70	01	17.6	17.999	0.021	0.692	0.054	...	...
D25SE-75	4	53	46.70	-70	03	49.4	18.007	0.024	-0.071	0.039	-0.504	0.071
D25SE-79	4	53	43.89	-70	00	53.9	18.012	0.098	-0.350	0.114	-0.224	0.083
D25SE-76	4	54	16.30	-70	01	33.7	18.017	0.023	0.003	0.041	0.237	0.122
D25NE-97	4	53	58.51	-69	59	17.7	18.019	0.018	0.977	0.053	...	...
D25NE-102	4	53	46.50	-69	59	44.2	18.023	0.020	-0.046	0.039	-0.438	0.067
D25NE-96	4	54	25.27	-69	59	52.5	18.023	0.021	1.237	0.058	...	...
D25NE-98	4	54	19.97	-69	59	12.0	18.023	0.024	1.035	0.059	...	...

D25SE-78	4	53	46.99	-70	02	19.1	18.030	0.023	0.072	0.041	-0.207	0.114
D25NW-79	4	53	08.97	-69	57	44.6	18.037	0.026	0.898	0.057	...	...
D25NW-82	4	53	32.30	-69	57	19.1	18.045	0.019	0.824	0.058	...	...
D25SWt-87	4	53	11.60	-70	02	17.1	18.053	0.058	0.621	0.108	...	...
D25SE-80	4	53	42.33	-70	02	52.1	18.061	0.031	0.065	0.046	-0.349	0.094
D25NE-101	4	54	28.19	-69	56	50.9	18.062	0.021	0.979	0.082	...	...
D25NE-103	4	53	50.20	-69	59	04.6	18.062	0.021	-0.009	0.045	-0.494	0.062
D25NE-100	4	54	12.01	-69	56	52.2	18.069	0.016	1.165	0.060	...	...
D25SE-83	4	53	41.61	-70	00	45.1	18.070	0.021	-0.023	0.038	-0.523	0.076
D25NE-105	4	54	08.39	-69	59	09.0	18.076	0.026	0.004	0.037	-0.575	0.070
D25NE-106	4	54	19.89	-69	57	12.7	18.078	0.019	-0.096	0.039	-0.487	0.073
D25NE-107	4	53	50.78	-69	58	38.0	18.079	0.025	-0.071	0.037	-0.251	0.082
D25SWt-92	4	53	10.87	-70	04	00.9	18.084	0.054	-0.014	0.087	-0.537	0.123
D25NW-83	4	53	28.44	-69	57	48.8	18.089	0.028	0.670	0.067	...	...
D25SWt-89	4	53	36.73	-70	03	51.2	18.096	0.059	0.800	0.125	...	...
D25NE-108	4	53	55.59	-69	59	57.8	18.098	0.020	-0.006	0.039	-0.413	0.075
D25NE-109	4	54	13.30	-69	56	48.6	18.109	0.027	-0.045	0.046	-0.689	0.074
D25NE-104	4	53	52.84	-70	00	09.9	18.111	0.015	0.901	0.064	...	...
D25SWt-90	4	53	32.64	-70	01	25.0	18.116	0.049	1.153	0.128	...	...
D25NW-86	4	53	36.80	-69	58	06.7	18.120	0.028	0.353	0.049	-0.592	0.147
D25SE-88	4	54	07.56	-70	03	27.2	18.122	0.023	0.054	0.041	-0.002	0.124
D25SE-82	4	54	02.04	-70	02	01.8	18.125	0.025	1.274	0.089	...	...
D25SWt-95	4	53	37.21	-70	01	02.0	18.132	0.065	0.169	0.103	-0.631	0.147
D25SE-85	4	54	12.07	-70	02	59.6	18.140	0.029	0.919	0.084	...	...
D25SWt-96	4	53	09.88	-70	04	02.4	18.145	0.061	0.177	0.101	0.110	0.251
D25SE-87	4	54	11.35	-70	02	43.8	18.148	0.024	1.039	0.076	...	...
D25SE-86	4	54	07.67	-70	02	16.4	18.150	0.025	1.114	0.079	...	...
D25NW-85	4	53	28.98	-69	56	45.4	18.152	0.027	1.348	0.094	...	...
D25NW-87	4	53	12.94	-69	57	17.0	18.176	0.023	1.338	0.091	...	...
D25NW-94	4	53	25.27	-69	59	54.5	18.176	0.031	0.104	0.050	-0.276	0.121
D25NE-117	4	53	59.92	-69	59	40.4	18.180	0.029	-0.001	0.047	-0.153	0.101
D25SE-95	4	54	08.61	-70	00	51.2	18.181	0.034	0.005	0.050	-0.355	0.117
D25NE-118	4	54	26.67	-69	59	40.2	18.181	0.040	-0.006	0.067	-0.246	0.092
D25SE-96	4	54	12.38	-70	02	25.6	18.183	0.024	-0.025	0.045	0.021	0.124
D25NE-114	4	54	03.03	-69	59	16.1	18.184	0.031	0.603	0.052	0.071	0.188
D25NW-89	4	53	27.71	-69	58	57.8	18.185	0.025	1.180	0.079	...	...
D25SE-89	4	53	52.89	-70	00	43.6	18.185	0.023	1.422	0.097	...	...
D25NW-88	4	53	23.39	-69	56	43.2	18.187	0.026	1.292	0.093	...	...
D25SWt-98	4	53	25.57	-70	02	18.0	18.190	0.062	0.879	0.141	...	...
D25NE-120	4	54	25.14	-69	59	04.6	18.194	0.028	-0.105	0.047	-0.320	0.085
D25NW-92	4	53	11.31	-70	00	04.9	18.199	0.023	1.007	0.073	...	...
D25NE-111	4	53	59.21	-70	00	24.3	18.200	0.031	1.188	0.082	...	...
D25NW-91	4	53	35.29	-69	56	54.5	18.201	0.027	1.230	0.097	...	...
D25NE-110	4	54	11.00	-69	57	40.6	18.201	0.022	1.269	0.073	...	...
D25NE-112	4	54	12.34	-70	00	19.6	18.206	0.019	1.219	0.068	...	...
D25NW-90	4	53	38.84	-69	58	55.2	18.211	0.024	1.554	0.110	...	...
D25NW-93	4	53	32.77	-69	59	09.9	18.211	0.025	1.276	0.088	...	...
D25SWt-100	4	53	28.34	-70	02	50.1	18.212	0.062	0.891	0.147	...	...
D25NE-113	4	53	52.18	-69	59	10.2	18.212	0.033	1.277	0.103	...	...
D25NW-96	4	53	22.70	-69	57	23.0	18.217	0.028	0.272	0.055	-0.145	0.173
D25NE-124	4	54	15.08	-69	57	25.5	18.221	0.022	-0.044	0.042	-0.664	0.073
D25NE-116	4	54	21.33	-69	57	17.4	18.224	0.024	1.055	0.076	...	...
D25SE-94	4	53	45.82	-70	02	35.2	18.228	0.025	1.272	0.092	...	...
D25SWt-106	4	53	17.48	-70	03	53.1	18.228	0.070	-0.078	0.116	-0.688	0.142
D25SE-97	4	53	56.63	-70	01	49.2	18.230	0.033	1.001	0.090	...	...
D25SE-99	4	54	16.14	-70	03	40.4	18.230	0.028	0.098	0.051	-0.107	0.143
D25SWt-103	4	53	11.53	-70	00	38.8	18.230	0.073	0.639	0.138	...	...
D25NE-126	4	54	28.09	-69	58	25.8	18.230	0.022	-0.030	0.044	-0.506	0.066
D25SE-101	4	53	45.52	-70	01	45.9	18.233	0.024	0.005	0.043	-0.017	0.144
D25NW-97	4	53	35.79	-69	57	38.2	18.239	0.034	0.515	0.066	...	...
D25NE-119	4	54	00.49	-69	59	33.8	18.244	0.026	1.289	0.099	...	...
D25NE-121	4	54	01.13	-70	00	09.9	18.249	0.018	1.023	0.070	...	...
D25NW-98	4	53	41.13	-69	57	11.1	18.253	0.030	0.807	0.076	...	...
D25NE-127	4	54	27.29	-69	57	51.5	18.253	0.047	0.224	0.075	-0.463	0.112
D25NE-122	4	54	25.69	-69	59	20.6	18.255	0.024	0.983	0.066	...	...
D25SE-100	4	54	16.94	-70	00	46.5	18.258	0.029	0.613	0.054	...	...

D25NW-95	4	53	42.95	-69	57	11.1	18.260	0.028	1.269	0.104	...	...
D25SE-98	4	54	02.10	-70	02	53.9	18.268	0.029	1.184	0.102	...	...
D25NW-99	4	53	16.29	-69	59	54.1	18.269	0.031	1.033	0.083	...	...
D25NE-129	4	54	01.83	-69	58	10.1	18.270	0.022	0.053	0.042	-0.283	0.094
D25NW-101	4	53	13.48	-69	58	35.6	18.280	0.029	0.888	0.079	...	...
D25SE-107	4	53	40.64	-70	01	54.7	18.281	0.036	0.069	0.055	0.093	0.172
D25SWt-116	4	53	34.52	-70	01	52.0	18.285	0.107	-0.312	0.168	-0.802	0.182
D25NW-100	4	53	34.64	-69	59	45.5	18.288	0.034	1.103	0.080	0.516	0.750
D25SE-103	4	54	17.71	-70	01	11.9	18.289	0.031	1.016	0.081	...	...
D25SE-102	4	53	48.77	-70	01	10.8	18.297	0.026	1.280	0.093	...	...
D25NE-128	4	54	06.61	-69	58	00.1	18.298	0.031	1.173	0.086	...	...
D25SE-109	4	53	48.02	-70	01	31.7	18.299	0.027	0.144	0.053	0.464	0.243
D25SWt-112	4	53	17.74	-70	01	08.8	18.299	0.062	0.366	0.126	...	...
D25NE-132	4	53	53.35	-69	58	23.7	18.302	0.031	0.199	0.054	-0.603	0.101
D25SE-105	4	54	15.18	-70	03	43.3	18.304	0.040	1.169	0.145	...	...
D25NE-135	4	54	12.46	-69	58	46.9	18.310	0.032	-0.077	0.056	-0.715	0.082
D25NE-130	4	54	04.90	-69	58	49.1	18.311	0.025	0.936	0.063	...	...
D25NW-105	4	53	32.79	-69	58	18.2	18.312	0.027	0.100	0.050	-0.471	0.141
D25SWt-114	4	53	35.28	-70	02	12.5	18.313	0.074	0.590	0.148	...	...
D25NE-138	4	53	58.60	-69	58	52.3	18.317	0.026	-0.031	0.065	-0.593	0.113
D25NW-108	4	53	37.01	-69	57	42.1	18.320	0.031	0.039	0.056	-0.980	0.111
D25SE-108	4	54	05.88	-70	03	16.0	18.323	0.022	0.940	0.070	...	...
D25NW-102	4	53	10.35	-69	58	01.6	18.325	0.030	1.129	0.092	...	...
D25SE-106	4	53	48.20	-70	02	13.2	18.325	0.031	1.289	0.117	...	...
D25SE-112	4	54	10.68	-70	03	45.2	18.326	0.029	-0.040	0.046	-0.243	0.138
D25NE-140	4	54	13.95	-69	59	43.0	18.326	0.028	-0.022	0.056	-0.573	0.097
D25NW-112	4	53	21.37	-69	58	15.9	18.334	0.073	0.016	0.096	-0.469	0.144
D25SE-113	4	53	43.75	-70	03	31.0	18.338	0.031	0.128	0.067	0.140	0.189
D25NE-133	4	54	25.47	-69	59	03.9	18.340	0.029	0.918	0.086	...	...
D25NE-131	4	54	08.33	-69	58	13.3	18.341	0.026	1.251	0.079	...	...
D25NE-144	4	54	01.10	-69	59	08.6	18.343	0.032	0.053	0.053	-0.200	0.096
D25SE-117	4	54	18.00	-70	02	39.6	18.348	0.038	0.079	0.059	0.072	0.161
D25SE-116	4	54	07.12	-70	02	19.0	18.349	0.033	0.140	0.060	...	...
D25NW-103	4	53	30.75	-69	58	08.2	18.350	0.029	1.188	0.100	...	...
D25NE-134	4	54	15.00	-69	58	03.2	18.351	0.025	0.965	0.095	...	...
D25NW-113	4	53	26.87	-69	59	14.1	18.353	0.035	0.248	0.063	-0.123	0.232
D25NE-136	4	53	56.54	-69	57	47.2	18.354	0.026	0.907	0.064	...	...
D25NE-137	4	54	26.44	-69	57	25.1	18.358	0.025	0.976	0.079	...	...
D25NW-114	4	53	15.90	-69	58	29.2	18.359	0.179	0.214	0.237	-0.757	0.196
D25NW-106	4	53	42.00	-69	56	45.3	18.363	0.031	1.238	0.099	...	...
D25NW-109	4	53	31.57	-69	59	37.3	18.363	0.029	0.922	0.095	...	...
D25SE-111	4	53	38.44	-70	03	08.0	18.363	0.030	1.106	0.090	...	...
D25NE-139	4	53	52.39	-69	57	35.6	18.364	0.028	0.892	0.074	...	...
D25SWt-125	4	53	20.13	-70	04	02.2	18.366	0.061	-0.046	0.103	...	...
D25NE-146	4	53	54.18	-69	59	22.0	18.366	0.035	-0.033	0.055	-0.602	0.082
D25SE-114	4	54	03.66	-70	02	04.4	18.369	0.024	0.806	0.075	...	...
D25NE-147	4	54	27.60	-69	59	56.3	18.372	0.031	0.067	0.054	0.404	0.155
D25NW-110	4	53	14.23	-69	57	14.2	18.376	0.030	1.110	0.094	...	...
D25NE-142	4	54	12.79	-69	57	22.0	18.376	0.034	0.933	0.084	...	...
D25NE-148	4	54	22.13	-69	59	41.5	18.378	0.024	0.179	0.052	-0.132	0.131
D25SWt-126	4	53	29.09	-70	02	09.3	18.381	0.110	0.094	0.154	...	...
D25NW-111	4	53	16.10	-69	58	28.2	18.382	0.177	1.152	0.333	...	...
D25SWt-128	4	53	13.69	-70	01	07.5	18.383	0.064	0.129	0.111	-0.425	0.213
D25NE-141	4	54	05.15	-69	57	43.7	18.383	0.026	1.228	0.096	...	...
D25NE-151	4	54	13.52	-70	00	03.8	18.385	0.051	0.163	0.075	-0.489	0.115
D25SE-119	4	54	20.68	-70	03	53.6	18.392	0.034	0.810	0.077	...	...
D25SE-122	4	54	08.97	-70	00	56.0	18.393	0.032	0.621	0.070	...	...
D25NE-154	4	54	00.13	-69	59	13.1	18.393	0.028	0.106	0.045	-0.019	0.139
D25NE-155	4	53	50.66	-69	56	54.4	18.396	0.022	-0.007	0.040	-0.340	0.106
D25NE-156	4	54	09.58	-69	57	55.8	18.397	0.030	-0.051	0.050	-0.581	0.098
D25NE-145	4	54	18.64	-69	57	48.9	18.398	0.026	1.194	0.071	...	...
D25SWt-131	4	53	32.57	-70	01	45.3	18.399	0.074	-0.003	0.112	-0.322	0.224
D25SE-115	4	53	57.77	-70	03	45.8	18.405	0.031	1.550	0.137	...	...
D25NW-118	4	53	31.49	-69	58	59.3	18.411	0.031	0.198	0.062	...	...
D25NE-149	4	54	23.44	-69	59	55.1	18.412	0.028	0.960	0.091	...	...
D25NW-117	4	53	39.76	-69	59	31.4	18.415	0.032	0.837	0.087	...	...

D25SE-118	4	53	59.54	-70	03	31.5	18.417	0.032	1.465	0.122	...	...
D25NE-153	4	53	44.62	-69	59	28.5	18.422	0.031	0.987	0.092	...	...
D25SE-123	4	53	47.28	-70	03	05.6	18.424	0.026	1.062	0.089	...	...
D25SWt-133	4	53	28.55	-70	02	58.0	18.425	0.060	0.281	0.138	...	...
D25NE-150	4	53	53.10	-69	59	03.0	18.427	0.030	1.257	0.131	...	...
D25NE-158	4	54	15.75	-69	58	23.6	18.427	0.032	0.035	0.061	-0.681	0.099
D25NE-159	4	53	45.69	-69	58	20.9	18.428	0.021	0.023	0.043	-0.553	0.069
D25NW-115	4	53	31.15	-69	57	22.8	18.430	0.034	1.258	0.103	...	...
D25NW-122	4	53	29.93	-69	57	34.2	18.433	0.031	0.512	0.069	...	...
D25SE-128	4	53	50.10	-70	02	19.4	18.438	0.030	0.033	0.055	-0.360	0.139
D25NE-160	4	53	59.71	-69	58	15.3	18.438	0.036	0.190	0.065	-0.385	0.143
D25NE-161	4	53	53.66	-69	59	42.2	18.439	0.032	0.091	0.050	-0.307	0.107
D25NW-119	4	53	35.27	-69	57	01.1	18.440	0.032	0.878	0.097	...	...
D25NW-127	4	53	38.84	-70	00	18.0	18.443	0.032	0.041	0.055	-0.671	0.134
D25SE-130	4	54	07.24	-70	01	31.8	18.445	0.032	0.094	0.064	-0.168	0.150
D25NE-157	4	54	06.33	-69	57	14.0	18.446	0.045	0.720	0.097	...	...
D25NE-163	4	54	02.89	-69	57	47.5	18.454	0.024	0.179	0.056	-0.186	0.128
D25NW-121	4	53	16.36	-69	59	01.2	18.457	0.038	1.113	0.096	...	...
D25NW-124	4	53	33.70	-69	57	53.6	18.460	0.043	0.821	0.101	...	...
D25NE-166	4	53	58.56	-69	58	44.4	18.461	0.032	-0.037	0.051	-0.381	0.101
D25NE-165	4	54	05.41	-69	57	16.7	18.462	0.027	0.098	0.051	-0.311	0.115
D25NW-120	4	53	42.50	-69	59	42.1	18.464	0.030	1.297	0.102	...	...
D25SE-134	4	53	55.74	-70	00	53.0	18.467	0.031	-0.185	0.049	-0.108	0.107
D25NW-128	4	53	08.24	-69	58	46.1	18.469	0.043	0.596	0.164	-1.209	0.245
D25SE-129	4	53	52.49	-70	03	29.5	18.469	0.029	0.665	0.068	...	...
D25NW-125	4	53	34.93	-69	57	40.8	18.471	0.046	1.069	0.109	...	...
D25NW-132	4	53	35.02	-69	58	58.0	18.477	0.038	0.090	0.060	...	...
D25SE-126	4	53	45.83	-70	02	58.7	18.478	0.046	1.334	0.111	...	...
D25NE-164	4	54	00.64	-69	59	57.4	18.486	0.034	0.834	0.084	...	...
D25SWt-140	4	53	12.95	-70	01	10.1	18.488	0.068	0.037	0.120	...	...
D25NE-162	4	54	08.96	-70	00	21.0	18.488	0.018	1.133	0.101	...	...
D25SE-127	4	54	13.67	-70	01	31.9	18.489	0.033	1.394	0.116	...	...
D25NW-137	4	53	16.74	-69	57	15.0	18.500	0.033	0.198	0.063	-0.897	0.147
D25SE-131	4	54	07.38	-70	01	00.1	18.500	0.029	1.208	0.110	...	...
D25NE-172	4	54	11.90	-69	59	15.0	18.501	0.025	-0.080	0.061	-0.323	0.118
D25NW-130	4	53	32.64	-69	59	36.1	18.502	0.032	0.917	0.079	...	...
D25NW-138	4	53	18.86	-69	59	08.0	18.503	0.083	0.158	0.133	...	...
D25NW-135	4	53	13.33	-70	00	13.5	18.506	0.037	0.482	0.074	...	...
D25SE-132	4	54	09.45	-70	01	50.6	18.508	0.036	1.139	0.105	...	...
D25NE-174	4	54	15.54	-69	58	50.7	18.508	0.033	0.049	0.069	-0.530	0.108
D25NW-133	4	53	35.47	-69	59	55.3	18.509	0.053	0.715	0.088	...	...
D25NE-175	4	53	56.19	-69	59	45.2	18.510	0.027	0.025	0.046	-0.396	0.126
D25NE-176	4	54	24.68	-69	58	24.3	18.512	0.053	-0.008	0.089	...	...
D25NW-134	4	53	28.47	-69	56	41.6	18.516	0.158	0.876	0.215	...	...
D25NE-178	4	53	45.74	-69	58	50.5	18.517	0.027	-0.026	0.052	-0.680	0.083
D25SE-135	4	53	54.61	-70	02	44.4	18.518	0.032	0.721	0.083	...	...
D25SWt-144	4	53	33.61	-70	02	36.8	18.518	0.079	-0.276	0.116	-0.189	0.197
D25NE-168	4	54	05.17	-69	57	21.8	18.518	0.025	0.904	0.072	...	...
D25SE-133	4	54	01.63	-70	03	20.8	18.519	0.029	1.184	0.119	...	...
D25NW-141	4	53	38.25	-69	56	54.9	18.521	0.036	0.116	0.061	-0.965	0.123
D25SE-140	4	53	54.09	-70	00	56.6	18.532	0.035	0.185	0.062	...	...
D25NE-170	4	54	27.90	-69	58	02.5	18.537	0.031	1.032	0.106	...	...
D25NW-139	4	53	30.30	-69	58	06.0	18.539	0.034	0.977	0.101	...	...
D25NE-171	4	54	10.09	-69	58	32.1	18.541	0.026	1.015	0.078	...	...
D25SE-138	4	53	54.14	-70	00	52.0	18.542	0.040	0.715	0.080	...	...
D25NE-182	4	53	59.16	-69	58	18.7	18.543	0.031	-0.005	0.047	-0.608	0.086
D25SE-142	4	54	16.92	-70	01	00.6	18.545	0.035	0.232	0.071	...	...
D25NE-184	4	54	12.97	-70	00	27.3	18.548	0.032	0.060	0.055	-0.597	0.091
D25NE-186	4	53	48.52	-69	58	13.0	18.548	0.036	-0.035	0.055	-0.725	0.083
D25NW-136	4	53	35.04	-69	59	43.3	18.549	0.041	1.406	0.148	...	...
D25SE-136	4	53	43.64	-70	01	32.2	18.554	0.037	1.345	0.136	...	...
D25SWt-149	4	53	20.99	-70	02	28.6	18.554	0.090	0.005	0.126	...	...
D25NW-146	4	53	21.16	-69	57	51.6	18.555	0.033	0.214	0.065	-0.284	0.229
D25SE-139	4	53	46.58	-70	00	48.4	18.558	0.038	0.854	0.104	...	...
D25NW-145	4	53	21.71	-69	58	12.4	18.559	0.044	0.555	0.096	...	...
D25NE-183	4	54	09.14	-69	59	00.6	18.559	0.047	0.308	0.086	0.011	0.211

D25SWt-151	4	53	14.47	-70	02	47.4	18.561	0.086	-0.022	0.125	...	...
D25NE-179	4	54	27.75	-69	57	19.9	18.563	0.037	1.045	0.106	...	...
D25NE-173	4	54	25.64	-69	59	02.3	18.564	0.031	1.372	0.122	...	...
D25NE-188	4	54	26.08	-69	58	43.4	18.566	0.038	-0.039	0.063	-0.819	0.081
D25NW-152	4	53	42.42	-69	59	23.2	18.573	0.037	0.068	0.061	...	...
D25NE-181	4	53	54.34	-69	59	01.5	18.579	0.032	1.046	0.093	...	...
D25NE-180	4	53	48.18	-69	58	43.9	18.582	0.049	1.190	0.108	...	...
D25NE-191	4	53	55.50	-69	57	03.8	18.584	0.029	0.046	0.054	-0.627	0.129
D25SE-146	4	54	12.22	-70	02	51.3	18.585	0.033	0.079	0.066	...	...
D25SE-147	4	53	42.04	-70	01	28.4	18.589	0.042	0.067	0.072	-0.212	0.189
D25SWt-148	4	53	34.13	-70	02	53.8	18.589	0.081	1.031	0.235	...	...
D25NE-192	4	54	10.94	-69	57	27.1	18.590	0.039	0.018	0.069	-0.776	0.109
D25NW-149	4	53	18.37	-70	00	14.2	18.591	0.049	0.855	0.107	...	...
D25NE-194	4	54	25.50	-69	58	00.1	18.592	0.031	-0.081	0.058	-0.546	0.100
D25NW-156	4	53	36.01	-69	59	51.1	18.594	0.043	0.035	0.073	...	...
D25NE-185	4	53	44.49	-69	59	44.4	18.594	0.028	1.048	0.092	...	...
D25SWt-158	4	53	37.22	-70	00	48.1	18.597	0.070	0.140	0.130	...	...
D25NE-197	4	53	48.66	-70	00	19.3	18.600	0.034	0.001	0.058	-0.937	0.085
D25NE-195	4	54	17.19	-69	56	46.5	18.601	0.039	0.049	0.065	-0.386	0.144
D25NW-154	4	53	21.55	-69	58	22.5	18.605	0.043	0.739	0.095	...	...
D25NW-157	4	53	24.29	-69	56	42.8	18.605	0.046	0.236	0.072	...	...
D25SE-152	4	54	02.72	-70	03	02.2	18.605	0.052	-0.302	0.072	-0.003	0.151
D25NE-196	4	53	49.46	-69	58	47.1	18.605	0.036	0.116	0.070	-0.403	0.117
D25NE-189	4	54	11.83	-69	59	36.6	18.607	0.030	0.805	0.094	...	...
D25NW-150	4	53	40.11	-69	59	26.6	18.610	0.035	1.247	0.112	...	...
D25NE-198	4	54	04.29	-69	59	46.4	18.613	0.032	0.170	0.058	-0.545	0.138
D25NW-151	4	53	34.89	-69	56	56.9	18.614	0.034	1.131	0.115	...	...
D25NW-147	4	53	23.92	-69	58	54.5	18.620	0.056	1.603	0.178	...	...
D25SE-153	4	53	56.06	-70	02	56.9	18.620	0.035	0.024	0.056	-0.484	0.147
D25SE-144	4	53	56.95	-70	01	59.6	18.621	0.034	1.227	0.117	...	...
D25SE-148	4	54	00.36	-70	02	39.5	18.623	0.037	0.621	0.221	...	...
D25SWt-162	4	53	19.30	-70	02	23.4	18.624	0.094	-0.146	0.124	-0.631	0.194
D25NE-200	4	54	26.98	-69	59	09.3	18.629	0.026	-0.015	0.064	-0.527	0.110
D25NW-155	4	53	37.91	-70	00	17.3	18.636	0.034	1.306	0.148	...	...
D25NE-202	4	53	56.37	-69	59	20.2	18.638	0.027	0.053	0.074	-0.676	0.128
D25SWt-164	4	53	15.15	-70	03	45.3	18.641	0.095	0.032	0.183	-0.618	0.247
D25SE-157	4	53	42.88	-70	01	41.0	18.643	0.035	-0.064	0.060	...	...
D25NW-161	4	53	33.31	-69	57	40.6	18.646	0.065	0.730	0.103	...	...
D25SE-156	4	53	50.29	-70	02	08.5	18.646	0.040	0.038	0.069	...	...
D25SE-155	4	54	06.48	-70	00	45.7	18.650	0.032	0.131	0.059	-0.486	0.141
D25NW-158	4	53	26.69	-69	57	41.8	18.651	0.035	1.183	0.137	...	...
D25SWt-167	4	53	35.66	-70	01	54.2	18.652	0.082	-0.048	0.133	-0.323	0.263
D25SWt-168	4	53	21.53	-70	02	38.5	18.656	0.098	0.040	0.157	-0.335	0.260
D25NE-203	4	54	10.07	-69	58	38.2	18.657	0.027	-0.044	0.067	-0.645	0.110
D25NE-204	4	54	26.47	-69	57	15.3	18.662	0.050	0.017	0.076	-0.370	0.152
D25NW-168	4	53	11.42	-69	58	48.8	18.664	0.038	0.182	0.068	-0.355	0.234
D25NW-164	4	53	31.93	-69	58	14.3	18.668	0.034	1.133	0.111	...	...
D25SE-164	4	54	18.18	-70	02	43.9	18.669	0.030	-0.084	0.057	-0.385	0.137
D25NW-171	4	53	34.14	-69	57	37.9	18.671	0.073	0.015	0.097	...	...
D25SWt-172	4	53	11.29	-70	00	57.7	18.673	0.122	0.153	0.185	0.100	0.324
D25SWt-175	4	53	27.18	-70	01	27.0	18.677	0.116	-0.105	0.157	-0.295	0.269
D25SE-159	4	54	07.63	-70	02	32.8	18.678	0.040	0.411	0.082	...	...
D25NE-207	4	54	02.37	-69	58	31.8	18.681	0.039	0.145	0.061	-0.205	0.155
D25NW-165	4	53	37.33	-69	56	39.2	18.685	0.041	1.339	0.151	...	...
D25NW-167	4	53	40.82	-69	59	15.3	18.693	0.039	1.034	0.112	...	...
D25NE-210	4	54	10.08	-69	57	15.5	18.697	0.043	0.090	0.074	-0.365	0.139
D25NE-206	4	54	25.74	-69	57	39.8	18.698	0.054	0.666	0.101	...	...
D25SE-162	4	54	16.36	-70	02	42.6	18.701	0.061	0.795	0.119	...	...
D25NE-208	4	54	10.94	-69	59	37.7	18.701	0.036	0.523	0.087	...	...
D25NW-175	4	53	30.99	-69	58	56.3	18.703	0.038	0.214	0.078	...	...
D25NE-205	4	53	57.02	-69	57	19.5	18.703	0.036	0.952	0.093	...	...
D25NW-172	4	53	17.62	-69	59	14.3	18.706	0.036	0.716	0.096	...	...
D25SE-161	4	53	43.61	-70	01	00.1	18.706	0.040	0.916	0.098	...	...
D25SE-163	4	53	51.70	-70	03	45.8	18.706	0.046	0.838	0.111	...	...
D25SWt-171	4	53	14.86	-70	02	21.4	18.712	0.108	1.109	0.280	...	...
D25NW-173	4	53	08.16	-70	00	07.4	18.715	0.044	0.747	0.099	...	...

D25SWt-181	4	53	29.19	-70	03	00.3	18.715	0.067	0.165	0.129	...	...
D25NE-215	4	54	19.99	-70	00	22.7	18.715	0.035	-0.002	0.066	-0.193	0.164
D25NE-217	4	53	51.04	-70	00	18.8	18.717	0.053	-0.121	0.082	-0.292	0.132
D25SWt-182	4	53	14.32	-70	03	58.8	18.719	0.117	0.156	0.191	...	...
D25SE-168	4	54	13.48	-70	02	27.6	18.720	0.078	0.516	0.126	...	...
D25NE-219	4	53	55.01	-69	58	47.0	18.720	0.043	-0.088	0.068	-0.621	0.101
D25NE-216	4	53	59.15	-69	57	32.6	18.721	0.025	0.001	0.056	-0.654	0.124
D25SE-160	4	54	11.42	-70	02	11.6	18.722	0.039	1.330	0.150	...	...
D25NE-220	4	53	56.90	-69	58	01.7	18.724	0.055	-0.108	0.099	-0.459	0.141
D25NE-218	4	54	02.24	-69	58	35.6	18.725	0.035	0.066	0.065	-0.376	0.150
D25SE-172	4	53	38.84	-70	03	10.9	18.732	0.043	0.229	0.077	...	...
D25NE-212	4	54	06.71	-69	56	54.7	18.732	0.020	0.797	0.075	...	...
D25NW-174	4	53	34.18	-69	57	32.7	18.740	0.041	1.092	0.109	...	...
D25SWt-190	4	53	35.84	-70	03	01.9	18.740	0.118	-0.442	0.252	0.314	0.370
D25NE-221	4	54	09.09	-69	58	18.7	18.741	0.044	0.124	0.067	...	...
D25NE-211	4	54	12.91	-69	59	30.8	18.742	0.050	1.065	0.130	...	...
D25NE-222	4	53	46.29	-70	00	08.8	18.742	0.030	0.025	0.064	-0.589	0.141
D25NW-183	4	53	18.70	-69	57	13.7	18.744	0.038	0.023	0.062	...	...
D25SE-165	4	53	44.44	-70	03	24.3	18.744	0.043	1.672	0.265	...	...
D25NE-214	4	54	17.90	-69	59	30.1	18.745	0.040	0.768	0.093	...	...
D25NE-225	4	54	03.43	-69	57	54.3	18.750	0.050	-0.020	0.076	-0.486	0.117
D25NE-213	4	53	52.72	-69	58	14.0	18.751	0.038	0.924	0.104	...	...
D25NW-181	4	53	17.93	-69	56	54.6	18.752	0.077	0.568	0.127	...	...
D25SE-177	4	53	53.08	-70	03	01.2	18.752	0.039	0.118	0.066	...	...
D25NW-179	4	53	16.72	-69	57	28.6	18.755	0.043	0.893	0.108	...	...
D25NW-184	4	53	27.59	-69	56	45.3	18.755	0.051	0.196	0.086	...	...
D25SWt-184	4	53	14.00	-70	03	35.3	18.755	0.099	0.394	0.192	...	...
D25SWt-192	4	53	15.07	-70	03	38.5	18.756	0.078	-0.091	0.124	-0.592	0.203
D25NW-176	4	53	21.01	-69	57	22.9	18.760	0.065	1.419	0.700	...	...
D25SE-181	4	54	15.11	-70	03	41.3	18.761	0.035	-0.128	0.085	-0.013	0.205
D25NE-226	4	54	19.96	-69	59	53.7	18.761	0.048	0.204	0.083	...	...
D25NW-178	4	53	09.55	-69	59	25.7	18.762	0.039	1.307	0.119	...	...
D25NW-191	4	53	10.67	-69	56	57.5	18.762	0.037	-0.024	0.059	...	...
D25NW-188	4	53	34.10	-69	59	08.4	18.763	0.129	0.182	0.157	...	...
D25SE-180	4	54	12.12	-70	03	25.3	18.765	0.044	0.122	0.079	...	...
D25NW-190	4	53	24.62	-69	58	19.5	18.769	0.041	0.264	0.077	...	...
D25NW-180	4	53	39.63	-69	59	52.0	18.771	0.052	1.146	0.152	...	...
D25NE-228	4	54	08.38	-69	58	54.4	18.775	0.027	0.470	0.087	-0.511	0.195
D25SE-178	4	54	06.78	-70	02	30.3	18.778	0.069	0.524	0.118	...	...
D25NW-187	4	53	24.15	-69	58	41.4	18.779	0.040	0.612	0.092	...	...
D25NE-229	4	53	57.11	-69	57	57.8	18.779	0.050	-0.024	0.089	-0.331	0.117
D25NE-231	4	54	09.61	-69	59	24.4	18.781	0.041	-0.212	0.062	-0.597	0.088
D25NW-196	4	53	18.75	-70	00	00.5	18.789	0.108	-0.005	0.136	...	...
D25NE-195	4	53	34.58	-69	56	51.0	18.790	0.041	0.020	0.072	-0.395	0.232
D25SE-188	4	54	18.47	-70	03	29.4	18.790	0.201	0.046	0.236	...	...
D25SWt-195	4	53	34.73	-70	01	52.8	18.794	0.169	0.059	0.316	...	...
D25SE-183	4	54	02.09	-70	03	08.7	18.795	0.359	0.415	0.531	-0.846	0.448
D25NW-186	4	53	08.49	-69	58	15.6	18.796	0.040	1.068	0.128	...	...
D25SE-173	4	53	41.14	-70	01	60.0	18.796	0.038	1.630	0.207	...	...
D25SWt-197	4	53	28.89	-70	03	14.8	18.796	0.082	-0.005	0.133	-0.608	0.238
D25NE-233	4	54	03.13	-69	58	51.0	18.796	0.034	-0.096	0.074	-0.283	0.146
D25SWt-198	4	53	14.46	-70	03	49.6	18.803	0.116	0.015	0.178	-0.639	0.231
D25SE-192	4	54	10.03	-70	02	33.3	18.804	0.043	0.122	0.077	...	...
D25NW-189	4	53	39.90	-69	57	43.4	18.806	0.042	1.161	0.140	...	...
D25NE-235	4	54	00.31	-69	59	39.9	18.808	0.054	0.093	0.083	...	...
D25NE-236	4	54	02.57	-70	00	03.7	18.808	0.035	0.013	0.071	...	...
D25SE-185	4	53	39.51	-70	00	47.8	18.810	0.037	0.707	0.086	...	...
D25NE-237	4	54	11.55	-69	56	57.9	18.814	0.042	0.114	0.077	-0.394	0.133
D25SWt-203	4	53	21.42	-70	00	26.3	18.816	0.093	-0.184	0.143	...	...
D25SE-194	4	53	58.75	-70	01	20.3	18.817	0.122	0.386	0.159	...	...
D25SWt-199	4	53	11.71	-70	00	52.7	18.817	0.171	0.268	0.233	-0.400	0.283
D25SWt-201	4	53	27.46	-70	01	34.6	18.818	0.097	0.023	0.168	...	...
D25SE-196	4	54	08.41	-70	02	36.6	18.820	0.073	0.018	0.099	...	...
D25NE-238	4	54	03.84	-69	59	49.6	18.823	0.035	0.040	0.066	0.300	0.231
D25NE-239	4	54	03.40	-69	57	38.8	18.826	0.046	0.045	0.073	-0.427	0.128
D25NW-192	4	53	30.61	-69	58	47.7	18.829	0.048	1.031	0.139	...	...

D25SE-187	4	53	51.95	-70	01	51.0	18.830	0.036	1.004	0.119	...	...
D25NW-193	4	53	29.80	-69	57	00.8	18.834	0.087	1.106	0.209	...	...
D25SE-191	4	53	46.93	-70	02	15.7	18.839	0.040	1.043	0.129	...	...
D25SE-200	4	53	58.02	-70	02	47.9	18.840	0.054	0.169	0.098	...	...
D25NW-202	4	53	33.60	-69	56	36.0	18.841	0.044	0.249	0.086	...	...
D25SE-189	4	54	05.56	-70	01	24.0	18.843	0.050	1.213	0.192	...	...
D25SE-190	4	53	56.19	-70	01	39.9	18.843	0.043	1.181	0.157	...	...
D25SE-205	4	54	14.28	-70	03	09.6	18.843	0.051	-0.111	0.076	...	...
D25SE-193	4	54	03.18	-70	01	07.6	18.844	0.040	1.053	0.146	...	...
D25NW-204	4	53	23.24	-69	56	49.3	18.849	0.054	0.126	0.098	...	...
D25NW-199	4	53	32.48	-69	57	04.8	18.852	0.043	0.875	0.110	...	...
D25SE-201	4	54	09.95	-70	02	41.7	18.853	0.048	0.357	0.099	-0.634	0.196
D25SE-206	4	54	01.81	-70	00	52.2	18.857	0.047	0.218	0.083	...	...
D25NE-242	4	54	21.41	-69	58	47.8	18.859	0.046	-0.021	0.077	...	...
D25NW-203	4	53	39.34	-69	59	54.3	18.861	0.056	0.611	0.109	...	...
D25SWt-210	4	53	29.16	-70	03	09.3	18.861	0.116	-0.016	0.175	...	...
D25SE-208	4	53	38.66	-70	03	17.8	18.868	0.111	0.337	0.151	...	...
D25SE-195	4	53	55.33	-70	00	55.8	18.869	0.044	1.239	0.162	...	...
D25SE-209	4	54	03.09	-70	02	31.2	18.869	0.041	0.267	0.080	...	...
D25NE-245	4	54	21.55	-69	58	42.1	18.872	0.033	0.038	0.057	-0.674	0.123
D25SE-213	4	53	46.85	-70	02	38.3	18.873	0.049	0.104	0.078	...	...
D25SE-211	4	53	43.63	-70	03	37.9	18.878	0.047	0.316	0.083	...	...
D25NW-201	4	53	30.22	-69	57	01.3	18.879	0.050	1.213	0.218	...	...
D25SE-215	4	54	13.85	-70	03	50.1	18.879	0.045	0.130	0.080	...	...
D25NE-248	4	54	07.58	-69	59	07.9	18.884	0.037	-0.095	0.069	-0.135	0.173
D25SE-216	4	54	03.42	-70	02	39.4	18.885	0.055	0.018	0.088	-0.329	0.191
D25NE-247	4	54	01.19	-69	57	07.9	18.886	0.052	0.109	0.089	-0.478	0.152
D25NW-207	4	53	24.60	-69	56	34.8	18.888	0.049	0.340	0.091	...	...
D25NE-250	4	53	57.23	-69	58	55.2	18.892	0.057	0.038	0.117	-1.620	0.152
D25SE-212	4	53	40.56	-70	01	15.4	18.904	0.042	0.850	0.131	...	...
D25SE-223	4	54	21.45	-70	03	24.7	18.907	0.062	-0.105	0.094	...	...
D25SE-227	4	54	00.99	-70	02	40.8	18.907	0.146	-0.290	0.218	0.134	0.274
D25NW-210	4	53	08.09	-69	58	48.5	18.909	0.062	0.439	0.161	...	...
D25NW-213	4	53	39.79	-70	00	06.9	18.912	0.054	0.016	0.085	...	...
D25SE-210	4	54	06.77	-70	03	45.6	18.912	0.047	1.190	0.153	...	...
D25NW-214	4	53	31.48	-69	59	05.0	18.915	0.056	-0.008	0.083	...	...
D25NW-209	4	53	36.66	-69	57	40.2	18.917	0.065	0.793	0.156	...	...
D25SE-224	4	53	42.70	-70	03	39.3	18.917	0.072	0.086	0.103	...	...
D25SE-214	4	53	48.86	-70	03	23.2	18.918	0.044	1.101	0.145	...	...
D25NE-254	4	54	05.00	-70	00	27.3	18.918	0.063	0.009	0.091	...	...
D25NE-262	4	54	00.99	-69	57	01.8	18.920	0.155	-0.670	0.183	0.021	0.125
D25NE-255	4	53	59.53	-69	56	45.1	18.927	0.035	0.068	0.060	...	...
D25NW-212	4	53	36.71	-69	59	36.3	18.929	0.053	0.650	0.139	...	...
D25NE-257	4	54	25.02	-69	59	40.6	18.929	0.046	0.029	0.075	-0.459	0.153
D25SE-220	4	54	18.88	-70	01	25.3	18.933	0.055	0.768	0.123	...	...
D25NE-256	4	54	18.85	-69	57	32.0	18.934	0.046	0.221	0.073	...	...
D25NE-259	4	54	12.34	-69	57	50.4	18.936	0.059	0.124	0.084	...	...
D25SE-233	4	54	07.60	-70	02	56.8	18.946	0.048	-0.011	0.094	...	...
D25SE-228	4	54	14.91	-70	00	31.9	18.949	0.050	0.538	0.111	...	...
D25SE-234	4	53	47.76	-70	00	46.7	18.950	0.051	0.070	0.084	-0.144	0.248
D25NE-263	4	54	00.15	-69	57	43.3	18.950	0.041	0.003	0.066	-0.484	0.182
D25NW-216	4	53	35.59	-69	57	30.8	18.959	0.046	0.900	0.135	...	...
D25NE-267	4	53	56.24	-69	58	00.7	18.960	0.050	0.051	0.077	...	...
D25NE-270	4	53	54.63	-69	59	49.0	18.961	0.052	-0.050	0.089	-0.574	0.140
D25SE-236	4	53	44.26	-70	03	22.0	18.964	0.054	0.163	0.112	...	...
D25NE-261	4	54	08.25	-70	00	11.1	18.965	0.033	0.408	0.077	...	...
D25NE-272	4	53	58.51	-69	59	08.3	18.965	0.052	-0.060	0.074	-0.326	0.173
D25NE-258	4	54	17.60	-69	59	28.4	18.966	0.038	0.868	0.116	...	...
D25NW-222	4	53	28.46	-69	59	35.2	18.968	0.051	0.339	0.103	...	...
D25NW-224	4	53	32.77	-69	57	35.2	18.968	0.050	0.267	0.099	...	...
D25NE-271	4	54	05.55	-69	58	31.6	18.968	0.045	0.036	0.085	-0.805	0.116
D25NE-268	4	53	58.61	-69	59	24.5	18.972	0.043	0.240	0.087	...	...
D25NE-274	4	54	26.91	-69	57	29.0	18.972	0.034	0.038	0.068	...	...
D25NE-275	4	53	54.35	-69	58	46.5	18.974	0.033	0.066	0.066	-0.188	0.207
D25NE-278	4	54	10.82	-69	56	58.4	18.975	0.041	-0.021	0.081	-0.227	0.160
D25NW-226	4	53	30.95	-69	57	19.3	18.976	0.055	0.278	0.095	...	...

D25NE-273	4	54	05.68	-70	00	14.1	18.977	0.041	0.178	0.086	...	...
D25SE-240	4	54	13.00	-70	01	18.8	18.980	0.045	0.053	0.093	...	...
D25SE-238	4	53	58.23	-70	03	12.8	18.982	0.050	0.209	0.088	...	...
D25NE-279	4	54	03.49	-69	59	35.6	18.982	0.052	-0.056	0.081	-0.555	0.150
D25SE-241	4	53	47.99	-70	02	51.1	18.984	0.053	0.093	0.098	...	...
D25SE-239	4	53	43.73	-70	02	35.1	18.987	0.054	0.260	0.096	...	...
D25NE-286	4	53	56.63	-69	59	04.6	18.988	0.059	-0.478	0.092	-0.177	0.147
D25NE-269	4	54	20.11	-69	57	56.2	18.989	0.060	0.599	0.103	...	...
D25NW-221	4	53	23.14	-69	59	14.8	18.990	0.045	0.900	0.126	...	...
D25SE-243	4	54	03.12	-70	02	28.0	18.995	0.046	0.124	0.083	...	...
D25SWt-231	4	53	11.33	-70	01	30.7	18.996	0.132	0.150	0.205	...	...
D25NE-283	4	54	21.75	-69	58	23.2	18.999	0.061	-0.107	0.098	...	...
D25NW-218	4	53	10.45	-69	59	41.9	19.000	0.060	1.586	0.305	...	...
D25NE-285	4	54	13.16	-69	59	34.0	19.001	0.040	-0.131	0.072	-0.673	0.134
D25SE-249	4	54	14.55	-70	02	15.1	19.004	0.058	0.066	0.091	...	...
D25NW-227	4	53	21.78	-69	58	15.5	19.009	0.062	0.639	0.153	...	...
D25NW-228	4	53	21.09	-70	00	08.3	19.010	0.041	0.498	0.098	...	...
D25SE-250	4	54	05.63	-70	00	47.9	19.012	0.055	0.170	0.099	...	...
D25SE-252	4	54	12.10	-70	00	58.3	19.012	0.048	-0.031	0.083	...	...
D25NE-282	4	54	10.63	-69	57	27.0	19.017	0.064	0.351	0.120	...	...
D25NE-288	4	54	01.63	-69	59	15.3	19.017	0.044	0.086	0.079	-0.179	0.168
D25SE-245	4	53	42.89	-70	03	16.8	19.018	0.049	0.451	0.098	...	...
D25NE-292	4	54	16.13	-69	58	48.6	19.019	0.051	-0.035	0.095	-0.390	0.187
D25NE-289	4	54	03.40	-69	59	54.1	19.020	0.054	0.144	0.105	-0.001	0.221
D25NW-235	4	53	44.27	-70	00	07.2	19.021	0.062	0.142	0.119	...	...
D25NE-290	4	54	19.71	-69	57	48.7	19.022	0.052	0.104	0.085	...	...
D25NE-291	4	53	50.41	-69	56	58.3	19.023	0.054	0.086	0.103	...	...
D25NE-296	4	54	00.02	-69	57	00.0	19.023	0.041	-0.142	0.067	-0.706	0.143
D25NW-236	4	53	13.12	-69	58	21.3	19.024	0.055	0.129	0.111	...	...
D25SWt-239	4	53	21.71	-70	03	23.8	19.024	0.101	-0.121	0.184	...	...
D25NW-238	4	53	11.58	-69	59	02.7	19.025	0.059	-0.005	0.095	-0.665	0.226
D25SE-258	4	53	50.41	-70	03	30.2	19.027	0.053	-0.101	0.093	...	...
D25NE-295	4	53	47.22	-69	58	43.5	19.027	0.056	0.029	0.098	-0.797	0.131
D25SWt-238	4	53	21.55	-70	00	28.6	19.031	0.122	0.049	0.197	...	...
D25NE-280	4	54	02.49	-69	57	03.3	19.034	0.047	1.012	0.130	...	...
D25SE-257	4	53	50.43	-70	02	25.2	19.036	0.052	0.155	0.094	...	...
D25NE-297	4	54	13.57	-69	57	36.9	19.038	0.041	0.216	0.080	...	...
D25NW-239	4	53	33.26	-69	59	29.8	19.039	0.053	0.230	0.102	...	...
D25NE-294	4	54	09.54	-70	00	26.9	19.040	0.070	0.348	0.108	...	...
D25NE-287	4	54	02.60	-69	59	45.3	19.041	0.081	0.749	0.209	...	...
D25NW-242	4	53	33.01	-69	59	02.1	19.042	0.045	-0.075	0.091	...	...
D25NE-300	4	54	17.49	-69	59	45.3	19.044	0.038	0.245	0.083	...	...
D25NE-303	4	54	05.25	-70	00	22.3	19.044	0.051	0.184	0.102	-0.779	0.160
D25NW-237	4	53	40.42	-69	58	32.6	19.047	0.053	0.526	0.119	...	...
D25SE-262	4	54	05.47	-70	01	52.8	19.049	0.052	0.101	0.092	...	...
D25NW-243	4	53	17.50	-69	58	09.0	19.050	0.051	0.059	0.090	-0.532	0.228
D25SE-247	4	53	53.60	-70	00	41.7	19.050	0.041	1.147	0.171	...	...
D25SE-260	4	53	40.47	-70	02	06.1	19.052	0.053	0.367	0.122	...	...
D25NW-241	4	53	21.01	-69	59	51.7	19.053	0.057	0.278	0.103	...	...
D25NE-306	4	53	58.97	-70	00	21.7	19.053	0.049	-0.005	0.078	-0.871	0.123
D25NW-244	4	53	23.39	-69	57	20.1	19.055	0.054	0.016	0.097	...	...
D25NW-240	4	53	42.98	-69	59	17.5	19.058	0.049	0.446	0.115	...	...
D25NE-310	4	54	15.84	-69	56	54.6	19.060	0.043	0.073	0.080	...	...
D25NE-293	4	54	01.76	-69	57	05.8	19.062	0.043	0.935	0.134	...	...
D25NE-311	4	54	28.48	-70	00	21.3	19.063	0.055	0.071	0.106	...	...
D25NE-301	4	53	58.37	-69	59	33.0	19.065	0.057	0.701	0.133	...	...
D25SE-253	4	53	45.39	-70	02	13.1	19.067	0.043	1.121	0.163	...	...
D25SWt-246	4	53	32.72	-70	01	19.0	19.067	0.116	0.134	0.200	...	...
D25SE-263	4	54	15.70	-70	00	30.3	19.072	0.050	0.408	0.113	...	...
D25NW-249	4	53	24.26	-69	59	47.9	19.073	0.054	0.248	0.106	...	...
D25NE-312	4	54	24.75	-69	58	13.7	19.077	0.038	0.202	0.088	...	...
D25NE-314	4	54	15.51	-69	59	01.0	19.081	0.036	0.100	0.064	-0.701	0.140
D25NE-316	4	54	10.43	-70	00	05.9	19.081	0.058	0.051	0.093	...	...
D25NE-317	4	54	10.05	-69	59	00.7	19.084	0.047	0.095	0.079	...	...
D25SE-275	4	53	40.91	-70	02	03.8	19.089	0.064	-0.194	0.103	...	...
D25NE-315	4	54	07.55	-69	58	20.1	19.093	0.056	0.352	0.102	...	...

D25NE-320	4	53	45.85	-69	58	07.5	19.094	0.037	0.193	0.089	...	...
D25NW-258	4	53	35.30	-69	59	37.2	19.096	0.050	0.320	0.094	...	...
D25NE-321	4	54	19.59	-70	00	25.9	19.096	0.074	0.191	0.118	...	...
D25NW-257	4	53	33.39	-69	56	57.1	19.098	0.065	0.467	0.351	...	...
D25SE-274	4	54	18.52	-70	03	19.5	19.098	0.053	0.013	0.090	...	...
D25NW-263	4	53	36.04	-70	00	10.4	19.099	0.065	0.060	0.105	...	...
D25NW-262	4	53	37.78	-69	56	34.3	19.103	0.057	0.193	0.105	...	...
D25SE-278	4	54	20.47	-70	00	52.2	19.104	0.053	0.013	0.092	...	...
D25SE-273	4	54	06.28	-70	00	32.3	19.106	0.058	0.233	0.103	...	...
D25SE-272	4	54	19.62	-70	00	29.7	19.107	0.054	0.245	0.106	...	...
D25NW-247	4	53	23.96	-69	58	56.6	19.108	0.050	1.140	0.246	...	...
D25SE-281	4	53	52.55	-70	03	54.5	19.108	0.055	0.067	0.110	...	...
D25SE-279	4	54	19.72	-70	03	36.6	19.109	0.059	0.102	0.100	...	...
D25NE-325	4	54	24.38	-69	58	43.3	19.112	0.042	0.281	0.099	...	...
D25NE-337	4	53	52.14	-70	00	28.6	19.116	0.077	-0.269	0.097	-0.407	0.145
D25SE-280	4	53	51.32	-70	01	57.1	19.117	0.045	0.295	0.115	...	...
D25NW-268	4	53	10.10	-69	59	05.9	19.119	0.054	0.151	0.100	...	...
D25SE-283	4	54	00.97	-70	03	24.9	19.120	0.065	0.200	0.109	...	...
D25SE-285	4	54	03.18	-70	02	41.7	19.120	0.053	0.106	0.100	...	...
D25NE-329	4	54	28.36	-69	57	37.4	19.124	0.044	0.231	0.082	...	...
D25NE-334	4	54	02.43	-69	57	49.5	19.125	0.067	0.003	0.104	...	...
D25NW-270	4	53	42.40	-70	00	08.5	19.127	0.054	0.101	0.104	...	...
D25SE-291	4	54	12.55	-70	02	59.9	19.128	0.072	-0.150	0.114	...	...
D25SE-276	4	53	56.11	-70	03	36.9	19.130	0.057	0.662	0.144	...	...
D25NW-261	4	53	27.86	-69	56	47.7	19.131	0.061	0.992	0.189	...	...
D25NW-273	4	53	11.59	-69	56	45.1	19.135	0.070	0.173	0.114	...	...
D25NE-341	4	54	18.87	-69	56	44.9	19.136	0.051	-0.015	0.096	...	...
D25NE-338	4	53	45.83	-69	58	03.9	19.137	0.070	0.136	0.111	...	...
D25NE-343	4	53	57.91	-69	59	04.6	19.137	0.048	-0.142	0.078	-0.457	0.143
D25NE-342	4	54	14.40	-69	58	53.1	19.141	0.121	-0.019	0.151	...	...
D25NE-344	4	53	57.52	-69	57	20.7	19.146	0.050	-0.022	0.082	...	...
D25NE-345	4	53	46.60	-69	57	09.9	19.148	0.039	-0.002	0.082	...	...
D25NW-275	4	53	38.26	-69	57	24.8	19.149	0.057	0.166	0.102	...	...
D25NW-274	4	53	22.64	-69	56	46.2	19.152	0.063	0.417	0.135	...	...
D25NW-284	4	53	26.05	-69	59	50.2	19.154	0.081	-0.190	0.107	...	...
D25SE-306	4	53	51.35	-70	00	32.2	19.161	0.060	-0.096	0.101	...	...
D25NE-349	4	53	51.23	-69	58	34.2	19.165	0.064	0.054	0.108	...	...
D25NE-355	4	54	17.90	-70	00	11.1	19.167	0.063	-0.121	0.118	-0.367	0.176
D25NW-288	4	53	42.90	-69	56	42.9	19.170	0.063	-0.096	0.095	...	...
D25NE-354	4	54	23.60	-69	58	48.6	19.175	0.047	0.126	0.095	...	...
D25NW-279	4	53	29.52	-69	56	38.1	19.183	0.065	0.648	0.138	...	...
D25NW-271	4	53	13.81	-69	56	40.8	19.184	0.056	1.409	0.196	...	...
D25SE-314	4	53	59.92	-70	02	49.7	19.185	0.067	-0.123	0.099	...	...
D25NE-358	4	53	57.73	-69	57	49.6	19.188	0.043	0.201	0.107	...	...
D25SE-311	4	53	53.24	-70	02	20.6	19.190	0.078	0.151	0.122	...	...
D25NE-362	4	54	01.59	-69	59	25.3	19.190	0.049	0.180	0.088	...	...
D25NE-367	4	53	59.74	-69	59	43.4	19.191	0.074	-0.242	0.112	-0.528	0.175
D25NE-366	4	53	52.67	-69	58	26.5	19.194	0.056	-0.040	0.095	-0.915	0.126
D25NW-290	4	53	18.82	-70	00	20.2	19.195	0.122	0.430	0.272	...	...
D25NW-302	4	53	36.19	-69	58	27.2	19.196	0.057	-0.091	0.088	...	...
D25NW-287	4	53	28.21	-69	59	56.0	19.197	0.061	0.610	0.323	...	...
D25SE-326	4	54	12.55	-70	03	37.7	19.197	0.117	-0.313	0.147	...	...
D25SE-324	4	54	00.38	-70	00	42.4	19.199	0.076	-0.152	0.114	...	...
D25SE-320	4	54	05.17	-70	01	22.5	19.207	0.057	0.169	0.128	...	...
D25SE-321	4	54	11.19	-70	01	26.1	19.208	0.061	0.128	0.104	-0.570	0.230
D25NE-368	4	54	24.72	-69	56	47.0	19.211	0.054	0.198	0.101	...	...
D25NE-372	4	54	15.58	-69	56	46.5	19.211	0.055	0.077	0.095	-0.851	0.152
D25NW-311	4	53	26.54	-69	59	11.6	19.213	0.074	0.087	0.113	...	...
D25NE-376	4	53	46.63	-70	00	02.5	19.214	0.055	-0.037	0.089	-0.535	0.164
D25NW-291	4	53	43.03	-69	56	57.0	19.217	0.060	0.939	0.165	...	...
D25SWt-259	4	53	15.09	-70	03	47.1	19.217	0.150	-0.031	0.231	...	...
D25NW-321	4	53	38.72	-69	57	38.8	19.219	0.279	-0.440	0.322	...	...
D25NW-308	4	53	08.58	-69	58	24.9	19.223	0.065	0.370	0.146	...	...
D25NE-379	4	53	58.71	-69	57	11.4	19.223	0.058	0.123	0.094	...	...
D25SE-315	4	53	42.98	-70	01	51.6	19.224	0.051	0.776	0.125	...	...
D25NW-309	4	53	16.52	-70	00	06.9	19.225	0.049	0.395	0.112	...	...

D25NE-365	4	54	02.16	-69	57	00.7	19.225	0.054	0.724	0.144	...	...
D25SE-336	4	53	49.09	-70	02	52.2	19.229	0.049	-0.041	0.102	...	...
D25NW-315	4	53	30.09	-69	59	35.4	19.231	0.060	0.159	0.116	...	...
D25SE-333	4	53	42.38	-70	03	38.1	19.231	0.092	0.106	0.173	...	...
D25NE-394	4	54	18.81	-70	00	28.8	19.231	0.080	-0.216	0.109	-0.394	0.216
D25SE-337	4	54	15.74	-70	03	12.8	19.234	0.060	0.095	0.113	...	...
D25SE-334	4	53	39.58	-70	00	35.4	19.238	0.094	0.241	0.195	...	...
D25SE-341	4	54	07.89	-70	03	47.5	19.238	0.070	-0.133	0.102	...	...
D25NE-389	4	54	20.91	-69	58	23.7	19.239	0.049	0.129	0.100	...	...
D25SE-331	4	54	02.87	-70	02	06.2	19.241	0.057	0.460	0.132	...	...
D25NW-306	4	53	10.59	-70	00	04.0	19.243	0.057	0.897	0.168	...	...
D25NE-393	4	53	45.12	-69	57	23.1	19.244	0.039	0.197	0.100	...	...
D25NW-305	4	53	35.42	-69	57	03.3	19.245	0.099	0.967	0.226	...	...
D25NE-395	4	54	24.76	-69	58	25.5	19.245	0.060	0.063	0.151	-1.539	0.193
D25NW-323	4	53	20.34	-69	59	13.2	19.250	0.063	0.255	0.145	...	...
D25NE-399	4	54	08.27	-69	59	49.5	19.250	0.051	0.101	0.111	...	...
D25NW-319	4	53	14.91	-69	57	12.8	19.253	0.066	0.466	0.141	...	...
D25NE-403	4	53	52.83	-69	59	21.9	19.257	0.069	0.061	0.105	...	...
D25NE-404	4	54	05.04	-70	00	18.1	19.261	0.065	0.061	0.109	-0.820	0.164
D25NE-408	4	53	59.46	-69	59	47.1	19.263	0.054	-0.137	0.119	-0.529	0.195
D25SE-346	4	54	08.01	-70	00	54.6	19.265	0.056	0.199	0.112	...	...
D25SE-317	4	54	21.10	-70	01	13.9	19.266	0.063	1.594	0.317	...	...
D25NW-327	4	53	20.50	-69	58	54.0	19.267	0.065	0.362	0.131	...	...
D25NW-300	4	53	20.52	-69	57	23.5	19.269	0.090	1.796	0.345	...	...
D25NW-326	4	53	37.99	-69	58	09.5	19.271	0.058	0.601	0.139	...	...
D25NE-407	4	54	15.70	-69	58	06.3	19.271	0.071	0.059	0.103	...	...
D25NW-329	4	53	12.28	-70	00	01.1	19.273	0.062	0.098	0.115	...	...
D25SE-348	4	54	03.03	-70	01	03.0	19.274	0.075	0.387	0.136	...	...
D25NE-409	4	53	45.86	-69	59	05.5	19.274	0.071	0.109	0.123	...	...
D25SE-385	4	54	17.80	-70	01	26.7	19.280	0.084	-1.315	0.513	...	...
D25SE-360	4	54	11.02	-70	03	18.2	19.284	0.081	-0.237	0.111	...	...
D25NW-337	4	53	21.07	-69	59	16.1	19.285	0.065	0.022	0.108	...	...
D25NW-333	4	53	12.61	-69	58	13.4	19.287	0.173	0.220	0.273	...	...
D25NW-336	4	53	41.24	-69	59	37.7	19.293	0.066	0.223	0.130	...	...
D25SE-356	4	53	45.20	-70	00	35.6	19.296	0.063	0.287	0.121	...	...
D25NW-343	4	53	15.06	-69	57	04.2	19.300	0.082	-0.125	0.125	...	...
D25SE-357	4	53	43.51	-70	01	56.5	19.300	0.063	0.231	0.114	...	...
D25SE-359	4	54	16.12	-70	03	27.8	19.300	0.050	0.209	0.115	...	...
D25NW-335	4	53	34.17	-69	57	11.0	19.301	0.077	0.432	0.143	...	...
D25SWt-267	4	53	33.02	-70	03	36.0	19.301	0.118	-0.020	0.229	...	...
D25NE-425	4	54	10.82	-69	58	59.0	19.303	0.070	-0.096	0.105	...	...
D25NE-424	4	54	16.00	-69	59	17.8	19.310	0.055	0.092	0.111	...	...
D25NE-423	4	54	17.24	-69	56	49.8	19.313	0.057	0.227	0.124	...	...
D25NW-339	4	53	30.80	-69	59	50.4	19.318	0.067	0.542	0.147	...	...
D25SE-369	4	54	16.46	-70	03	15.0	19.318	0.061	0.153	0.126	...	...
D25SE-373	4	53	53.03	-70	01	35.7	19.320	0.067	0.009	0.116	...	...
D25SE-367	4	54	12.59	-70	00	48.5	19.324	0.062	0.316	0.138	...	...
D25NW-348	4	53	43.05	-70	00	08.8	19.325	0.080	0.169	0.149	...	...
D25NW-331	4	53	09.06	-69	58	56.1	19.328	0.184	1.343	0.352	...	...
D25SE-381	4	53	39.24	-70	02	24.1	19.329	0.094	0.044	0.137	...	...
D25NE-422	4	54	06.90	-69	59	18.7	19.331	0.053	0.685	0.124	...	...
D25SE-361	4	54	04.09	-70	02	38.8	19.333	0.072	0.601	0.158	...	...
D25SE-355	4	53	44.84	-70	01	51.2	19.334	0.066	1.211	0.288	...	...
D25NW-350	4	53	10.72	-69	57	04.7	19.339	0.063	0.354	0.143	...	...
D25NW-356	4	53	24.31	-69	58	35.6	19.346	0.065	0.298	0.133	...	...
D25NW-362	4	53	20.80	-69	56	59.4	19.349	0.098	-0.024	0.142	...	...
D25SE-395	4	53	51.46	-70	00	40.2	19.353	0.074	-0.021	0.122	...	...
D25NE-457	4	53	50.86	-69	56	49.5	19.356	0.061	-0.088	0.115	...	...
D25SE-389	4	53	42.00	-70	01	25.4	19.358	0.098	0.334	0.171	...	...
D25SE-396	4	54	19.87	-70	01	15.7	19.359	0.072	-0.033	0.117	...	...
D25NE-454	4	54	01.80	-69	57	00.4	19.359	0.060	0.046	0.124	...	...
D25NW-371	4	53	37.68	-69	57	41.9	19.363	0.072	-0.050	0.130	...	...
D25NE-456	4	54	07.06	-70	00	21.4	19.363	0.057	0.107	0.104	...	...
D25SE-390	4	53	53.53	-70	02	24.6	19.365	0.067	0.347	0.142	...	...
D25NE-433	4	54	17.37	-69	59	13.0	19.366	0.050	0.990	0.147	...	...
D25NE-464	4	53	49.29	-69	59	42.7	19.369	0.062	-0.024	0.098	-0.079	0.243

D25NW-359	4	53	28.07	-69	57	18.4	19.371	0.077	0.667	0.184	...	...
D25SE-398	4	54	20.25	-70	00	47.7	19.375	0.071	0.266	0.136	...	...
D25NE-471	4	54	16.02	-69	56	52.5	19.375	0.056	-0.088	0.113	...	...
D25SE-403	4	53	42.43	-70	03	11.5	19.376	0.059	0.079	0.119	...	...
D25NW-365	4	53	12.74	-69	56	52.8	19.380	0.078	0.531	0.167	...	...
D25NW-373	4	53	09.92	-69	59	42.6	19.382	0.088	0.268	0.175	...	...
D25NW-380	4	53	28.09	-69	57	46.7	19.382	0.088	-0.110	0.140	...	...
D25NW-372	4	53	11.91	-70	00	08.6	19.385	0.088	0.429	0.210	...	...
D25NW-375	4	53	28.19	-69	58	11.7	19.386	0.070	0.210	0.132	...	...
D25NW-381	4	53	42.47	-69	59	12.2	19.391	0.071	0.122	0.146	...	...
D25NW-382	4	53	23.28	-69	59	17.6	19.391	0.078	-0.154	0.115	...	...
D25NE-473	4	54	11.54	-69	58	57.6	19.391	0.053	0.138	0.118	...	...
D25NE-478	4	54	10.20	-69	58	40.2	19.392	0.049	-0.036	0.116	-0.570	0.228
D25SWt-275	4	53	28.60	-70	03	17.1	19.395	0.142	-0.231	0.218	...	...
D25SE-417	4	54	19.87	-70	03	46.2	19.396	0.074	0.024	0.129	...	...
D25SE-408	4	54	17.68	-70	02	56.7	19.397	0.073	0.303	0.152	...	...
D25SE-411	4	54	19.64	-70	03	39.5	19.404	0.097	0.340	0.166	...	...
D25NE-484	4	54	13.61	-69	59	25.0	19.404	0.048	-0.056	0.098	-0.286	0.239
D25SE-418	4	53	48.50	-70	00	46.2	19.406	0.075	0.231	0.135	...	...
D25NE-486	4	54	15.33	-70	00	01.2	19.409	0.058	-0.033	0.108	...	...
D25NE-480	4	53	58.42	-69	57	41.7	19.413	0.058	0.359	0.109	...	...
D25NW-376	4	53	27.98	-69	57	12.1	19.414	0.066	0.837	0.213	...	...
D25SE-422	4	53	59.86	-70	03	14.5	19.415	0.073	0.047	0.135	...	...
D25NW-391	4	53	38.57	-69	58	13.0	19.418	0.067	0.115	0.120	...	...
D25NE-495	4	53	59.65	-69	59	35.4	19.425	0.077	0.072	0.139	...	...
D25NW-393	4	53	28.06	-70	00	07.0	19.426	0.076	0.254	0.138	...	...
D25NW-397	4	53	32.60	-69	56	50.6	19.432	0.080	0.112	0.141	...	...
D25SE-423	4	54	00.42	-70	00	36.5	19.440	0.064	0.607	0.163	...	...
D25NW-386	4	53	28.81	-69	56	40.6	19.442	0.086	0.853	0.392	...	...
D25NW-395	4	53	37.32	-69	56	55.6	19.442	0.078	0.529	0.165	...	...
D25NE-504	4	54	01.35	-69	56	58.2	19.444	0.082	0.091	0.136	...	...
D25SE-433	4	53	44.08	-70	02	21.2	19.449	0.067	0.222	0.141	...	...
D25NE-508	4	54	01.17	-69	59	18.5	19.452	0.077	0.066	0.127	...	...
D25SWt-277	4	53	37.13	-70	02	25.4	19.458	0.204	-0.132	0.299	...	...
D25NW-415	4	53	29.21	-69	59	22.6	19.472	0.082	-0.200	0.128	...	...
D25NE-525	4	53	59.73	-69	59	33.7	19.473	0.071	-0.182	0.117	-0.513	0.223
D25NW-396	4	53	16.29	-69	59	51.2	19.476	0.087	1.182	0.267	...	...
D25NW-412	4	53	28.31	-69	58	01.5	19.476	0.087	-0.041	0.130	-0.234	0.435
D25NE-528	4	54	09.34	-69	58	28.5	19.484	0.074	-0.031	0.114	...	...
D25NE-524	4	54	17.15	-69	59	43.4	19.486	0.078	0.140	0.130	...	...
D25SE-460	4	53	44.35	-70	01	11.0	19.487	0.078	-0.001	0.140	...	...
D25NW-414	4	53	32.47	-69	57	51.1	19.494	0.067	0.317	0.153	...	...
D25NW-418	4	53	11.02	-69	59	04.5	19.495	0.079	0.160	0.146	...	...
D25NE-534	4	53	56.98	-69	59	42.2	19.500	0.071	0.156	0.130	...	...
D25NW-413	4	53	16.50	-69	56	46.1	19.502	0.160	0.532	0.241	...	...
D25SE-468	4	53	45.96	-70	02	43.3	19.503	0.079	0.060	0.134	...	...
D25NW-422	4	53	17.83	-70	00	14.0	19.505	0.091	0.261	0.181	...	...
D25SE-466	4	53	57.12	-70	03	48.7	19.510	0.066	0.325	0.153	...	...
D25NE-542	4	53	44.71	-69	59	16.1	19.510	0.063	-0.045	0.113	...	...
D25NW-420	4	53	41.47	-69	59	48.0	19.514	0.097	0.582	0.187	...	...
D25NE-529	4	53	57.05	-69	58	41.8	19.518	0.075	0.684	0.181	...	...
D25NE-538	4	53	54.88	-69	59	46.0	19.518	0.062	0.332	0.166	...	...
D25NE-537	4	53	58.06	-69	58	51.0	19.520	0.065	0.414	0.119	...	...
D25NW-428	4	53	20.17	-69	57	11.3	19.522	0.079	0.185	0.142	-1.579	0.244
D25NW-433	4	53	09.10	-69	59	56.8	19.522	0.084	0.014	0.124	...	...
D25SE-477	4	53	46.66	-70	02	45.6	19.536	0.079	0.094	0.141	...	...
D25NE-547	4	53	55.51	-70	00	04.0	19.537	0.072	0.196	0.132	...	...
D25NE-550	4	53	47.39	-70	00	14.8	19.538	0.097	0.074	0.158	...	...
D25SE-481	4	53	45.38	-70	02	38.5	19.543	0.092	0.100	0.148	...	...
D25SE-479	4	53	44.54	-70	03	14.7	19.545	0.102	0.197	0.156	...	...
D25SE-486	4	53	49.76	-70	02	12.2	19.547	0.072	-0.083	0.120	...	...
D25SE-470	4	53	53.82	-70	00	46.9	19.550	0.093	1.117	0.267	...	...
D25SE-489	4	53	41.36	-70	03	46.0	19.550	0.168	-0.254	0.211	...	...
D25NE-567	4	53	58.90	-69	59	42.9	19.554	0.077	-0.310	0.118	...	...
D25NE-561	4	54	03.23	-70	00	12.6	19.556	0.071	0.024	0.126	-0.915	0.225
D25NW-424	4	53	27.34	-69	57	25.1	19.557	0.084	1.269	0.312	...	...

D25NE-560	4	54	05.26	-69	58	06.4	19.559	0.053	0.134	0.110	...	...
D25SE-473	4	54	04.78	-70	00	30.3	19.560	0.072	0.762	0.239	...	...
D25NE-563	4	54	00.66	-70	00	05.4	19.563	0.067	0.119	0.115	...	...
D25SE-495	4	54	12.11	-70	01	24.5	19.571	0.095	0.089	0.153	...	...
D25NE-558	4	53	49.22	-70	00	20.4	19.572	0.082	0.553	0.214	...	...
D25NE-575	4	53	45.56	-70	00	02.1	19.572	0.103	-0.289	0.165	...	...
D25NW-448	4	53	17.80	-69	56	43.4	19.576	0.086	-0.065	0.132	...	...
D25SE-485	4	54	10.19	-70	03	38.9	19.577	0.087	0.648	0.220	...	...
D25NE-574	4	54	02.87	-69	59	20.7	19.582	0.081	0.106	0.137	-0.006	0.397
D25NW-444	4	53	11.61	-70	00	10.7	19.584	0.105	0.402	0.246	...	...
D25SE-501	4	53	52.12	-70	01	08.1	19.589	0.077	0.365	0.161	...	...
D25NW-446	4	53	10.86	-70	00	07.9	19.591	0.079	0.365	0.171	...	...
D25SE-509	4	53	56.26	-70	01	57.1	19.594	0.085	0.185	0.151	...	...
D25NE-556	4	53	57.75	-69	58	43.2	19.594	0.082	1.163	0.204	...	...
D25NE-581	4	54	12.65	-69	57	27.4	19.598	0.069	0.018	0.169	...	...
D25SE-517	4	53	50.60	-70	02	28.3	19.599	0.083	-0.011	0.142	...	...
D25NE-580	4	54	06.96	-70	00	19.2	19.599	0.070	0.073	0.125	...	...
D25SE-507	4	53	59.32	-70	01	26.1	19.602	0.091	0.460	0.193	...	...
D25NE-589	4	53	58.67	-69	59	29.7	19.602	0.076	-0.277	0.125	...	...
D25NW-445	4	53	10.02	-69	59	00.7	19.610	0.089	0.925	0.239	...	...
D25NW-456	4	53	08.59	-69	59	19.1	19.612	0.099	0.243	0.172	...	...
D25NW-453	4	53	09.33	-69	58	57.4	19.613	0.247	0.389	0.329	...	...
D25NE-595	4	54	12.44	-69	57	35.8	19.613	0.066	-0.241	0.127	...	...
D25NE-592	4	54	05.99	-69	58	48.5	19.615	0.089	-0.037	0.133	...	...
D25NE-593	4	54	10.46	-69	59	19.5	19.618	0.072	-0.009	0.114	...	...
D25NE-599	4	54	14.17	-70	00	23.1	19.621	0.079	-0.108	0.126	...	...
D25SE-522	4	53	50.56	-70	02	10.9	19.622	0.095	0.211	0.163	...	...
D25SE-530	4	53	39.94	-70	00	34.5	19.622	0.134	-0.316	0.212	...	...
D25SE-523	4	54	18.32	-70	03	51.5	19.625	0.078	0.235	0.145	...	...
D25SE-526	4	53	51.35	-70	02	23.7	19.625	0.085	0.112	0.147	...	...
D25SE-516	4	53	59.57	-70	03	42.3	19.630	0.090	0.724	0.203	...	...
D25SE-528	4	54	06.42	-70	03	06.9	19.631	0.090	0.123	0.157	...	...
D25NE-606	4	53	55.46	-69	59	01.7	19.633	0.065	-0.160	0.125	...	...
D25NE-607	4	53	59.48	-69	58	13.8	19.634	0.083	-0.128	0.140	...	...
D25NE-604	4	54	15.89	-69	59	31.4	19.636	0.080	-0.047	0.134	...	...
D25SE-518	4	53	59.70	-70	03	39.6	19.641	0.088	0.947	0.236	...	...
D25NE-615	4	54	04.16	-69	59	18.2	19.642	0.084	-0.290	0.127	...	...
D25SE-545	4	54	13.93	-70	00	53.8	19.644	0.098	-0.720	0.362	...	...
D25NE-600	4	53	56.16	-70	00	04.3	19.647	0.094	0.388	0.189	...	...
D25SE-533	4	54	13.07	-70	00	59.5	19.658	0.082	0.130	0.141	...	...
D25NE-614	4	53	48.65	-70	00	17.4	19.660	0.080	0.149	0.144	...	...
D25NE-622	4	54	16.00	-69	58	33.1	19.660	0.087	-0.350	0.144	...	...
D25SE-534	4	54	09.04	-70	02	02.8	19.662	0.088	0.234	0.168	...	...
D25NW-477	4	53	42.67	-70	00	05.3	19.671	0.095	-0.098	0.156	...	...
D25NE-618	4	54	01.10	-70	00	01.8	19.673	0.080	0.156	0.148	...	...
D25NE-627	4	54	09.15	-69	59	19.9	19.689	0.084	-0.039	0.144	...	...
D25NW-484	4	53	15.52	-69	59	52.1	19.706	0.099	0.241	0.186	...	...
D25NE-633	4	54	09.16	-70	00	05.4	19.714	0.068	0.147	0.137	...	...
D25NW-490	4	53	10.22	-69	59	15.5	19.726	0.097	0.313	0.177	...	...
D25NE-638	4	53	50.41	-70	00	19.7	19.742	0.072	0.217	0.144	...	...
D25NE-640	4	54	11.92	-69	58	47.7	19.745	0.082	0.194	0.166	...	...
D25SE-561	4	54	02.48	-70	02	43.6	19.753	0.080	0.795	0.230	...	...
D25NW-499	4	53	24.48	-69	58	52.5	19.779	0.098	0.460	0.215	...	...
D25SE-575	4	54	21.78	-70	03	00.1	19.786	0.098	0.261	0.198	...	...
D25SE-578	4	54	18.27	-70	03	22.3	19.794	0.094	0.223	0.182	...	...
D25NW-507	4	53	16.75	-69	58	04.0	19.795	0.107	0.169	0.189	...	...
D25NE-648	4	54	02.09	-69	57	07.5	19.797	0.082	0.217	0.181	...	...
D25NW-517	4	53	44.70	-69	59	15.8	19.815	0.108	-0.088	0.191	0.614	0.878
D25SE-585	4	53	50.42	-70	02	57.0	19.835	0.118	0.399	0.245	...	...
D25NW-520	4	53	40.97	-70	00	10.6	19.842	0.108	0.247	0.205	...	...
D25SE-591	4	53	41.99	-70	02	58.1	19.853	0.130	0.380	0.236	...	...
D25SWt-285	4	53	14.77	-70	03	35.4	19.856	0.284	0.512	0.536	...	...
D25SE-594	4	53	42.38	-70	02	06.2	19.861	0.111	0.458	0.238	...	...
D25NE-662	4	54	25.69	-69	57	35.2	19.861	0.105	-0.016	0.182	...	...
D25NW-531	4	53	20.55	-69	58	29.8	19.876	0.119	-0.324	0.181	...	...
D25SE-597	4	53	58.14	-70	03	43.7	19.896	0.112	1.004	0.356	...	...

D25NW-529	4	53	35.41	-69	59	46.2	19.917	0.124	0.806	0.302	...	...
D25NW-536	4	53	29.88	-69	57	39.8	19.923	0.107	0.042	0.203	...	...
D25SE-608	4	54	10.79	-70	02	26.3	19.944	0.209	0.582	0.375	...	...
D25NW-541	4	53	18.66	-69	59	09.7	19.952	0.321	-0.243	0.441	...	...
D25SE-614	4	53	42.58	-70	01	10.7	19.955	0.097	0.152	0.221	...	...
D25NE-671	4	54	02.18	-70	00	05.3	19.957	0.107	0.016	0.189	...	...
D25SE-617	4	53	46.72	-70	02	22.5	19.965	0.118	0.270	0.239	...	...
D25SE-619	4	53	43.58	-70	01	46.5	19.995	0.139	0.416	0.265	...	...
D25SE-630	4	53	42.25	-70	01	56.1	20.057	0.129	-0.065	0.210	...	...
D25NW-553	4	53	23.41	-69	58	51.6	20.074	0.125	-0.132	0.204	...	...
D25SE-656	4	54	13.94	-70	01	14.8	20.246	0.359	-1.039	0.415	...	...
D25NW-579	4	53	15.55	-69	58	06.5	20.513	0.200	-0.330	0.284	...	...

Table 4b

D31-2001	4	55	11.09	-67	10	10.9	9.690	...	0.090	...	-0.610	...
D31E-1001	4	55	14.98	-67	11	24.1	12.542	0.071	0.080	0.105	-0.872	0.295
D31W-2	4	54	40.04	-67	13	04.9	13.272	0.003	-0.060	0.004	-0.857	0.004
D31E-2	4	55	01.29	-67	09	36.8	13.898	0.003	-0.223	0.005	-1.031	0.006
D31E-4	4	55	16.91	-67	09	54.7	14.041	0.007	-0.145	0.011	-0.826	0.012
D31E-1002	4	55	15.12	-67	11	24.0	14.399	0.388	-0.435	0.538	0.925	0.549
D31E-6	4	55	03.35	-67	08	58.8	14.458	0.004	-0.228	0.005	-1.048	0.007
D31E-7	4	55	22.03	-67	11	07.1	14.499	0.005	-0.160	0.007	-0.826	0.008
D31E-8	4	55	15.69	-67	09	24.3	14.527	0.003	-0.165	0.005	-0.956	0.007
D31E-1003	4	55	15.02	-67	11	23.1	14.606	0.181	0.588	0.409	-3.699	0.554
D31E-10	4	55	02.61	-67	12	11.2	14.614	0.006	-0.064	0.008	-0.827	0.011
D31E-12	4	55	14.65	-67	11	56.6	14.621	0.062	-0.337	0.070	-1.019	0.012
D31W-8	4	54	50.11	-67	11	14.8	14.785	0.005	-0.163	0.008	-0.770	0.008
D31E-13	4	55	21.32	-67	11	38.7	14.859	0.006	-0.101	0.014	-0.644	0.017
D31E-14	4	55	37.90	-67	11	26.9	14.941	0.005	-0.222	0.007	-1.001	0.008
D31E-11a	4	55	02.75	-67	09	52.1	15.036	...	-0.221	...	-0.928	...
D31E-15	4	55	11.73	-67	10	39.5	15.081	0.008	-0.169	0.017	-0.908	0.022
D31E-17	4	55	01.63	-67	08	29.3	15.220	0.014	1.061	0.018	1.055	0.061
D31W-12	4	54	41.04	-67	11	38.5	15.280	0.005	-0.102	0.008	-0.511	0.012
D31E-18	4	55	24.40	-67	11	54.1	15.290	0.006	-0.211	0.012	-0.960	0.013
D31W-13	4	54	39.29	-67	13	21.7	15.336	0.011	-0.099	0.030	-0.800	0.036
D31W-14	4	54	50.69	-67	11	46.9	15.371	0.005	-0.164	0.009	-0.820	0.015
D31E-19	4	55	14.05	-67	09	24.6	15.450	0.005	-0.215	0.008	-0.956	0.012
D31E-21	4	55	30.75	-67	11	12.6	15.498	0.007	-0.243	0.009	-0.984	0.011
D31E-22	4	55	14.20	-67	09	47.1	15.568	0.005	-0.159	0.008	-0.870	0.013
D31W-15	4	55	12.75	-67	13	55.3	15.605	0.005	-0.130	0.008	...	...
D31E-11b	4	55	02.75	-67	09	52.1	15.636	...	-0.221	...	-0.928	...
D31W-17	4	54	43.74	-67	11	58.7	15.702	0.006	-0.146	0.009	-0.811	0.012
D31E-23	4	54	59.47	-67	09	38.0	15.767	0.007	2.052	0.025	...	...
D31E-24	4	55	31.86	-67	09	39.0	15.787	0.006	-0.092	0.009	-0.726	0.013
D31E-25	4	55	21.43	-67	09	46.3	15.798	0.006	-0.220	0.010	-0.945	0.013
D31E-26	4	55	12.34	-67	10	56.7	15.810	0.006	-0.176	0.008	-0.788	0.015
D31E-27	4	55	11.74	-67	10	47.2	15.889	0.006	-0.202	0.009	-0.846	0.014
D31E-28	4	55	25.17	-67	09	14.9	15.897	0.007	-0.176	0.014	-0.626	0.020
D31E-30	4	55	09.04	-67	10	17.7	15.927	0.014	-0.202	0.020	-0.824	0.021
D31E-32	4	55	05.92	-67	10	50.7	15.974	0.010	-0.187	0.012	-0.838	0.014
D31E-1005	4	55	14.95	-67	11	25.7	15.984	0.146	-0.673	0.367	...	...
D31W-23	4	55	08.48	-67	13	09.7	15.987	0.007	-0.130	0.009	-0.809	0.014
D31W-24	4	54	56.46	-67	11	37.5	15.993	0.020	-0.157	0.029	-0.737	0.055
D31W-22	4	54	54.31	-67	13	35.3	16.005	0.008	0.684	0.016	0.433	0.042
D31E-31	4	55	23.09	-67	08	33.5	16.048	0.018	1.691	0.093	...	...
D31W-25	4	55	00.01	-67	13	48.2	16.075	0.006	0.911	0.017	0.774	0.061
D31W-26	4	54	50.81	-67	13	26.8	16.104	0.008	-0.118	0.011	-0.619	0.017
D31W-27	4	54	38.40	-67	13	48.6	16.120	0.007	-0.102	0.011	-0.601	0.019
D31W-28	4	54	59.12	-67	11	50.0	16.160	0.008	-0.064	0.011	-0.587	0.016
D31E-1006	4	55	14.47	-67	11	25.6	16.169	0.079	0.120	0.106	-0.299	0.099
D31E-35	4	55	14.68	-67	09	25.5	16.188	0.007	-0.170	0.009	-0.786	0.014
D31E-33	4	55	15.09	-67	10	00.4	16.193	0.009	0.619	0.015	0.224	0.051
D31W-29	4	54	57.33	-67	11	24.1	16.194	0.009	-0.176	0.012	-0.848	0.015
D31E-34	4	55	00.30	-67	11	04.6	16.226	0.023	1.263	0.035	0.732	0.103
D31E-37	4	55	30.32	-67	11	09.6	16.231	0.025	-0.221	0.029	-0.838	0.016
D31E-38	4	55	11.25	-67	09	39.2	16.264	0.008	-0.155	0.012	-0.897	0.019
D31E-36	4	55	01.42	-67	08	29.8	16.267	0.037	1.269	0.094	...	...
D31W-31	4	54	53.31	-67	13	20.3	16.285	0.008	-0.134	0.014	-0.655	0.021
D31E-40	4	55	31.87	-67	12	08.7	16.314	0.010	-0.055	0.013	-0.659	0.018
D31E-41	4	55	28.30	-67	09	37.0	16.316	0.009	-0.120	0.012	-0.543	0.019
D31W-33	4	54	50.12	-67	12	30.9	16.334	0.010	-0.130	0.014	-0.613	0.017
D31E-39	4	55	25.38	-67	10	05.1	16.348	0.008	0.761	0.016	0.467	0.062
D31E-43	4	55	12.28	-67	08	28.1	16.389	0.008	-0.134	0.015	-0.506	0.046
D31E-44	4	55	12.59	-67	10	36.1	16.389	0.009	-0.173	0.013	-0.883	0.018
D31E-42	4	55	30.31	-67	08	41.3	16.439	0.008	1.321	0.022	1.169	0.165
D31W-35	4	54	44.86	-67	12	59.2	16.485	0.013	0.556	0.021	-0.001	0.040
D31E-47	4	55	37.49	-67	11	20.8	16.487	0.010	-0.184	0.014	-0.732	0.025
D31E-45	4	55	12.74	-67	11	04.2	16.532	0.009	1.664	0.026	...	...

D31E-46	4	55	01.95	-67	09	51.7	16.547	0.008	1.652	0.024	1.824	0.383
D31E-48	4	55	12.77	-67	08	37.7	16.564	0.011	-0.154	0.016	-0.597	0.024
D31E-50	4	55	14.88	-67	10	29.4	16.602	0.010	-0.180	0.014	-0.662	0.021
D31W-37	4	55	03.16	-67	12	26.0	16.611	0.012	1.606	0.034	...	...
D31W-39	4	54	55.89	-67	11	43.6	16.612	0.011	-0.137	0.016	-0.820	0.021
D31E-51	4	55	36.13	-67	10	35.0	16.629	0.009	-0.087	0.014	-0.712	0.024
D31E-49	4	55	26.25	-67	08	44.0	16.653	0.010	1.443	0.028	...	...
D31E-1007	4	55	14.95	-67	11	30.3	16.698	0.032	-0.185	0.053	-0.669	0.056
D31E-53	4	54	59.85	-67	11	28.6	16.701	0.009	-0.142	0.014	-0.774	0.025
D31W-42	4	55	04.38	-67	13	42.5	16.730	0.010	-0.108	0.017	-0.672	0.028
D31E-52	4	55	12.10	-67	09	14.5	16.766	0.010	1.639	0.031	...	...
D31E-54	4	55	33.51	-67	09	00.0	16.797	0.011	1.509	0.032	...	...
D31E-55	4	55	36.90	-67	11	31.7	16.816	0.011	0.813	0.023	0.713	0.093
D31W-46	4	54	54.29	-67	11	29.9	16.822	0.015	-0.004	0.077	-0.636	0.098
D31E-58	4	55	33.78	-67	08	42.2	16.850	0.011	-0.101	0.018	-0.626	0.025
D31W-44	4	55	01.49	-67	13	01.9	16.850	0.013	1.426	0.042	...	...
D31E-56	4	55	10.12	-67	08	34.7	16.852	0.011	1.163	0.025	...	...
D31W-45	4	54	45.07	-67	13	00.6	16.862	0.014	1.414	0.029	...	...
D31E-57	4	55	01.13	-67	10	20.3	16.867	0.011	0.634	0.021	0.151	0.062
D31W-49	4	54	56.39	-67	11	38.5	16.881	0.045	0.081	0.123	-0.936	0.209
D31E-59	4	55	06.73	-67	12	07.9	16.908	0.009	-0.014	0.014	-0.615	0.028
D31W-50	4	55	12.64	-67	13	29.5	16.911	0.011	0.715	0.022	0.250	0.087
D31E-60	4	55	22.36	-67	09	06.7	16.912	0.011	-0.128	0.018	-0.603	0.028
D31E-63	4	55	10.63	-67	10	52.3	16.919	0.012	-0.174	0.019	-0.816	0.026
D31W-48	4	54	51.19	-67	12	34.1	16.922	0.010	1.209	0.029	...	...
D31W-52	4	54	49.27	-67	13	43.1	16.943	0.011	-0.052	0.020	-0.705	0.028
D31E-64	4	55	23.14	-67	10	02.8	16.950	0.012	-0.081	0.018	-0.266	0.039
D31E-61	4	55	37.03	-67	10	55.3	16.954	0.010	0.713	0.021	0.281	0.066
D31W-53	4	54	49.79	-67	13	25.2	16.976	0.013	-0.105	0.020	-0.495	0.034
D31W-54	4	54	54.38	-67	13	52.1	16.980	0.013	-0.093	0.024	0.208	0.144
D31E-66	4	55	11.84	-67	09	55.4	16.982	0.017	-0.161	0.027	-0.761	0.034
D31E-62	4	55	22.78	-67	10	24.2	16.989	0.010	1.546	0.038	...	...
D31W-56	4	54	53.35	-67	13	09.0	17.019	0.012	-0.114	0.018	-0.582	0.029
D31E-65	4	55	30.67	-67	11	43.6	17.020	0.011	0.859	0.109	-0.365	0.149
D31E-67	4	55	12.72	-67	09	49.0	17.048	0.014	-0.137	0.023	-0.651	0.035
D31E-68	4	55	20.95	-67	09	03.7	17.049	0.011	-0.136	0.018	-0.639	0.032
D31W-57	4	54	51.40	-67	11	10.8	17.050	0.014	-0.147	0.024	-0.636	0.036
D31W-55	4	54	52.36	-67	12	18.5	17.055	0.012	1.135	0.031	...	...
D31E-69	4	55	32.75	-67	09	13.4	17.059	0.011	0.023	0.018	-0.136	0.042
D31E-71	4	55	26.18	-67	09	23.7	17.074	0.017	-0.122	0.039	-0.597	0.048
D31W-58	4	54	47.21	-67	11	35.2	17.086	0.012	-0.161	0.021	-0.577	0.032
D31W-59	4	54	59.12	-67	11	32.8	17.118	0.011	-0.148	0.018	-0.772	0.029
D31E-73	4	55	06.84	-67	08	48.0	17.123	0.015	-0.091	0.023	-0.493	0.039
D31E-72	4	55	23.88	-67	11	37.4	17.124	0.039	0.098	0.047	-0.605	0.035
D31E-74	4	55	13.85	-67	10	04.5	17.141	0.015	-0.129	0.028	-0.808	0.033
D31E-75	4	55	17.71	-67	11	31.1	17.142	0.084	-0.376	0.096	-0.835	0.032
D31W-60	4	54	49.10	-67	13	14.3	17.167	0.014	-0.074	0.021	-0.564	0.034
D31E-76	4	55	22.36	-67	11	29.4	17.201	0.014	-0.044	0.024	-0.560	0.034
D31W-61	4	54	46.50	-67	13	18.4	17.209	0.016	-0.090	0.030	-0.535	0.041
D31E-78	4	55	20.60	-67	11	50.6	17.249	0.016	-0.036	0.022	-0.579	0.037
D31E-79	4	55	23.03	-67	10	11.8	17.251	0.021	-0.113	0.047	-0.669	0.056
D31E-81	4	55	22.15	-67	10	52.1	17.264	0.014	-0.126	0.025	-0.673	0.037
D31E-82	4	55	09.55	-67	09	51.9	17.264	0.014	-0.175	0.024	-0.691	0.037
D31E-80	4	55	10.13	-67	09	44.9	17.269	0.085	0.146	0.128	0.761	0.376
D31E-77	4	55	35.79	-67	09	39.8	17.283	0.015	1.438	0.048	...	...
D31E-84	4	55	05.48	-67	09	27.1	17.293	0.011	-0.095	0.022	-0.605	0.037
D31E-83	4	55	12.53	-67	10	44.0	17.313	0.013	0.572	0.030	0.553	0.142
D31E-85	4	55	29.84	-67	11	51.5	17.320	0.014	-0.014	0.026	0.084	0.075
D31E-86	4	55	30.40	-67	09	22.1	17.325	0.014	-0.119	0.022	-0.643	0.038
D31E-87	4	55	24.59	-67	09	18.9	17.329	0.015	-0.100	0.023	-0.587	0.033
D31E-88	4	55	12.10	-67	10	39.7	17.337	0.025	-0.130	0.038	-0.488	0.058
D31E-1009	4	55	14.99	-67	11	28.6	17.337	0.054	-0.097	0.099	-0.415	0.108
D31E-89	4	55	10.69	-67	10	18.7	17.351	0.141	-0.237	0.233	-0.757	0.215
D31E-90	4	55	10.33	-67	11	45.0	17.359	0.014	-0.075	0.024	-0.539	0.041
D31W-67	4	55	05.73	-67	13	23.1	17.383	0.011	-0.009	0.023	-0.651	0.043
D31E-93	4	55	08.05	-67	10	33.0	17.389	0.014	-0.182	0.023	-0.752	0.032

D31E-92	4	55	25.18	-67	10	17.9	17.415	0.016	0.583	0.040	-0.041	0.080
D31E-91	4	55	16.93	-67	10	22.6	17.419	0.014	0.992	0.033	...	...
D31E-1010	4	55	15.03	-67	11	20.9	17.429	0.088	0.183	0.128	...	...
D31E-94	4	55	18.27	-67	10	14.3	17.460	0.064	-0.072	0.077	-0.579	0.053
D31E-95	4	55	34.83	-67	11	47.2	17.471	0.016	-0.124	0.024	-0.675	0.038
D31W-75	4	55	01.89	-67	13	22.8	17.474	0.018	-0.136	0.027	-0.494	0.051
D31W-68	4	54	52.95	-67	12	23.1	17.478	0.017	1.175	0.049	...	...
D31E-97	4	55	33.85	-67	11	34.7	17.492	0.016	-0.077	0.025	-0.760	0.041
D31W-79	4	54	52.42	-67	11	22.1	17.502	0.017	-0.125	0.027	-0.695	0.040
D31W-71	4	54	40.06	-67	13	30.1	17.507	0.016	1.336	0.055	...	...
D31W-77	4	54	38.29	-67	10	33.7	17.508	0.024	0.137	0.139	-0.445	0.175
D31E-99	4	55	09.71	-67	11	07.7	17.515	0.012	-0.062	0.021	-0.425	0.043
D31E-100	4	55	04.36	-67	10	54.6	17.516	0.016	-0.109	0.025	-0.121	0.053
D31E-101	4	55	20.39	-67	11	23.9	17.520	0.016	-0.125	0.026	-0.679	0.046
D31W-76	4	55	07.39	-67	13	01.0	17.521	0.018	0.855	0.039	...	...
D31E-96	4	55	35.73	-67	08	57.2	17.527	0.017	1.063	0.041	...	...
D31E-103	4	55	05.31	-67	10	28.3	17.540	0.015	-0.118	0.024	-0.746	0.038
D31E-104	4	55	05.76	-67	10	30.0	17.546	0.016	-0.155	0.024	-0.585	0.038
D31E-98	4	55	14.55	-67	09	57.5	17.548	0.017	0.841	0.044	0.888	0.240
D31W-78	4	54	53.35	-67	12	11.3	17.552	0.019	1.089	0.051	...	...
D31W-81	4	54	43.99	-67	13	36.9	17.552	0.017	-0.062	0.036	-0.720	0.057
D31W-83	4	54	49.04	-67	13	53.0	17.557	0.018	-0.112	0.029	...	...
D31W-82	4	55	13.37	-67	12	42.4	17.559	0.016	-0.017	0.031	-0.489	0.048
D31E-106	4	55	03.42	-67	12	06.4	17.568	0.016	-0.148	0.025	-0.582	0.040
D31W-84	4	55	11.89	-67	13	57.3	17.584	0.020	-0.092	0.034	...	...
D31E-102	4	55	31.07	-67	11	19.1	17.587	0.014	1.283	0.046	...	...
D31W-87	4	54	58.41	-67	13	34.1	17.608	0.018	-0.016	0.030	-0.337	0.052
D31E-105	4	55	20.77	-67	09	24.0	17.623	0.017	1.427	0.056	...	...
D31E-113	4	55	13.06	-67	10	14.3	17.625	0.056	-0.375	0.095	-0.637	0.112
D31E-110	4	55	13.25	-67	09	42.5	17.628	0.019	-0.068	0.031	-0.411	0.052
D31E-112	4	55	08.38	-67	09	49.9	17.631	0.019	-0.125	0.028	-0.600	0.047
D31W-86	4	54	54.35	-67	10	33.2	17.637	0.018	0.728	0.042	0.196	0.139
D31E-107	4	55	36.66	-67	11	44.4	17.638	0.014	1.222	0.042	...	...
D31W-88	4	54	58.92	-67	11	14.2	17.647	0.024	0.706	0.040	...	...
D31E-115	4	55	02.06	-67	10	07.8	17.650	0.013	-0.238	0.023	-0.665	0.038
D31W-90	4	54	55.78	-67	11	40.6	17.654	0.022	-0.069	0.033	-0.512	0.053
D31E-109	4	55	20.15	-67	09	47.9	17.656	0.021	1.289	0.072	...	...
D31E-116	4	55	37.59	-67	08	46.0	17.663	0.015	-0.089	0.025	-0.575	0.047
D31E-111	4	55	09.79	-67	09	57.1	17.665	0.018	0.766	0.063	...	...
D31E-117	4	55	14.08	-67	09	52.4	17.674	0.022	-0.138	0.037	-0.824	0.066
D31W-89	4	54	54.98	-67	11	29.6	17.681	0.022	1.317	0.054	...	...
D31E-118	4	55	18.63	-67	11	30.2	17.693	0.021	-0.158	0.032	-0.632	0.049
D31W-92	4	54	53.06	-67	11	49.5	17.708	0.021	-0.029	0.031	-0.433	0.051
D31W-95	4	54	56.56	-67	11	38.9	17.725	0.093	-0.256	0.121	-0.283	0.114
D31W-93	4	54	58.74	-67	13	13.2	17.728	0.018	-0.023	0.031	-0.187	0.063
D31E-120	4	55	05.24	-67	09	04.4	17.739	0.020	-0.061	0.031	-0.649	0.048
D31W-97	4	54	47.26	-67	10	19.2	17.749	0.022	-0.100	0.034	-0.542	0.051
D31E-119	4	55	22.60	-67	11	27.9	17.752	0.017	0.991	0.045	...	...
D31W-91	4	54	56.31	-67	12	18.1	17.753	0.023	1.395	0.060	...	...
D31W-99	4	54	51.87	-67	13	20.2	17.763	0.032	-0.086	0.049	-0.762	0.071
D31W-98	4	54	52.55	-67	12	20.9	17.764	0.017	-0.042	0.030	-0.135	0.070
D31E-122	4	55	09.53	-67	10	08.0	17.786	0.066	-0.245	0.107	-0.997	0.113
D31E-123	4	55	12.09	-67	11	52.2	17.795	0.017	-0.044	0.033	-0.431	0.052
D31W-101	4	54	57.54	-67	10	54.4	17.799	0.026	-0.141	0.036	-0.474	0.067
D31E-125	4	55	25.26	-67	09	22.5	17.804	0.024	-0.218	0.039	-0.530	0.060
D31E-126	4	55	32.55	-67	08	33.9	17.825	0.032	-0.096	0.041	-0.304	0.058
D31E-127	4	55	16.56	-67	09	14.7	17.826	0.021	-0.139	0.031	-0.731	0.044
D31E-128	4	55	21.41	-67	11	48.1	17.831	0.019	-0.060	0.031	-0.586	0.056
D31E-121	4	55	13.94	-67	08	34.6	17.842	0.018	1.082	0.056	...	...
D31W-100	4	54	50.62	-67	11	07.6	17.849	0.022	1.139	0.062	...	...
D31W-105	4	54	39.94	-67	10	16.4	17.863	0.021	-0.052	0.038	-0.417	0.059
D31E-129	4	55	11.28	-67	12	07.5	17.864	0.022	0.077	0.038	-0.581	0.061
D31W-102	4	54	51.03	-67	13	37.3	17.866	0.028	1.038	0.065	...	...
D31E-124	4	55	31.94	-67	08	42.3	17.868	0.023	1.438	0.070	...	...
D31W-106	4	55	02.12	-67	12	48.1	17.875	0.022	-0.115	0.034	-0.562	0.051
D31E-131	4	55	00.84	-67	09	35.5	17.876	0.026	-0.040	0.048	-0.393	0.094

D31W-103	4	54	59.21	-67	13	03.1	17.887	0.019	1.157	0.071	...	...
D31W-108	4	54	54.50	-67	13	17.8	17.891	0.024	-0.043	0.042	-0.662	0.066
D31W-110	4	54	39.99	-67	13	16.9	17.902	0.030	-0.023	0.039	-0.581	0.066
D31W-111	4	54	53.92	-67	11	43.2	17.903	0.020	-0.031	0.034	-0.444	0.063
D31E-130	4	55	05.86	-67	08	46.5	17.905	0.019	0.875	0.053	...	...
D31W-112	4	54	46.04	-67	12	36.0	17.914	0.027	-0.028	0.037	-0.433	0.062
D31W-107	4	54	45.30	-67	10	50.8	17.925	0.022	0.880	0.055	...	...
D31E-133	4	55	14.96	-67	09	29.4	17.927	0.021	-0.176	0.032	-0.691	0.049
D31E-132	4	55	38.36	-67	08	49.1	17.936	0.025	1.290	0.069	...	...
D31E-136	4	55	19.01	-67	10	31.8	17.949	0.021	-0.026	0.037	-0.119	0.080
D31W-109	4	54	54.44	-67	10	26.7	17.950	0.022	1.246	0.055	...	...
D31E-137	4	55	17.75	-67	08	51.8	17.960	0.022	-0.051	0.036	-0.569	0.055
D31W-116	4	54	50.60	-67	10	38.9	17.961	0.021	-0.057	0.038	-0.522	0.065
D31E-135	4	55	30.01	-67	10	17.9	17.977	0.021	0.722	0.044	...	...
D31W-113	4	54	58.28	-67	13	45.1	17.981	0.025	1.266	0.051	...	...
D31E-134	4	55	22.02	-67	08	58.1	17.985	0.015	1.043	0.058	...	...
D31W-119	4	54	45.11	-67	12	43.1	17.996	0.027	-0.036	0.046	0.022	0.094
D31E-138	4	55	10.31	-67	11	08.7	17.997	0.073	-0.100	0.092	-0.717	0.069
D31W-114	4	54	44.45	-67	11	30.2	18.001	0.025	0.968	0.064	...	...
D31E-139	4	55	34.40	-67	08	34.0	18.008	0.020	-0.009	0.031	-0.305	0.082
D31E-141	4	55	10.52	-67	12	10.2	18.009	0.020	-0.097	0.031	-0.438	0.058
D31W-115	4	54	57.91	-67	11	28.2	18.014	0.021	1.200	0.056	...	...
D31W-120	4	54	58.44	-67	10	14.5	18.016	0.025	0.064	0.045	-0.254	0.082
D31W-121	4	54	45.24	-67	13	23.5	18.018	0.020	0.020	0.064	-0.430	0.103
D31E-142	4	55	26.51	-67	11	44.5	18.023	0.022	-0.040	0.034	-0.359	0.074
D31W-118	4	55	05.89	-67	13	24.4	18.033	0.025	0.934	0.074	...	...
D31E-144	4	55	13.76	-67	08	37.7	18.036	0.030	-0.101	0.042	-0.648	0.049
D31E-146	4	55	25.02	-67	09	23.8	18.053	0.029	-0.046	0.044	-0.533	0.079
D31E-140	4	55	28.74	-67	09	15.2	18.059	0.019	1.149	0.062	...	...
D31W-126	4	54	51.45	-67	11	37.5	18.060	0.023	-0.037	0.037	0.196	0.099
D31W-129	4	54	58.14	-67	11	39.8	18.060	0.021	-0.103	0.043	-0.288	0.090
D31W-122	4	54	40.65	-67	10	49.4	18.061	0.020	0.956	0.056	...	...
D31W-123	4	55	14.10	-67	13	49.9	18.065	0.034	0.422	0.247	-0.544	0.322
D31W-130	4	54	57.58	-67	11	16.1	18.065	0.027	-0.044	0.044	-0.430	0.091
D31E-149	4	55	21.67	-67	10	03.2	18.070	0.022	-0.155	0.035	-0.611	0.064
D31E-147	4	55	08.21	-67	10	55.8	18.073	0.036	0.352	0.324	-0.669	0.407
D31E-150	4	55	21.12	-67	09	05.9	18.073	0.025	-0.136	0.040	-0.476	0.079
D31W-124	4	54	54.79	-67	12	49.9	18.086	0.022	0.844	0.065	...	...
D31E-145	4	55	36.87	-67	09	56.6	18.089	0.024	1.048	0.063	...	...
D31E-151	4	55	16.31	-67	11	53.7	18.090	0.023	0.009	0.038	0.474	0.131
D31E-153	4	55	23.84	-67	11	54.2	18.092	0.026	-0.089	0.036	-0.388	0.062
D31E-143	4	55	34.06	-67	10	45.4	18.093	0.016	1.336	0.071	...	...
D31E-148	4	55	30.59	-67	10	28.3	18.106	0.025	1.092	0.068	...	...
D31W-138	4	54	50.62	-67	11	48.5	18.113	0.035	-0.141	0.056	-0.682	0.145
D31E-155	4	55	00.57	-67	11	52.0	18.115	0.023	-0.005	0.041	-0.554	0.080
D31W-132	4	54	51.68	-67	11	58.5	18.122	0.023	0.970	0.079	...	...
D31W-128	4	55	10.80	-67	12	46.5	18.124	0.022	1.388	0.084	...	...
D31E-157	4	55	22.15	-67	11	15.6	18.125	0.023	-0.102	0.034	-0.679	0.067
D31W-137	4	54	43.21	-67	13	17.8	18.131	0.135	0.395	0.158	...	...
D31E-152	4	55	38.15	-67	08	28.5	18.134	0.024	0.897	0.066	...	...
D31W-133	4	54	55.37	-67	12	16.9	18.135	0.030	1.058	0.064	...	...
D31E-154	4	55	16.51	-67	11	16.1	18.140	0.026	0.963	0.066	...	...
D31E-164	4	55	10.47	-67	09	51.0	18.158	0.022	-0.218	0.041	-0.587	0.063
D31W-143	4	55	05.01	-67	12	22.8	18.159	0.026	0.036	0.041	0.136	0.105
D31E-165	4	55	17.63	-67	10	43.2	18.161	0.027	-0.192	0.040	-0.496	0.072
D31E-162	4	55	16.23	-67	12	11.2	18.162	0.018	-0.086	0.034	-0.442	0.069
D31E-156	4	55	32.38	-67	09	11.8	18.164	0.022	1.023	0.066	...	...
D31W-146	4	54	52.25	-67	11	29.4	18.165	0.030	-0.046	0.048	-0.337	0.084
D31E-158	4	55	34.25	-67	08	45.8	18.166	0.026	0.729	0.058	...	...
D31E-168	4	55	14.03	-67	10	40.1	18.173	0.027	-0.183	0.038	-0.472	0.072
D31W-147	4	54	40.05	-67	11	53.8	18.177	0.034	0.036	0.064	-0.499	0.097
D31E-170	4	55	30.73	-67	08	29.7	18.180	0.153	-0.337	0.175	-0.373	0.091
D31E-159	4	55	18.82	-67	09	11.9	18.181	0.020	1.072	0.067	...	...
D31E-160	4	55	09.22	-67	09	35.7	18.187	0.023	0.869	0.059	...	...
D31E-163	4	55	07.61	-67	10	17.5	18.187	0.030	0.468	0.059	...	...
D31W-150	4	54	38.91	-67	11	26.4	18.194	0.023	0.034	0.044	-0.116	0.108

D31E-171	4	55	37.57	-67	11	38.6	18.196	0.024	-0.082	0.042	-0.449	0.087
D31E-166	4	55	15.99	-67	11	12.1	18.199	0.025	0.675	0.058	...	...
D31E-172	4	55	16.98	-67	11	45.7	18.199	0.032	-0.079	0.044	-0.279	0.110
D31E-173	4	55	04.32	-67	09	58.5	18.204	0.028	-0.009	0.052	-0.626	0.081
D31W-152	4	55	11.68	-67	12	51.8	18.205	0.027	0.159	0.052	0.412	0.163
D31E-178	4	55	15.45	-67	09	33.2	18.213	0.025	-0.128	0.062	-0.521	0.109
D31E-161	4	55	28.40	-67	09	34.9	18.215	0.028	1.204	0.090	...	...
D31E-177	4	55	01.19	-67	09	31.5	18.220	0.040	0.026	0.070	0.220	0.128
D31W-148	4	55	14.67	-67	13	50.3	18.221	0.028	1.004	0.066	...	...
D31E-175	4	55	12.97	-67	09	56.1	18.222	0.039	0.246	0.067	-0.623	0.126
D31E-167	4	55	06.86	-67	11	09.8	18.225	0.026	1.121	0.071	...	...
D31E-169	4	55	02.00	-67	10	37.6	18.229	0.025	0.978	0.073	...	...
D31E-181	4	55	18.97	-67	09	37.3	18.231	0.032	-0.104	0.050	-0.751	0.068
D31W-149	4	55	15.35	-67	12	49.9	18.232	0.024	1.133	0.068	...	...
D31E-182	4	55	29.12	-67	08	35.7	18.244	0.026	0.083	0.045	0.370	0.163
D31W-156	4	54	40.20	-67	10	39.9	18.244	0.028	0.079	0.047	-0.508	0.094
D31E-183	4	55	08.49	-67	12	08.2	18.249	0.035	-0.053	0.056	-0.369	0.086
D31E-176	4	55	12.51	-67	11	09.8	18.253	0.022	0.889	0.068	...	...
D31E-174	4	55	22.04	-67	09	51.6	18.256	0.022	1.114	0.072	...	...
D31E-179	4	55	07.16	-67	10	19.1	18.264	0.042	0.974	0.115	...	...
D31E-186	4	55	06.13	-67	09	38.8	18.271	0.024	0.096	0.043	0.012	0.130
D31E-180	4	55	15.20	-67	10	30.4	18.272	0.030	0.904	0.077	...	...
D31W-154	4	54	44.28	-67	12	54.7	18.284	0.028	1.615	0.102	...	...
D31W-160	4	54	49.94	-67	13	13.4	18.287	0.043	0.317	0.076	-0.288	0.145
D31E-189	4	55	06.56	-67	10	55.2	18.290	0.024	-0.030	0.041	-0.472	0.087
D31E-184	4	55	14.44	-67	08	51.7	18.293	0.026	0.824	0.066	...	...
D31E-192	4	55	09.89	-67	08	32.1	18.294	0.029	-0.108	0.043	-0.349	0.087
D31E-185	4	55	01.81	-67	09	35.5	18.303	0.043	0.919	0.101	...	...
D31W-158	4	55	09.53	-67	13	42.8	18.306	0.028	0.951	0.103	...	...
D31E-188	4	55	24.96	-67	12	02.2	18.308	0.025	0.695	0.060	...	...
D31E-193	4	55	26.47	-67	11	26.7	18.317	0.032	-0.067	0.050	-0.434	0.083
D31E-194	4	55	15.20	-67	11	59.1	18.321	0.033	-0.097	0.052	-0.434	0.088
D31E-195	4	55	18.44	-67	10	12.7	18.322	0.067	-0.088	0.084	0.053	0.142
D31E-187	4	55	11.79	-67	09	22.2	18.324	0.022	1.147	0.111	...	...
D31W-166	4	54	54.32	-67	13	32.6	18.324	0.051	-0.033	0.116	-0.440	0.150
D31E-196	4	55	10.24	-67	11	00.3	18.327	0.029	-0.074	0.046	-0.669	0.078
D31E-197	4	55	07.33	-67	11	29.5	18.329	0.034	-0.107	0.049	-0.336	0.089
D31E-190	4	55	22.53	-67	11	56.5	18.333	0.033	0.975	0.073	...	...
D31E-191	4	55	13.60	-67	10	49.3	18.335	0.031	0.903	0.070	...	...
D31E-198	4	55	00.05	-67	10	23.5	18.335	0.025	-0.049	0.039	-0.348	0.094
D31E-201	4	55	28.17	-67	08	47.8	18.347	0.024	-0.012	0.046	-0.524	0.091
D31W-170	4	54	38.73	-67	10	45.0	18.350	0.034	0.227	0.054	-0.097	0.136
D31E-204	4	55	27.78	-67	11	05.1	18.358	0.030	-0.033	0.045	-0.368	0.098
D31W-174	4	54	42.30	-67	10	45.4	18.359	0.030	-0.113	0.047	-0.086	0.108
D31E-203	4	55	29.12	-67	10	07.2	18.360	0.028	0.104	0.052	-0.201	0.134
D31W-164	4	55	09.83	-67	13	36.8	18.361	0.022	1.141	0.097	...	...
D31W-175	4	54	52.45	-67	13	27.2	18.363	0.038	-0.112	0.057	-0.456	0.096
D31E-202	4	55	22.55	-67	12	02.4	18.364	0.037	0.234	0.059	-0.254	0.117
D31W-165	4	54	54.87	-67	11	26.0	18.367	0.027	1.133	0.095	...	...
D31W-171	4	54	56.42	-67	11	36.2	18.369	0.050	0.295	0.095	...	...
D31E-205	4	55	09.42	-67	09	59.2	18.370	0.033	-0.276	0.059	-0.465	0.092
D31E-200	4	55	14.36	-67	11	33.1	18.377	0.026	0.723	0.073	...	...
D31W-176	4	54	54.65	-67	10	24.5	18.378	0.029	-0.032	0.048	-0.670	0.086
D31E-199	4	55	26.01	-67	09	48.0	18.380	0.032	0.861	0.068	...	...
D31W-177	4	54	44.93	-67	13	40.7	18.386	0.033	0.018	0.056	-0.470	0.089
D31W-180	4	54	40.55	-67	11	08.8	18.391	0.034	-0.085	0.049	-0.431	0.082
D31E-206	4	55	04.05	-67	11	41.9	18.402	0.027	0.199	0.054	...	...
D31E-207	4	55	14.67	-67	10	31.6	18.402	0.030	-0.156	0.046	-0.392	0.093
D31E-208	4	55	08.13	-67	11	28.8	18.408	0.036	-0.148	0.057	-0.490	0.091
D31E-210	4	55	30.47	-67	11	43.5	18.418	0.136	-0.174	0.229	...	...
D31W-181	4	54	45.82	-67	12	57.7	18.428	0.173	0.590	0.208	...	...
D31E-213	4	55	33.35	-67	10	34.4	18.434	0.028	0.022	0.048	-0.688	0.102
D31W-179	4	54	43.63	-67	10	28.8	18.438	0.032	0.995	0.112	...	...
D31E-214	4	55	21.53	-67	10	06.2	18.440	0.029	0.019	0.053	-0.565	0.104
D31E-216	4	55	08.74	-67	11	29.3	18.444	0.031	-0.064	0.051	-0.394	0.096
D31W-183	4	55	11.63	-67	13	52.3	18.448	0.032	0.818	0.079	...	...

D31E-209	4	55	04.18	-67	08	38.4	18.450	0.031	0.774	0.090	...	...
D31W-187	4	54	49.61	-67	11	01.7	18.454	0.033	0.045	0.053	0.148	0.172
D31E-211	4	55	34.34	-67	10	14.5	18.457	0.035	0.689	0.076	...	...
D31E-218	4	55	02.69	-67	11	55.7	18.460	0.027	0.190	0.057	...	...
D31E-215	4	55	36.35	-67	11	14.4	18.464	0.028	0.400	0.057	...	...
D31E-212	4	55	16.24	-67	09	19.2	18.474	0.030	1.082	0.087	...	...
D31E-222	4	55	38.28	-67	08	58.1	18.475	0.032	-0.093	0.049	-0.598	0.082
D31E-223	4	55	36.52	-67	09	34.4	18.484	0.032	0.094	0.057	0.233	0.180
D31W-190	4	54	44.00	-67	13	58.8	18.484	0.070	0.025	0.103	...	...
D31E-226	4	55	09.78	-67	10	59.3	18.489	0.033	0.065	0.056	0.495	0.209
D31W-192	4	54	41.33	-67	11	00.0	18.489	0.048	0.066	0.067	0.008	0.136
D31E-219	4	55	10.27	-67	09	45.3	18.491	0.256	0.442	0.433	-1.673	0.457
D31E-228	4	55	16.19	-67	10	00.2	18.496	0.072	-0.178	0.101	-0.250	0.124
D31E-217	4	55	29.62	-67	09	29.1	18.497	0.029	1.062	0.093	...	...
D31E-229	4	55	24.61	-67	08	40.7	18.503	0.032	-0.050	0.051	-0.677	0.090
D31E-224	4	55	20.08	-67	10	23.0	18.514	0.033	0.734	0.057	...	...
D31E-225	4	55	02.09	-67	08	42.1	18.514	0.031	0.705	0.072	...	...
D31E-230	4	55	22.94	-67	09	56.6	18.515	0.030	-0.050	0.052	-0.335	0.107
D31E-220	4	55	05.99	-67	09	12.0	18.516	0.034	0.970	0.084	...	...
D31E-221	4	55	16.26	-67	10	21.7	18.518	0.034	0.968	0.102	...	...
D31E-231	4	55	23.94	-67	09	27.3	18.520	0.030	0.041	0.052	-0.536	0.105
D31W-191	4	54	40.84	-67	12	38.0	18.521	0.057	0.830	0.117	...	...
D31E-232	4	55	25.11	-67	11	15.7	18.529	0.032	-0.031	0.051	-0.495	0.096
D31W-189	4	54	38.88	-67	10	33.5	18.531	0.035	1.246	0.089	...	...
D31W-195	4	55	01.28	-67	13	30.9	18.536	0.038	0.822	0.127	...	...
D31W-193	4	54	54.94	-67	10	26.7	18.540	0.037	1.100	0.098	-0.547	0.305
D31E-234	4	55	10.45	-67	08	52.3	18.544	0.035	0.130	0.062	...	...
D31E-227	4	55	12.26	-67	09	46.3	18.554	0.030	1.286	0.172	...	...
D31W-197	4	54	52.85	-67	11	31.5	18.559	0.040	0.410	0.082	0.200	0.252
D31E-236	4	55	21.53	-67	11	39.9	18.560	0.063	0.286	0.164	...	...
D31E-237	4	55	07.51	-67	09	04.6	18.564	0.032	0.261	0.060	...	...
D31E-233	4	55	17.83	-67	10	31.1	18.572	0.034	0.958	0.077	...	...
D31E-240	4	55	29.80	-67	08	41.1	18.580	0.029	0.064	0.052	-0.377	0.125
D31E-243	4	55	36.19	-67	09	11.2	18.587	0.041	-0.280	0.056	-0.157	0.095
D31W-196	4	55	07.34	-67	13	13.6	18.588	0.039	1.114	0.181	...	...
D31E-238	4	55	08.96	-67	09	54.4	18.593	0.055	0.905	0.111	...	...
D31E-242	4	55	25.85	-67	10	25.8	18.594	0.043	-0.020	0.074	-0.307	0.153
D31E-239	4	55	19.25	-67	11	32.3	18.599	0.040	0.924	0.094	...	...
D31W-200	4	55	11.21	-67	12	30.0	18.609	0.030	0.185	0.059	-0.526	0.153
D31W-202	4	54	55.31	-67	11	09.9	18.613	0.039	0.010	0.065	-0.324	0.129
D31E-244	4	55	30.78	-67	12	09.6	18.614	0.044	-0.079	0.064	-0.234	0.132
D31W-205	4	55	16.06	-67	13	48.7	18.624	0.044	-0.116	0.062	-0.530	0.103
D31E-245	4	55	18.04	-67	11	26.2	18.625	0.037	-0.053	0.062	-0.858	0.107
D31E-241	4	55	13.39	-67	11	08.7	18.633	0.063	1.147	0.119	...	...
D31E-247	4	55	00.98	-67	08	54.8	18.635	0.032	-0.085	0.053	-0.393	0.103
D31W-198	4	54	46.24	-67	13	33.2	18.638	0.031	0.999	0.134	...	...
D31W-206	4	55	05.83	-67	12	35.4	18.641	0.044	0.053	0.062	-0.470	0.120
D31W-207	4	54	54.35	-67	12	22.5	18.646	0.038	0.044	0.056	-0.545	0.123
D31E-250	4	55	24.87	-67	09	51.5	18.659	0.031	-0.031	0.050	-0.470	0.103
D31E-251	4	55	13.01	-67	09	17.0	18.668	0.034	0.091	0.059	-0.263	0.152
D31E-249	4	55	25.74	-67	09	17.6	18.671	0.049	0.465	0.177	...	...
D31E-253	4	55	37.00	-67	10	49.9	18.674	0.029	0.027	0.047	...	...
D31E-246	4	55	19.57	-67	10	02.1	18.685	0.043	1.202	0.117	...	...
D31W-211	4	54	59.54	-67	13	26.5	18.693	0.067	0.811	0.186	-1.059	0.252
D31E-256	4	55	25.89	-67	11	24.4	18.695	0.043	0.091	0.075	0.041	0.166
D31W-210	4	55	04.24	-67	13	52.4	18.695	0.038	0.931	0.124	...	...
D31E-255	4	55	09.01	-67	10	38.6	18.697	0.039	0.293	0.078	-0.261	0.159
D31W-213	4	54	43.25	-67	12	20.2	18.699	0.042	0.008	0.068	...	...
D31W-215	4	54	48.67	-67	10	34.5	18.704	0.039	-0.046	0.069	-0.306	0.132
D31E-252	4	55	12.99	-67	09	29.7	18.706	0.036	0.951	0.107	...	...
D31E-258	4	55	13.04	-67	09	50.0	18.711	0.051	-0.064	0.085	-0.490	0.158
D31E-257	4	55	07.00	-67	11	06.7	18.713	0.041	0.048	0.063	-0.205	0.123
D31W-217	4	54	57.30	-67	12	34.5	18.722	0.053	-0.097	0.079	-0.116	0.165
D31E-254	4	55	25.45	-67	10	01.2	18.724	0.039	1.150	0.129	...	...
D31W-220	4	54	55.57	-67	12	14.4	18.729	0.042	-0.002	0.063	-0.269	0.130
D31E-262	4	55	32.36	-67	10	59.2	18.730	0.036	-0.234	0.057	-0.477	0.134

D31W-214	4	54	48.32	-67	12	39.0	18.752	0.038	1.074	0.125	...	...
D31E-265	4	55	31.48	-67	09	04.6	18.756	0.028	-0.013	0.060	-0.371	0.123
D31E-261	4	55	24.62	-67	10	30.5	18.760	0.043	0.607	0.090	...	...
D31W-216	4	54	44.60	-67	13	56.4	18.761	0.032	0.845	0.072	...	...
D31W-218	4	55	16.22	-67	12	28.5	18.761	0.047	0.782	0.184	...	...
D31E-260	4	55	07.45	-67	11	25.6	18.763	0.030	1.054	0.106	...	...
D31E-266	4	55	03.11	-67	11	55.2	18.763	0.033	0.114	0.070	...	...
D31W-228	4	54	57.62	-67	13	19.4	18.768	0.052	0.165	0.074	...	...
D31W-222	4	54	53.49	-67	12	01.0	18.770	0.046	0.646	0.094	...	...
D31W-234	4	54	56.56	-67	11	31.8	18.775	0.051	-0.055	0.072	-0.436	0.140
D31E-263	4	55	09.15	-67	11	57.1	18.781	0.036	0.852	0.103	...	...
D31W-221	4	54	42.42	-67	10	19.3	18.781	0.043	1.104	0.112	...	...
D31W-227	4	54	39.14	-67	13	13.1	18.781	0.055	0.484	0.139	...	...
D31W-235	4	54	40.31	-67	11	15.1	18.783	0.042	0.031	0.069	-0.230	0.163
D31E-267	4	55	09.18	-67	10	32.8	18.791	0.058	0.682	0.126	...	...
D31W-236	4	54	44.81	-67	11	51.0	18.793	0.038	0.111	0.074	-0.085	0.200
D31W-226	4	54	47.30	-67	11	57.4	18.794	0.050	0.830	0.108	...	...
D31W-237	4	55	03.94	-67	12	54.8	18.796	0.042	0.034	0.064	-0.491	0.133
D31E-270	4	55	30.66	-67	09	41.4	18.797	0.042	0.135	0.080	...	...
D31W-225	4	54	52.17	-67	11	24.5	18.798	0.056	1.056	0.151	...	...
D31W-232	4	54	38.24	-67	12	17.0	18.803	0.050	0.678	0.082	...	...
D31E-274	4	55	24.48	-67	11	19.6	18.805	0.030	-0.161	0.051	-0.508	0.122
D31W-241	4	54	37.61	-67	10	18.4	18.812	0.032	-0.121	0.054	-0.096	0.141
D31E-278	4	55	16.80	-67	09	58.6	18.817	0.043	-0.030	0.086	0.275	0.229
D31E-269	4	55	07.06	-67	08	40.4	18.823	0.043	0.801	0.093	...	...
D31E-276	4	55	27.83	-67	08	59.0	18.823	0.052	0.168	0.092	...	...
D31W-242	4	55	02.85	-67	13	42.3	18.827	0.049	-0.159	0.073	-0.502	0.136
D31E-271	4	55	10.96	-67	10	44.0	18.828	0.053	0.623	0.097	...	...
D31E-284	4	55	02.47	-67	10	58.1	18.835	0.038	-0.193	0.061	-0.021	0.196
D31E-281	4	55	38.32	-67	10	20.2	18.836	0.044	0.053	0.073	...	...
D31E-283	4	55	06.71	-67	09	49.4	18.839	0.037	0.079	0.071	-0.311	0.184
D31W-247	4	54	59.17	-67	11	47.8	18.842	0.045	-0.108	0.062	-0.700	0.140
D31E-272	4	55	10.09	-67	08	40.3	18.844	0.040	0.950	0.121	...	...
D31W-239	4	54	39.59	-67	11	14.4	18.846	0.062	1.070	0.127	...	...
D31E-275	4	55	21.58	-67	08	44.5	18.855	0.038	0.942	0.126	...	...
D31W-252	4	54	58.00	-67	12	28.0	18.860	0.040	-0.129	0.067	-0.454	0.126
D31E-279	4	55	15.99	-67	08	48.1	18.861	0.040	0.945	0.089	...	...
D31E-292	4	55	16.01	-67	10	25.9	18.861	0.037	-0.285	0.056	-0.292	0.133
D31W-253	4	54	39.49	-67	11	15.5	18.861	0.033	-0.140	0.106	-0.290	0.202
D31W-243	4	54	50.18	-67	11	07.9	18.865	0.049	0.606	0.092	...	...
D31E-293	4	55	13.15	-67	11	40.9	18.871	0.043	-0.095	0.069	-0.741	0.105
D31E-286	4	55	13.88	-67	11	57.7	18.875	0.040	0.568	0.101	...	...
D31E-288	4	55	05.95	-67	09	50.6	18.877	0.040	0.451	0.088	...	...
D31E-282	4	55	26.20	-67	09	02.3	18.878	0.060	0.991	0.152	...	...
D31E-295	4	55	14.18	-67	09	50.7	18.878	0.066	0.034	0.117	-0.440	0.276
D31W-245	4	54	54.40	-67	12	31.1	18.882	0.045	0.947	0.109	...	...
D31E-297	4	55	27.75	-67	10	57.1	18.883	0.049	-0.065	0.077	-0.468	0.135
D31E-291	4	55	07.67	-67	10	04.7	18.886	0.049	0.403	0.101	...	...
D31E-285	4	55	35.56	-67	11	05.8	18.888	0.045	0.949	0.130	...	...
D31E-290	4	55	27.73	-67	10	60.0	18.894	0.049	0.661	0.100	...	...
D31E-299	4	55	22.98	-67	08	34.5	18.896	0.245	-0.008	0.417	-0.770	0.403
D31E-300	4	55	36.71	-67	10	40.2	18.896	0.049	-0.011	0.082	...	...
D31E-294	4	55	34.60	-67	10	09.0	18.898	0.042	0.501	0.090	...	...
D31W-248	4	54	55.45	-67	13	29.9	18.899	0.038	1.039	0.112	...	...
D31E-302	4	55	25.77	-67	09	19.3	18.900	0.050	-0.042	0.124	-0.833	0.181
D31W-249	4	54	57.39	-67	11	03.1	18.903	0.042	1.022	0.162	...	...
D31W-250	4	54	43.81	-67	13	56.7	18.903	0.068	0.948	0.199	...	...
D31E-287	4	55	27.98	-67	10	07.7	18.907	0.039	1.220	0.129	...	...
D31E-303	4	55	29.11	-67	09	10.8	18.909	0.038	0.064	0.064	...	...
D31E-289	4	54	59.92	-67	11	08.3	18.910	0.055	1.160	0.155	...	...
D31W-262	4	54	51.60	-67	13	19.9	18.912	0.083	-0.263	0.102	0.109	0.268
D31E-304	4	55	18.29	-67	09	30.6	18.913	0.042	-0.011	0.072	-0.464	0.148
D31E-307	4	55	27.45	-67	08	38.5	18.922	0.048	0.023	0.077	...	...
D31E-298	4	55	34.69	-67	10	41.5	18.923	0.043	0.840	0.115	...	...
D31E-309	4	55	25.57	-67	09	35.7	18.927	0.033	-0.128	0.069	-0.351	0.137
D31E-296	4	55	37.36	-67	11	57.6	18.928	0.040	1.052	0.145	...	...

D31E-301	4	55	24.85	-67	10	04.2	18.936	0.053	0.813	0.132	...	...
D31E-310	4	55	30.71	-67	11	51.2	18.936	0.047	-0.001	0.076	-0.088	0.151
D31E-322	4	55	11.52	-67	10	39.0	18.940	0.261	-0.765	0.432	0.415	0.669
D31E-1013	4	55	14.15	-67	11	28.5	18.940	0.241	-0.792	0.293	...	...
D31E-312	4	55	26.12	-67	12	09.6	18.942	0.049	0.003	0.078	-0.537	0.132
D31E-305	4	55	06.47	-67	08	43.4	18.953	0.046	0.856	0.100	...	...
D31E-314	4	55	08.62	-67	11	31.4	18.956	0.045	0.098	0.082	-0.185	0.174
D31E-315	4	55	04.31	-67	11	18.0	18.957	0.039	-0.055	0.068	-0.238	0.171
D31E-306	4	55	06.51	-67	08	33.7	18.961	0.048	1.016	0.127	...	...
D31E-317	4	55	36.83	-67	08	40.2	18.961	0.055	-0.076	0.085	...	...
D31W-260	4	54	48.00	-67	10	45.7	18.962	0.081	0.933	0.170	...	...
D31E-320	4	55	31.92	-67	11	40.2	18.965	0.052	-0.048	0.077	-0.358	0.149
D31W-265	4	55	06.48	-67	13	29.2	18.974	0.047	0.723	0.108	...	...
D31W-271	4	54	43.09	-67	11	18.9	18.976	0.051	0.012	0.082	...	...
D31E-323	4	55	24.25	-67	11	49.8	18.979	0.046	-0.002	0.077	0.252	0.267
D31E-321	4	55	11.26	-67	09	36.1	18.980	0.048	0.199	0.086	...	...
D31W-258	4	54	49.79	-67	12	27.6	18.981	0.047	1.718	0.216	...	...
D31E-311	4	55	30.25	-67	08	51.7	18.982	0.043	0.981	0.144	...	...
D31E-324	4	55	13.93	-67	09	42.1	18.983	0.046	0.023	0.077	-0.279	0.165
D31W-266	4	55	04.32	-67	13	33.3	18.985	0.061	0.897	0.153	...	...
D31W-273	4	55	02.32	-67	12	45.3	18.987	0.046	0.171	0.090	...	...
D31W-267	4	54	40.16	-67	11	54.9	18.990	0.067	0.878	0.201	...	...
D31E-319	4	55	31.15	-67	08	35.2	18.992	0.051	0.617	0.097	...	...
D31W-274	4	55	07.43	-67	12	38.4	18.993	0.051	0.115	0.074	...	...
D31E-313	4	55	04.35	-67	09	34.8	18.994	0.058	1.082	0.151	...	...
D31W-275	4	54	57.29	-67	11	46.4	18.994	0.067	0.044	0.106	...	...
D31E-329	4	55	09.41	-67	11	27.1	18.999	0.044	-0.118	0.072	-0.017	0.158
D31W-264	4	54	52.37	-67	13	20.4	18.999	0.052	1.489	0.207	...	...
D31E-327	4	55	27.15	-67	12	10.7	19.000	0.045	0.089	0.069	...	...
D31W-269	4	55	10.61	-67	13	37.3	19.002	0.039	0.982	0.133	...	...
D31E-330	4	55	22.80	-67	10	11.3	19.003	0.054	-0.030	0.223	...	...
D31E-318	4	55	17.05	-67	08	35.2	19.006	0.038	0.981	0.126	...	...
D31W-279	4	54	44.81	-67	11	57.7	19.007	0.037	-0.042	0.081	-0.321	0.175
D31W-284	4	54	43.41	-67	12	38.9	19.007	0.048	-0.194	0.081	-0.014	0.178
D31E-335	4	55	18.93	-67	12	03.3	19.012	0.053	-0.032	0.083	...	...
D31W-283	4	55	09.98	-67	13	53.3	19.015	0.043	-0.010	0.074	...	...
D31E-336	4	55	08.21	-67	10	19.8	19.016	0.060	0.075	0.105	...	...
D31E-338	4	55	15.47	-67	11	43.9	19.017	0.051	0.061	0.089	...	...
D31W-270	4	54	56.05	-67	13	03.7	19.018	0.057	1.063	0.149	...	...
D31W-282	4	54	37.60	-67	13	28.9	19.018	0.045	0.116	0.074	...	...
D31E-339	4	55	04.47	-67	10	29.2	19.021	0.058	0.070	0.094	...	...
D31E-341	4	55	37.17	-67	09	29.5	19.023	0.046	-0.051	0.073	-0.297	0.180
D31E-325	4	55	36.73	-67	09	10.5	19.029	0.051	1.051	0.134	...	...
D31W-286	4	54	47.91	-67	13	35.7	19.032	0.064	0.049	0.105	-0.458	0.159
D31E-332	4	55	19.52	-67	10	30.3	19.033	0.054	0.628	0.110	...	...
D31E-348	4	55	09.42	-67	10	36.5	19.033	0.052	-0.005	0.093	...	...
D31E-343	4	55	30.85	-67	09	23.9	19.034	0.042	0.118	0.073	0.084	0.257
D31W-272	4	54	59.10	-67	11	57.3	19.034	0.057	1.351	0.229	...	...
D31E-352	4	55	29.71	-67	10	19.8	19.035	0.051	-0.101	0.077	...	...
D31W-277	4	54	48.56	-67	10	18.4	19.039	0.055	1.027	0.218	...	...
D31W-278	4	54	54.13	-67	13	56.1	19.039	0.041	0.865	0.123	...	...
D31E-357	4	55	14.10	-67	10	21.8	19.041	0.059	-0.139	0.087	...	...
D31W-281	4	54	39.10	-67	12	41.0	19.042	0.063	0.664	0.135	...	...
D31W-288	4	54	54.56	-67	11	31.2	19.042	0.061	0.106	0.092	...	...
D31E-340	4	55	32.76	-67	09	36.1	19.045	0.045	0.600	0.105	...	...
D31E-337	4	55	02.10	-67	08	32.5	19.046	0.035	0.747	0.097	...	...
D31E-331	4	55	05.17	-67	09	53.2	19.052	0.046	1.113	0.129	...	...
D31E-353	4	55	31.26	-67	09	57.5	19.053	0.060	0.201	0.090	...	...
D31E-334	4	55	23.37	-67	09	58.1	19.055	0.043	1.047	0.143	...	...
D31E-349	4	55	27.89	-67	11	59.9	19.055	0.056	0.517	0.110	...	...
D31W-298	4	54	45.42	-67	11	15.5	19.059	0.058	0.024	0.101	...	...
D31E-363	4	55	23.27	-67	09	51.0	19.060	0.039	-0.115	0.076	-0.278	0.202
D31W-300	4	54	54.29	-67	13	47.1	19.063	0.046	-0.014	0.095	...	...
D31E-345	4	55	29.45	-67	11	01.2	19.066	0.043	0.817	0.107	...	...
D31E-361	4	55	13.65	-67	11	48.6	19.067	0.041	0.095	0.076	...	...
D31E-346	4	55	24.96	-67	08	59.1	19.068	0.054	0.856	0.134	...	...

D31E-350	4	55	25.56	-67	10	26.6	19.068	0.050	0.704	0.158	...	...
D31E-367	4	55	34.29	-67	09	08.9	19.069	0.043	-0.113	0.064	-0.393	0.153
D31E-347	4	55	33.19	-67	09	20.3	19.073	0.040	0.988	0.155	...	...
D31E-369	4	55	35.78	-67	11	10.9	19.076	0.045	-0.013	0.071	-0.435	0.144
D31W-287	4	54	45.30	-67	11	51.0	19.076	0.046	0.943	0.118	...	...
D31W-292	4	54	56.17	-67	11	03.9	19.079	0.062	0.817	0.150	...	...
D31W-303	4	54	46.78	-67	12	56.9	19.079	0.053	0.147	0.084	...	...
D31E-351	4	55	04.32	-67	09	49.8	19.080	0.052	0.987	0.150	...	...
D31E-371	4	55	34.60	-67	08	31.4	19.082	0.052	0.014	0.077	-0.253	0.218
D31E-355	4	55	09.33	-67	08	49.1	19.083	0.047	0.892	0.154	...	...
D31W-295	4	54	54.19	-67	13	25.2	19.083	0.050	0.800	0.120	...	...
D31E-372	4	55	32.85	-67	09	49.9	19.085	0.041	0.099	0.067	...	...
D31W-289	4	55	15.96	-67	12	25.6	19.085	0.039	1.006	0.180	...	...
D31E-358	4	55	34.89	-67	11	35.4	19.086	0.038	0.855	0.152	...	...
D31E-366	4	55	09.90	-67	09	12.9	19.090	0.049	0.390	0.094	...	...
D31W-299	4	54	53.36	-67	12	41.9	19.091	0.043	0.725	0.101	...	...
D31E-356	4	55	14.40	-67	11	53.1	19.092	0.055	1.047	0.182	...	...
D31E-364	4	55	09.29	-67	09	47.2	19.094	0.040	0.639	0.093	...	...
D31E-375	4	55	09.08	-67	10	54.1	19.098	0.063	-0.043	0.093	...	...
D31E-368	4	55	34.32	-67	12	13.6	19.100	0.056	0.599	0.231	...	...
D31W-309	4	54	49.26	-67	12	28.0	19.100	0.059	0.118	0.095	...	...
D31E-376	4	55	07.09	-67	10	31.3	19.102	0.065	-0.006	0.098	...	...
D31E-362	4	55	10.25	-67	09	27.3	19.103	0.054	0.901	0.145	...	...
D31W-301	4	54	43.40	-67	13	09.7	19.103	0.067	0.855	0.134	...	...
D31W-314	4	54	54.52	-67	13	50.4	19.103	0.067	-0.145	0.121	...	...
D31E-379	4	55	19.06	-67	10	41.4	19.104	0.046	-0.012	0.092	-0.640	0.161
D31W-313	4	54	46.86	-67	13	32.6	19.109	0.049	0.020	0.082	-0.266	0.186
D31W-302	4	55	01.82	-67	13	04.7	19.110	0.064	0.936	0.181	...	...
D31E-383	4	55	15.45	-67	11	16.8	19.112	0.103	-0.264	0.175	...	...
D31W-304	4	54	42.13	-67	11	35.5	19.112	0.060	0.858	0.189	...	...
D31W-307	4	55	05.94	-67	13	07.0	19.112	0.067	0.485	0.118	...	...
D31W-318	4	54	38.16	-67	10	15.2	19.112	0.056	-0.159	0.081	-0.269	0.144
D31E-373	4	55	14.83	-67	09	47.1	19.115	0.056	0.745	0.142	...	...
D31E-378	4	55	37.70	-67	11	14.0	19.115	0.041	0.234	0.079	...	...
D31W-305	4	55	10.66	-67	13	43.1	19.117	0.042	0.923	0.193	...	...
D31W-320	4	54	46.21	-67	12	05.6	19.119	0.072	-0.046	0.117	...	...
D31E-370	4	55	24.89	-67	11	06.6	19.121	0.053	0.966	0.137	...	...
D31W-308	4	54	50.15	-67	10	58.6	19.123	0.051	0.675	0.130	...	...
D31W-321	4	55	03.02	-67	13	30.2	19.123	0.055	0.027	0.091	-0.379	0.189
D31W-319	4	54	45.04	-67	12	38.1	19.128	0.055	0.170	0.099	...	...
D31E-374	4	55	03.24	-67	09	07.4	19.131	0.052	0.980	0.112	...	...
D31W-311	4	54	40.88	-67	11	54.4	19.132	0.057	0.607	0.155	...	...
D31E-388	4	55	24.83	-67	11	34.3	19.133	0.047	-0.123	0.082	-0.742	0.142
D31W-326	4	54	49.15	-67	13	28.7	19.133	0.054	0.023	0.096	-0.611	0.170
D31E-387	4	55	33.14	-67	08	33.3	19.135	0.051	0.025	0.085	-0.166	0.210
D31E-386	4	55	02.32	-67	08	50.9	19.140	0.057	0.152	0.107	...	...
D31W-334	4	54	49.64	-67	13	12.8	19.141	0.061	-0.133	0.120	...	...
D31W-335	4	55	13.52	-67	12	19.5	19.144	0.060	-0.064	0.104	...	...
D31E-397	4	55	01.10	-67	10	22.3	19.146	0.058	-0.193	0.088	-0.258	0.146
D31W-330	4	54	40.04	-67	13	07.5	19.146	0.054	0.123	0.107	-0.779	0.187
D31E-395	4	55	32.22	-67	12	12.1	19.148	0.067	0.006	0.111	...	...
D31E-377	4	55	12.89	-67	08	55.0	19.149	0.046	1.033	0.131	...	...
D31E-396	4	55	26.39	-67	10	15.7	19.150	0.044	-0.062	0.076	...	...
D31W-312	4	54	43.73	-67	13	35.7	19.151	0.058	1.031	0.205	...	...
D31E-393	4	55	24.73	-67	10	06.4	19.154	0.053	0.247	0.102	-0.576	0.254
D31W-310	4	55	07.69	-67	13	22.5	19.155	0.057	1.177	0.171	...	...
D31E-382	4	55	20.82	-67	09	15.1	19.159	0.044	0.912	0.126	...	...
D31W-316	4	54	58.45	-67	11	26.0	19.159	0.041	1.058	0.135	...	...
D31W-317	4	54	49.60	-67	12	16.5	19.161	0.055	1.049	0.186	...	...
D31W-337	4	54	37.69	-67	11	26.0	19.161	0.054	0.231	0.106	...	...
D31E-399	4	55	12.16	-67	09	07.1	19.163	0.055	0.111	0.088	...	...
D31E-400	4	55	19.85	-67	09	47.2	19.164	0.067	0.084	0.120	...	...
D31W-327	4	54	46.45	-67	10	30.8	19.167	0.071	0.820	0.133	...	...
D31E-389	4	55	16.48	-67	10	23.1	19.174	0.067	0.819	0.144	...	...
D31W-338	4	54	48.59	-67	10	52.7	19.175	0.063	0.505	0.122	...	...
D31W-329	4	54	38.96	-67	13	11.8	19.177	0.085	0.842	0.158	...	...

D31W-345	4	54	52.57	-67	11	30.2	19.177	0.065	0.122	0.131	...	...
D31E-407	4	55	23.13	-67	11	36.8	19.179	0.054	-0.128	0.085	-0.394	0.145
D31W-346	4	54	51.97	-67	12	26.1	19.179	0.043	0.164	0.090	...	...
D31E-392	4	55	16.01	-67	09	29.0	19.180	0.052	0.880	0.142	...	...
D31W-336	4	54	38.51	-67	10	43.0	19.180	0.062	0.699	0.158	...	...
D31W-348	4	55	09.51	-67	12	59.5	19.180	0.057	0.044	0.104	...	...
D31W-333	4	54	38.26	-67	13	55.5	19.185	0.071	0.894	0.157	...	...
D31W-331	4	54	44.82	-67	13	43.0	19.186	0.061	1.026	0.183	...	...
D31E-405	4	55	02.29	-67	09	20.6	19.188	0.049	0.094	0.085	...	...
D31E-401	4	55	24.24	-67	08	42.4	19.189	0.055	0.641	0.120	...	...
D31E-410	4	55	13.10	-67	11	09.2	19.192	0.108	-0.050	0.186	-0.611	0.221
D31W-351	4	55	03.63	-67	12	25.2	19.195	0.093	0.127	0.138	...	...
D31E-415	4	55	03.81	-67	11	06.0	19.198	0.055	-0.178	0.086	...	...
D31W-340	4	54	51.50	-67	11	14.7	19.201	0.061	1.068	0.162	...	...
D31W-353	4	54	40.42	-67	11	11.9	19.203	0.081	0.074	0.111	...	...
D31E-417	4	55	23.30	-67	10	49.6	19.204	0.056	-0.104	0.080	...	...
D31E-418	4	55	13.38	-67	11	33.8	19.205	0.059	-0.262	0.081	...	...
D31E-403	4	55	33.79	-67	10	26.0	19.207	0.056	0.883	0.149	...	...
D31W-344	4	55	01.77	-67	13	44.8	19.208	0.051	0.929	0.132	...	...
D31W-347	4	55	10.63	-67	13	40.2	19.208	0.045	0.773	0.151	...	...
D31E-402	4	55	27.02	-67	09	04.0	19.209	0.048	0.983	0.154	...	...
D31E-414	4	55	23.31	-67	09	10.6	19.209	0.054	0.154	0.102	...	...
D31W-341	4	54	53.43	-67	13	18.5	19.209	0.060	1.170	0.215	...	...
D31E-398	4	55	36.02	-67	11	13.7	19.218	0.051	1.415	0.207	...	...
D31W-350	4	54	56.70	-67	11	00.4	19.223	0.050	0.834	0.120	...	...
D31W-362	4	54	44.06	-67	11	30.1	19.225	0.058	0.114	0.102	...	...
D31W-349	4	54	57.97	-67	10	51.5	19.226	0.056	0.988	0.152	...	...
D31W-360	4	54	50.65	-67	12	36.9	19.226	0.046	0.181	0.099	...	...
D31W-364	4	55	06.23	-67	12	46.7	19.226	0.059	-0.059	0.094	...	...
D31W-373	4	54	59.50	-67	13	27.8	19.227	0.058	-0.476	0.079	...	...
D31E-421	4	55	12.56	-67	10	33.1	19.228	0.067	0.128	0.112	...	...
D31E-408	4	55	13.51	-67	08	55.9	19.230	0.057	0.973	0.155	...	...
D31E-409	4	55	19.46	-67	08	48.4	19.230	0.041	0.843	0.134	...	...
D31W-361	4	54	45.34	-67	10	28.4	19.231	0.051	0.271	0.111	...	...
D31E-412	4	55	35.61	-67	09	33.0	19.237	0.060	0.910	0.150	...	...
D31E-429	4	55	23.87	-67	11	07.1	19.241	0.059	-0.190	0.088	...	...
D31W-354	4	54	40.41	-67	11	30.8	19.241	0.061	0.824	0.209	...	...
D31W-372	4	54	44.69	-67	13	29.2	19.241	0.070	-0.088	0.119	...	...
D31W-368	4	54	45.90	-67	13	05.3	19.242	0.068	0.119	0.118	...	...
D31E-411	4	55	17.19	-67	10	40.4	19.244	0.045	1.091	0.172	...	...
D31E-416	4	55	22.61	-67	09	03.7	19.244	0.042	0.859	0.157	...	...
D31E-428	4	55	19.52	-67	10	51.8	19.245	0.055	-0.088	0.091	...	...
D31E-425	4	55	09.94	-67	08	38.2	19.247	0.065	0.121	0.108	...	...
D31E-434	4	55	30.81	-67	10	59.3	19.250	0.059	-0.207	0.120	...	...
D31E-419	4	55	21.85	-67	11	01.7	19.251	0.059	0.724	0.144	...	...
D31W-375	4	54	56.31	-67	10	13.8	19.252	0.051	0.046	0.090	...	...
D31W-370	4	55	03.78	-67	12	57.0	19.253	0.060	0.244	0.105	-0.398	0.258
D31E-432	4	55	37.48	-67	09	01.1	19.255	0.052	0.066	0.094	...	...
D31W-387	4	54	39.48	-67	13	21.9	19.255	0.117	-1.139	0.147	...	...
D31W-367	4	54	40.97	-67	12	39.1	19.259	0.117	0.552	0.201	...	...
D31E-413	4	55	12.40	-67	10	47.3	19.261	0.063	1.412	0.324	...	...
D31E-433	4	55	31.08	-67	11	48.4	19.262	0.172	0.180	0.213	...	...
D31W-365	4	54	45.72	-67	10	60.0	19.264	0.066	0.770	0.159	...	...
D31W-363	4	55	11.11	-67	12	25.9	19.265	0.061	1.026	0.174	...	...
D31W-377	4	54	56.68	-67	11	49.9	19.267	0.087	0.178	0.129	...	...
D31E-439	4	55	26.23	-67	09	22.3	19.274	0.113	-0.051	0.151	...	...
D31E-424	4	55	25.97	-67	08	37.9	19.277	0.047	0.820	0.167	...	...
D31E-440	4	55	12.10	-67	08	29.5	19.281	0.084	0.088	0.170	...	...
D31E-427	4	55	26.89	-67	11	31.3	19.283	0.062	0.838	0.141	...	...
D31E-431	4	55	29.25	-67	11	35.4	19.284	0.045	0.746	0.117	...	...
D31E-450	4	55	17.17	-67	09	10.8	19.287	0.054	-0.085	0.086	...	...
D31W-374	4	55	12.21	-67	12	24.1	19.287	0.088	0.879	0.181	...	...
D31E-453	4	55	14.86	-67	08	33.5	19.289	0.362	-0.234	0.415	...	...
D31E-447	4	55	31.08	-67	08	47.4	19.290	0.065	0.057	0.112	...	...
D31E-446	4	55	06.29	-67	10	15.0	19.293	0.059	0.182	0.109	...	...
D31E-445	4	55	24.06	-67	11	12.4	19.295	0.064	0.276	0.115	...	...

D31W-378	4	54	55.28	-67	12	50.1	19.295	0.061	0.809	0.178	...	...
D31E-449	4	55	03.07	-67	09	19.8	19.296	0.063	0.122	0.101	...	...
D31E-442	4	55	05.12	-67	11	51.2	19.297	0.071	0.397	0.110	...	...
D31W-371	4	54	37.73	-67	13	07.9	19.299	0.059	1.290	0.181	...	...
D31E-459	4	55	06.88	-67	10	18.7	19.300	0.073	-0.304	0.100	...	...
D31W-376	4	54	52.91	-67	12	35.2	19.300	0.062	0.967	0.173	...	...
D31W-386	4	54	54.36	-67	11	55.8	19.300	0.073	-0.104	0.111	...	...
D31W-380	4	54	56.42	-67	11	49.1	19.301	0.086	0.340	0.143	...	...
D31W-379	4	54	59.65	-67	13	00.3	19.305	0.064	0.534	0.149	...	...
D31E-458	4	55	37.27	-67	10	16.3	19.308	0.050	-0.048	0.097	...	...
D31W-384	4	54	42.78	-67	12	08.6	19.309	0.066	0.167	0.127	...	...
D31E-457	4	55	13.15	-67	11	37.9	19.311	0.122	0.120	0.203	...	...
D31E-455	4	55	11.70	-67	11	11.8	19.315	0.075	0.235	0.132	...	...
D31E-460	4	55	10.05	-67	09	17.8	19.315	0.067	0.046	0.120	...	...
D31E-461	4	55	29.27	-67	12	08.6	19.319	0.066	-0.004	0.096	...	...
D31W-381	4	55	05.95	-67	13	21.2	19.322	0.053	0.781	0.148	...	...
D31E-456	4	55	07.24	-67	11	50.0	19.325	0.072	0.437	0.123	...	...
D31E-464	4	55	16.72	-67	08	40.2	19.325	0.067	0.043	0.141	...	...
D31E-468	4	55	25.27	-67	10	34.7	19.328	0.058	-0.079	0.089	...	...
D31W-383	4	54	41.17	-67	11	47.6	19.331	0.060	0.873	0.160	...	...
D31E-475	4	55	16.85	-67	09	26.6	19.333	0.068	-0.192	0.094	...	...
D31E-473	4	55	15.16	-67	08	51.1	19.334	0.050	-0.043	0.093	...	...
D31E-465	4	55	13.04	-67	09	01.8	19.336	0.080	0.277	0.150	...	...
D31E-467	4	55	08.51	-67	10	41.9	19.339	0.057	0.188	0.103	...	...
D31E-448	4	55	30.63	-67	10	02.9	19.343	0.067	1.252	0.205	...	...
D31E-452	4	55	32.70	-67	11	12.5	19.343	0.044	1.040	0.165	...	...
D31W-397	4	55	12.95	-67	12	39.7	19.343	0.058	0.100	0.108	...	...
D31W-401	4	54	45.89	-67	11	34.4	19.344	0.065	0.005	0.133	...	...
D31W-402	4	55	00.35	-67	12	51.1	19.348	0.062	0.008	0.101	...	...
D31W-403	4	54	37.73	-67	12	27.7	19.349	0.062	0.030	0.124	...	...
D31W-399	4	55	03.69	-67	13	01.7	19.354	0.070	0.339	0.127	...	...
D31E-480	4	55	12.89	-67	10	59.1	19.355	0.085	0.103	0.131	...	...
D31W-406	4	54	53.59	-67	11	19.9	19.357	0.076	0.028	0.144	...	...
D31E-481	4	55	15.35	-67	12	03.7	19.359	0.069	0.111	0.099	...	...
D31W-395	4	54	56.75	-67	11	42.1	19.363	0.063	0.631	0.161	...	...
D31E-483	4	55	20.37	-67	08	36.7	19.368	0.073	0.128	0.128	...	...
D31W-394	4	55	11.95	-67	13	18.2	19.369	0.067	0.853	0.160	...	...
D31E-476	4	55	34.12	-67	11	58.6	19.370	0.047	0.657	0.142	...	...
D31E-482	4	55	30.26	-67	09	54.8	19.373	0.063	0.293	0.113	...	...
D31E-490	4	55	21.82	-67	10	21.5	19.379	0.045	0.019	0.088	...	...
D31E-494	4	55	27.53	-67	11	15.3	19.379	0.068	-0.171	0.095	...	...
D31E-472	4	55	13.70	-67	11	53.0	19.386	0.075	1.162	0.185	...	...
D31E-489	4	55	29.15	-67	10	14.9	19.386	0.058	0.217	0.112	...	...
D31W-412	4	55	06.91	-67	12	56.2	19.389	0.072	0.396	0.161	...	...
D31W-407	4	55	08.77	-67	12	29.7	19.390	0.065	0.768	0.146	...	...
D31E-478	4	55	05.99	-67	08	58.1	19.392	0.067	1.050	0.177	...	...
D31E-491	4	55	34.78	-67	11	08.5	19.393	0.058	0.304	0.108	...	...
D31W-417	4	55	10.13	-67	12	35.2	19.394	0.050	0.096	0.104	...	...
D31E-497	4	55	19.05	-67	10	44.9	19.397	0.078	-0.069	0.134	...	...
D31W-409	4	55	07.52	-67	13	49.8	19.397	0.074	0.840	0.186	...	...
D31W-416	4	54	42.36	-67	12	17.7	19.398	0.069	0.197	0.122	...	...
D31W-418	4	54	40.15	-67	12	26.7	19.398	0.061	0.088	0.101	...	...
D31E-499	4	55	27.22	-67	08	32.9	19.400	0.059	-0.034	0.116	...	...
D31E-498	4	55	04.86	-67	11	12.5	19.402	0.073	0.017	0.125	...	...
D31W-410	4	55	01.83	-67	13	14.4	19.405	0.065	0.953	0.211	...	...
D31E-488	4	55	06.70	-67	09	33.5	19.407	0.064	0.733	0.146	...	...
D31W-422	4	54	52.22	-67	12	14.1	19.407	0.073	0.208	0.119	...	...
D31E-496	4	55	27.36	-67	11	47.3	19.413	0.056	0.424	0.123	...	...
D31E-500	4	55	32.54	-67	09	28.0	19.413	0.070	0.244	0.118	...	...
D31E-505	4	55	11.14	-67	11	35.6	19.415	0.072	-0.179	0.107	...	...
D31E-507	4	55	31.63	-67	12	06.1	19.419	0.089	-0.136	0.117	...	...
D31E-492	4	55	28.22	-67	10	15.2	19.420	0.061	0.911	0.187	...	...
D31E-504	4	55	20.27	-67	11	59.4	19.420	0.068	-0.017	0.103	...	...
D31W-414	4	54	48.55	-67	12	11.2	19.421	0.088	0.954	0.227	...	...
D31W-427	4	54	47.94	-67	10	52.7	19.422	0.080	0.093	0.140	...	...
D31E-508	4	55	08.49	-67	09	05.9	19.425	0.062	-0.002	0.101	...	...

D31E-506	4	55	37.83	-67	10	35.7	19.428	0.070	0.060	0.117	...	...
D31E-512	4	55	11.11	-67	08	49.1	19.430	0.077	-0.131	0.110	...	...
D31E-493	4	55	05.46	-67	09	31.6	19.432	0.064	1.109	0.224	...	...
D31W-423	4	55	04.72	-67	13	42.4	19.435	0.073	0.726	0.163	...	...
D31W-428	4	54	46.89	-67	13	26.2	19.437	0.062	0.257	0.127	...	...
D31E-515	4	55	36.66	-67	08	57.6	19.440	0.063	-0.092	0.096	...	...
D31E-513	4	55	05.03	-67	10	18.2	19.445	0.085	0.168	0.131	...	...
D31W-433	4	54	54.54	-67	13	19.4	19.446	0.088	0.014	0.134	...	...
D31E-520	4	55	09.17	-67	09	53.2	19.447	0.119	-0.485	0.158	-0.396	0.195
D31W-425	4	54	54.94	-67	12	38.9	19.450	0.105	0.931	0.205	...	...
D31E-516	4	55	28.09	-67	09	00.2	19.456	0.084	0.011	0.144	...	...
D31E-509	4	55	16.64	-67	10	27.7	19.459	0.064	0.783	0.172	...	...
D31W-432	4	54	37.78	-67	10	32.9	19.461	0.074	0.433	0.188	...	...
D31E-502	4	55	15.50	-67	10	23.5	19.462	0.071	1.220	0.264	...	...
D31E-518	4	55	25.37	-67	09	24.8	19.462	0.078	-0.064	0.127	...	...
D31E-510	4	55	22.85	-67	12	06.2	19.463	0.072	0.759	0.165	...	...
D31E-521	4	54	59.45	-67	11	37.3	19.466	0.104	-0.168	0.150	...	...
D31E-519	4	55	05.99	-67	11	55.0	19.468	0.061	0.036	0.102	...	...
D31W-437	4	54	51.65	-67	10	44.9	19.469	0.087	0.249	0.166	...	...
D31W-439	4	54	43.53	-67	13	05.3	19.476	0.084	0.317	0.148	...	...
D31W-431	4	54	40.89	-67	11	40.5	19.477	0.086	0.857	0.265	...	...
D31W-434	4	54	40.95	-67	10	58.6	19.479	0.078	0.667	0.160	...	...
D31W-444	4	55	13.83	-67	12	36.6	19.479	0.074	0.011	0.118	...	...
D31W-445	4	54	38.24	-67	12	49.6	19.480	0.066	0.004	0.116	...	...
D31E-527	4	55	31.78	-67	10	03.0	19.482	0.050	-0.105	0.095	...	...
D31E-514	4	55	25.49	-67	09	21.9	19.484	0.263	0.949	0.654	...	...
D31E-522	4	55	25.73	-67	12	10.9	19.486	0.075	0.262	0.136	...	...
D31E-526	4	55	19.38	-67	09	13.5	19.493	0.070	0.224	0.133	...	...
D31E-525	4	55	17.04	-67	09	43.9	19.496	0.106	0.437	0.157	...	...
D31W-442	4	54	57.71	-67	10	46.4	19.496	0.068	0.498	0.168	...	...
D31W-447	4	54	54.26	-67	13	31.6	19.496	0.070	0.257	0.152	...	...
D31W-452	4	55	14.06	-67	12	26.3	19.496	0.093	-0.164	0.139	...	...
D31E-531	4	55	16.73	-67	09	43.8	19.497	0.194	-0.277	0.234	...	...
D31E-528	4	55	21.45	-67	11	59.5	19.503	0.074	0.083	0.117	...	...
D31W-453	4	54	52.17	-67	13	32.4	19.511	0.072	0.082	0.143	...	...
D31W-454	4	54	46.66	-67	13	17.2	19.511	0.112	-0.078	0.153	...	...
D31W-456	4	54	38.70	-67	12	36.0	19.511	0.114	-0.091	0.150	...	...
D31W-449	4	55	06.38	-67	13	01.8	19.512	0.111	0.345	0.174	...	...
D31W-438	4	54	56.43	-67	13	04.5	19.516	0.100	1.277	0.314	...	...
D31E-539	4	55	23.64	-67	11	19.8	19.519	0.074	-0.061	0.116	...	...
D31E-532	4	55	28.05	-67	09	02.8	19.521	0.073	0.221	0.135	...	...
D31E-534	4	55	01.48	-67	10	32.9	19.522	0.071	0.188	0.112	...	...
D31E-536	4	55	23.46	-67	09	17.5	19.524	0.080	0.116	0.133	...	...
D31E-529	4	55	18.98	-67	11	27.1	19.525	0.066	0.540	0.152	...	...
D31E-550	4	55	09.67	-67	11	31.7	19.527	0.150	-0.499	0.178	...	...
D31E-538	4	55	05.97	-67	11	25.8	19.531	0.074	0.225	0.128	...	...
D31W-460	4	54	43.56	-67	13	31.7	19.532	0.072	0.037	0.123	...	...
D31W-459	4	55	13.75	-67	13	42.9	19.533	0.117	0.087	0.156	...	...
D31W-463	4	54	55.74	-67	12	10.7	19.534	0.082	-0.111	0.132	...	...
D31E-541	4	55	34.34	-67	12	05.5	19.537	0.080	0.094	0.134	...	...
D31E-546	4	55	33.28	-67	10	09.3	19.539	0.065	-0.060	0.123	...	...
D31E-542	4	55	26.61	-67	09	27.1	19.540	0.074	0.033	0.120	...	...
D31W-469	4	54	47.36	-67	10	36.8	19.543	0.082	-0.087	0.119	...	...
D31W-457	4	54	44.74	-67	12	45.5	19.544	0.104	0.518	0.283	...	...
D31W-461	4	54	52.67	-67	12	06.0	19.544	0.065	0.276	0.132	...	...
D31W-470	4	54	57.18	-67	11	19.6	19.544	0.089	-0.146	0.122	...	...
D31E-552	4	55	02.30	-67	11	02.5	19.545	0.070	-0.093	0.108	...	...
D31W-467	4	54	56.79	-67	11	37.4	19.546	0.146	0.011	0.236	-0.875	0.342
D31W-474	4	54	38.14	-67	10	32.5	19.548	0.093	-0.255	0.155	...	...
D31E-547	4	55	26.90	-67	11	26.7	19.549	0.086	0.097	0.148	...	...
D31W-462	4	54	55.04	-67	13	16.9	19.550	0.095	0.352	0.157	...	...
D31W-471	4	55	07.28	-67	13	43.3	19.551	0.090	-0.097	0.133	...	...
D31W-475	4	54	37.80	-67	10	38.9	19.553	0.086	-0.148	0.130	...	...
D31W-451	4	55	08.17	-67	12	40.9	19.554	0.075	1.235	0.254	...	...
D31E-549	4	55	26.91	-67	08	59.4	19.556	0.075	0.216	0.129	...	...
D31E-535	4	55	16.40	-67	11	02.8	19.559	0.080	1.024	0.249	...	...

D31E-560	4	55	08.08	-67	10	36.2	19.561	0.071	-0.229	0.121	-0.218	0.244
D31E-556	4	55	22.53	-67	11	22.3	19.562	0.079	0.005	0.126	...	...
D31E-553	4	55	10.52	-67	11	08.1	19.564	0.301	0.327	0.415	...	...
D31E-554	4	55	29.89	-67	09	03.3	19.565	0.062	0.289	0.121	...	...
D31W-473	4	54	40.23	-67	11	18.4	19.565	0.107	0.159	0.171	...	...
D31E-555	4	55	09.42	-67	09	10.1	19.566	0.075	0.180	0.132	...	...
D31W-476	4	54	57.80	-67	10	16.6	19.567	0.079	0.038	0.147	...	...
D31W-477	4	55	01.18	-67	12	52.7	19.570	0.076	0.033	0.134	...	...
D31W-466	4	54	53.03	-67	10	43.9	19.572	0.085	0.684	0.187	...	...
D31E-544	4	55	06.11	-67	09	52.7	19.574	0.073	0.762	0.178	...	...
D31E-559	4	55	05.02	-67	11	29.7	19.576	0.071	0.235	0.126	...	...
D31W-479	4	54	57.88	-67	10	48.0	19.577	0.071	-0.034	0.131	...	...
D31E-561	4	55	04.03	-67	09	58.8	19.578	0.133	-0.096	0.194	...	...
D31W-481	4	55	11.92	-67	13	47.5	19.579	0.082	-0.196	0.141	...	...
D31E-566	4	55	08.16	-67	09	20.6	19.583	0.078	-0.264	0.123	...	...
D31E-563	4	55	30.32	-67	12	09.9	19.590	0.081	0.098	0.138	-0.878	0.237
D31W-483	4	54	45.06	-67	10	52.6	19.592	0.095	0.030	0.142	...	...
D31E-564	4	55	23.89	-67	09	02.2	19.595	0.055	0.189	0.128	...	...
D31W-488	4	54	53.89	-67	10	41.3	19.598	0.066	-0.162	0.112	...	...
D31W-490	4	55	04.58	-67	12	53.1	19.599	0.087	-0.294	0.140	...	...
D31E-569	4	55	31.47	-67	10	26.7	19.607	0.075	0.057	0.128	...	...
D31E-565	4	55	00.26	-67	11	36.7	19.609	0.071	0.403	0.135	...	...
D31E-567	4	55	18.66	-67	10	45.5	19.610	0.088	0.244	0.181	...	...
D31E-570	4	55	25.05	-67	10	16.3	19.611	0.090	0.127	0.194	...	...
D31E-575	4	55	36.59	-67	10	37.0	19.611	0.073	-0.101	0.129	...	...
D31W-487	4	54	53.05	-67	10	46.5	19.617	0.099	0.361	0.168	...	...
D31W-489	4	54	45.19	-67	10	48.2	19.617	0.080	0.221	0.165	...	...
D31E-576	4	55	30.91	-67	09	19.0	19.620	0.088	0.104	0.130	-0.533	0.384
D31E-587	4	55	38.18	-67	09	21.7	19.620	0.171	-0.561	0.204	...	...
D31E-582	4	55	04.95	-67	11	37.0	19.621	0.075	-0.211	0.115	...	...
D31W-491	4	54	45.96	-67	12	54.1	19.621	0.069	0.185	0.125	...	...
D31W-495	4	54	39.49	-67	13	09.9	19.623	0.101	0.000	0.141	-1.025	0.209
D31E-572	4	55	12.62	-67	10	45.8	19.625	0.076	0.390	0.166	...	...
D31W-498	4	54	51.34	-67	12	09.1	19.626	0.106	-0.122	0.157	...	...
D31E-573	4	55	17.46	-67	10	25.6	19.629	0.067	0.423	0.166	...	...
D31E-578	4	55	03.47	-67	10	35.8	19.631	0.073	0.124	0.126	...	...
D31W-486	4	54	52.58	-67	12	33.4	19.633	0.098	0.740	0.225	...	...
D31W-499	4	55	13.56	-67	13	27.6	19.634	0.096	0.023	0.145	...	...
D31E-580	4	55	36.73	-67	09	01.3	19.635	0.087	0.196	0.157	...	...
D31E-586	4	55	00.19	-67	12	01.8	19.636	0.077	-0.188	0.119	...	...
D31W-485	4	55	01.31	-67	13	28.0	19.640	0.120	0.963	0.283	...	...
D31W-500	4	54	38.85	-67	13	17.8	19.640	0.087	0.073	0.230	...	...
D31W-497	4	54	39.73	-67	12	37.8	19.641	0.113	0.377	0.153	...	...
D31E-584	4	55	27.16	-67	11	32.5	19.642	0.092	0.083	0.140	...	...
D31W-508	4	54	43.35	-67	12	57.6	19.642	0.086	-0.177	0.161	...	...
D31E-588	4	55	26.70	-67	10	21.6	19.646	0.065	0.028	0.126	...	...
D31E-585	4	55	20.27	-67	09	33.8	19.647	0.091	0.190	0.140	...	...
D31E-589	4	55	23.19	-67	11	32.1	19.648	0.081	0.033	0.153	...	...
D31W-509	4	55	04.16	-67	12	41.7	19.649	0.094	-0.041	0.145	...	...
D31W-502	4	54	51.30	-67	12	29.5	19.656	0.087	0.356	0.200	...	...
D31W-496	4	54	43.23	-67	13	38.7	19.659	0.104	0.830	0.223	...	...
D31W-510	4	55	14.34	-67	13	36.6	19.665	0.094	0.229	0.183	...	...
D31E-594	4	55	31.24	-67	08	41.6	19.667	0.083	0.088	0.148	...	...
D31E-595	4	55	07.96	-67	10	00.5	19.667	0.095	0.006	0.146	...	...
D31E-601	4	55	12.97	-67	11	17.0	19.670	0.085	-0.290	0.131	...	...
D31E-596	4	55	34.93	-67	11	50.0	19.671	0.076	0.070	0.145	...	...
D31W-514	4	54	44.01	-67	12	52.1	19.673	0.072	0.125	0.134	...	...
D31E-602	4	54	59.60	-67	10	54.0	19.674	0.075	-0.293	0.109	...	...
D31W-501	4	54	51.70	-67	11	02.4	19.674	0.108	0.762	0.218	...	...
D31E-593	4	55	06.76	-67	09	08.9	19.675	0.069	0.429	0.153	...	...
D31W-511	4	54	45.40	-67	12	30.4	19.678	0.080	0.355	0.137	...	...
D31E-600	4	55	28.07	-67	09	28.2	19.679	0.093	-0.075	0.140	...	...
D31W-523	4	54	58.97	-67	10	37.9	19.680	0.106	-0.080	0.143	...	...
D31E-607	4	55	08.43	-67	09	44.1	19.681	0.096	-0.374	0.132	...	...
D31W-517	4	55	09.44	-67	12	39.9	19.682	0.082	0.054	0.132	...	...
D31E-597	4	55	07.55	-67	09	42.2	19.686	0.080	0.286	0.161	...	...

D31E-598	4	55	28.37	-67	09	26.0	19.686	0.078	0.205	0.150	...	...
D31W-521	4	54	59.67	-67	13	15.4	19.692	0.104	0.226	0.170	...	...
D31E-603	4	55	35.33	-67	09	09.0	19.694	0.085	0.123	0.145	...	...
D31E-605	4	55	25.04	-67	10	01.1	19.695	0.094	0.085	0.171	...	...
D31E-599	4	55	34.33	-67	08	59.2	19.698	0.076	0.450	0.162	...	...
D31E-609	4	55	29.10	-67	11	28.7	19.699	0.085	-0.053	0.129	...	...
D31W-516	4	55	03.07	-67	12	33.6	19.700	0.112	0.625	0.184	...	...
D31E-615	4	55	07.67	-67	11	01.2	19.707	0.082	-0.186	0.136	...	...
D31E-614	4	55	21.28	-67	08	54.0	19.708	0.066	-0.113	0.107	...	...
D31W-528	4	55	12.03	-67	12	46.2	19.709	0.096	0.322	0.166	...	...
D31E-612	4	55	13.94	-67	08	51.8	19.712	0.083	0.054	0.144	...	...
D31W-534	4	54	46.43	-67	10	38.5	19.718	0.087	0.065	0.134	...	...
D31E-611	4	55	27.29	-67	09	20.5	19.720	0.093	0.269	0.158	...	...
D31W-526	4	55	06.04	-67	13	40.9	19.720	0.069	0.622	0.234	...	...
D31W-507	4	54	41.64	-67	11	41.9	19.728	0.095	1.863	0.627	...	...
D31W-531	4	54	51.58	-67	12	31.5	19.729	0.091	0.506	0.209	...	...
D31E-617	4	55	16.49	-67	08	50.3	19.733	0.070	0.148	0.152	...	...
D31W-537	4	55	11.08	-67	12	54.1	19.733	0.128	0.234	0.200	...	...
D31W-543	4	54	41.70	-67	13	010.0	19.740	0.098	0.147	0.167	...	...
D31W-544	4	55	04.75	-67	13	19.4	19.740	0.079	0.066	0.128	...	...
D31E-625	4	55	24.90	-67	11	53.7	19.750	0.101	-0.210	0.152	...	...
D31E-624	4	55	22.33	-67	09	22.5	19.755	0.094	-0.082	0.141	...	...
D31E-623	4	55	15.81	-67	10	01.6	19.756	0.083	-0.032	0.179	...	...
D31W-546	4	54	54.71	-67	13	35.6	19.759	0.088	0.442	0.165	...	...
D31W-548	4	54	42.69	-67	12	16.2	19.761	0.091	0.263	0.165	...	...
D31W-549	4	54	54.51	-67	13	57.5	19.762	0.091	0.256	0.193	...	...
D31W-535	4	54	38.93	-67	13	51.4	19.766	0.116	1.158	0.327	...	...
D31E-627	4	55	12.95	-67	11	22.6	19.780	0.077	0.206	0.152	...	...
D31W-555	4	54	44.61	-67	10	15.5	19.780	0.121	-0.135	0.182	...	...
D31E-631	4	55	08.49	-67	08	35.4	19.782	0.088	0.012	0.133	...	...
D31W-551	4	54	57.13	-67	11	43.2	19.783	0.086	0.375	0.183	...	...
D31W-553	4	54	56.63	-67	10	59.0	19.787	0.105	0.300	0.229	...	...
D31W-558	4	54	50.58	-67	12	16.0	19.789	0.116	0.000	0.176	...	...
D31W-561	4	54	59.56	-67	13	49.8	19.789	0.106	-0.121	0.177	...	...
D31W-554	4	54	44.99	-67	11	14.2	19.793	0.094	0.309	0.215	...	...
D31W-559	4	55	07.29	-67	13	09.0	19.795	0.098	0.041	0.180	...	...
D31E-635	4	55	04.61	-67	11	58.5	19.797	0.082	0.077	0.160	...	...
D31E-639	4	55	29.74	-67	08	29.3	19.801	0.095	0.057	0.149	...	...
D31E-634	4	55	27.20	-67	09	22.0	19.805	0.082	0.264	0.185	...	...
D31E-642	4	55	33.85	-67	08	49.1	19.805	0.103	0.013	0.163	...	...
D31W-568	4	54	50.76	-67	12	58.7	19.806	0.139	-0.083	0.202	...	...
D31W-574	4	54	39.05	-67	10	26.2	19.808	0.103	-0.289	0.163	...	...
D31W-562	4	54	37.87	-67	12	59.1	19.810	0.120	0.145	0.228	...	...
D31W-571	4	54	38.07	-67	10	20.3	19.812	0.091	-0.060	0.146	...	...
D31E-640	4	55	18.08	-67	09	56.8	19.817	0.092	0.388	0.211	...	...
D31E-644	4	55	21.84	-67	10	60.0	19.819	0.097	0.202	0.164	...	...
D31W-580	4	54	41.58	-67	12	09.2	19.819	0.068	-0.309	0.118	...	...
D31W-584	4	54	39.18	-67	13	02.3	19.821	0.126	-0.590	0.159	...	...
D31E-647	4	55	14.58	-67	10	46.7	19.824	0.079	0.057	0.153	...	...
D31W-576	4	54	38.55	-67	13	14.7	19.825	0.126	0.055	0.189	...	...
D31W-578	4	54	51.21	-67	13	42.7	19.826	0.115	-0.043	0.169	...	...
D31W-575	4	54	40.89	-67	12	49.0	19.829	0.076	0.162	0.145	...	...
D31W-579	4	54	56.43	-67	13	50.4	19.830	0.076	-0.030	0.121	...	...
D31E-649	4	55	26.45	-67	09	33.4	19.835	0.083	0.123	0.154	...	...
D31E-648	4	55	15.28	-67	08	31.9	19.842	0.099	0.360	0.185	...	...
D31E-657	4	55	10.30	-67	11	12.5	19.844	0.085	-0.172	0.139	...	...
D31W-581	4	54	53.86	-67	10	48.2	19.846	0.102	0.248	0.187	...	...
D31E-653	4	55	24.80	-67	09	35.6	19.848	0.093	0.091	0.171	...	...
D31W-583	4	54	56.62	-67	12	48.5	19.851	0.104	0.151	0.158	...	...
D31W-587	4	55	01.16	-67	12	35.0	19.854	0.100	-0.059	0.192	...	...
D31E-656	4	55	26.91	-67	09	18.2	19.856	0.068	0.155	0.143	...	...
D31W-589	4	54	38.90	-67	12	16.6	19.857	0.117	-0.083	0.181	...	...
D31W-591	4	54	43.19	-67	10	48.4	19.862	0.119	-0.060	0.185	...	...
D31E-659	4	55	05.72	-67	12	04.5	19.863	0.066	0.064	0.149	...	...
D31W-590	4	54	57.50	-67	13	46.1	19.863	0.081	-0.015	0.155	...	...
D31W-596	4	54	54.59	-67	11	05.6	19.871	0.107	-0.072	0.166	...	...

D31E-661	4	55	36.99	-67	11	46.3	19.874	0.077	-0.058	0.131	...	...
D31W-594	4	54	54.94	-67	12	31.0	19.877	0.107	0.160	0.182	...	...
D31W-586	4	54	38.69	-67	13	23.4	19.881	0.087	0.755	0.245	...	...
D31E-662	4	55	07.18	-67	08	59.1	19.885	0.078	0.118	0.158	...	...
D31E-668	4	55	14.28	-67	10	43.7	19.885	0.109	-0.204	0.163	...	...
D31W-593	4	54	46.37	-67	13	22.0	19.887	0.116	0.427	0.180	...	...
D31E-665	4	55	22.24	-67	09	43.8	19.896	0.101	0.188	0.176	...	...
D31W-600	4	55	01.19	-67	13	47.0	19.897	0.104	0.002	0.168	...	...
D31W-597	4	54	44.68	-67	11	12.6	19.902	0.103	0.603	0.254	...	...
D31W-608	4	54	42.32	-67	10	26.1	19.903	0.128	-0.278	0.183	...	...
D31W-611	4	55	07.85	-67	13	24.7	19.915	0.099	-0.111	0.166	...	...
D31E-675	4	55	05.76	-67	10	16.4	19.917	0.107	0.003	0.171	...	...
D31W-615	4	54	54.46	-67	10	35.6	19.918	0.113	-0.132	0.169	...	...
D31E-674	4	55	24.32	-67	11	45.4	19.924	0.086	0.159	0.172	...	...
D31E-664	4	55	15.48	-67	09	52.9	19.925	0.118	0.942	0.373	...	...
D31W-618	4	54	48.63	-67	12	58.1	19.928	0.104	-0.029	0.153	...	...
D31E-678	4	55	16.08	-67	09	58.4	19.929	0.115	-0.278	0.228	...	...
D31E-672	4	55	02.10	-67	09	55.1	19.931	0.110	0.479	0.194	...	...
D31W-626	4	54	45.83	-67	12	16.0	19.941	0.121	-0.320	0.177	...	...
D31W-622	4	55	00.59	-67	13	20.7	19.943	0.096	0.145	0.161	...	...
D31W-612	4	54	45.06	-67	11	37.5	19.949	0.155	0.634	0.289	...	...
D31W-623	4	54	41.22	-67	13	45.5	19.949	0.129	0.137	0.200	...	...
D31W-630	4	55	09.31	-67	13	38.6	19.951	0.092	-0.341	0.146	...	...
D31E-681	4	55	33.10	-67	09	00.3	19.959	0.124	0.219	0.200	...	...
D31W-628	4	54	47.33	-67	13	48.7	19.963	0.106	0.030	0.161	...	...
D31E-684	4	55	08.36	-67	11	27.6	19.964	0.139	0.154	0.249	...	...
D31E-688	4	55	05.37	-67	09	58.0	19.968	0.095	-0.301	0.153	...	...
D31E-692	4	55	09.98	-67	09	54.3	19.977	0.129	-0.634	0.188	...	...
D31E-686	4	55	10.14	-67	11	46.8	19.985	0.121	0.222	0.238	...	...
D31W-631	4	54	45.79	-67	12	20.0	19.986	0.101	0.443	0.241	...	...
D31W-632	4	54	41.27	-67	10	55.7	19.987	0.089	0.317	0.233	...	...
D31E-687	4	55	02.41	-67	09	03.3	19.988	0.091	0.260	0.155	...	...
D31W-638	4	54	52.80	-67	13	15.8	19.989	0.130	-0.436	0.190	...	...
D31E-693	4	55	27.79	-67	11	37.5	20.010	0.114	0.133	0.194	...	...
D31E-694	4	55	25.37	-67	09	26.9	20.011	0.121	0.005	0.267	...	...
D31E-695	4	55	18.05	-67	10	42.0	20.018	0.119	-0.011	0.194	...	...
D31E-702	4	55	08.96	-67	10	30.9	20.020	0.133	-0.417	0.199	...	...
D31W-644	4	54	56.05	-67	11	36.3	20.025	0.140	-0.027	0.214	...	...
D31E-697	4	55	22.09	-67	10	58.4	20.031	0.107	0.094	0.176	...	...
D31W-646	4	54	48.36	-67	11	00.4	20.034	0.109	0.038	0.230	...	...
D31E-701	4	55	03.68	-67	11	42.5	20.040	0.106	0.080	0.207	...	...
D31E-698	4	55	25.40	-67	09	17.1	20.041	0.143	0.261	0.265	...	...
D31E-699	4	55	21.81	-67	11	46.5	20.041	0.113	0.224	0.217	...	...
D31W-650	4	55	14.42	-67	12	55.1	20.043	0.107	0.073	0.204	...	...
D31E-700	4	55	04.11	-67	08	58.7	20.053	0.098	0.389	0.209	-0.839	0.505
D31E-704	4	55	25.90	-67	09	13.4	20.054	0.107	0.064	0.210	...	...
D31W-647	4	55	10.36	-67	13	06.4	20.058	0.111	0.614	0.247	...	...
D31W-651	4	54	53.31	-67	13	23.6	20.063	0.103	0.298	0.212	...	...
D31W-655	4	54	51.43	-67	13	23.6	20.065	0.142	-0.107	0.232	...	...
D31E-707	4	55	20.02	-67	11	26.9	20.067	0.150	0.155	0.236	...	...
D31W-659	4	54	46.60	-67	13	43.3	20.072	0.109	-0.171	0.181	...	...
D31E-712	4	55	25.32	-67	11	27.5	20.074	0.115	-0.169	0.159	...	...
D31E-716	4	55	13.40	-67	11	37.3	20.074	0.121	-0.646	0.210	...	...
D31W-656	4	55	09.43	-67	13	13.4	20.075	0.097	0.118	0.195	...	...
D31E-706	4	55	01.64	-67	10	35.1	20.078	0.114	0.449	0.214	...	...
D31E-703	4	55	06.70	-67	08	49.9	20.082	0.141	0.936	0.359	...	...
D31E-713	4	55	36.82	-67	08	38.4	20.096	0.132	0.256	0.249	...	...
D31E-718	4	55	31.34	-67	10	55.2	20.096	0.107	-0.265	0.160	...	...
D31E-714	4	55	33.59	-67	08	34.5	20.103	0.111	0.273	0.249	...	...
D31W-663	4	55	11.11	-67	13	26.3	20.107	0.150	0.010	0.249	...	...
D31W-671	4	54	54.40	-67	12	50.1	20.121	0.120	-0.167	0.189	...	...
D31E-717	4	55	29.50	-67	08	35.8	20.122	0.121	0.392	0.284	...	...
D31E-719	4	55	16.69	-67	11	13.5	20.122	0.133	0.048	0.210	...	...
D31W-674	4	54	48.01	-67	10	23.4	20.122	0.322	-0.478	0.383	...	...
D31E-726	4	55	15.72	-67	10	15.8	20.133	0.159	-0.609	0.205	...	...
D31W-667	4	55	11.57	-67	12	31.1	20.136	0.122	0.414	0.235	...	...

D31W-675	4	55	02.81	-67	12	31.9	20.141	0.154	-0.089	0.212	...	...
D31W-676	4	55	04.92	-67	12	14.4	20.146	0.109	-0.266	0.169	...	...
D31E-725	4	55	24.51	-67	09	22.4	20.151	0.129	0.022	0.204	...	...
D31W-680	4	55	04.65	-67	12	43.8	20.151	0.176	-0.343	0.233	...	...
D31E-724	4	55	36.55	-67	11	16.6	20.158	0.114	0.280	0.219	...	...
D31W-678	4	54	51.53	-67	11	35.5	20.175	0.155	0.373	0.257	...	...
D31E-733	4	55	16.58	-67	09	40.6	20.188	0.132	-0.160	0.202	...	...
D31W-684	4	55	13.32	-67	13	18.1	20.190	0.119	0.194	0.201	...	...
D31E-731	4	55	03.20	-67	09	48.7	20.198	0.121	0.540	0.244	...	...
D31W-686	4	55	02.08	-67	13	13.5	20.200	0.149	0.226	0.276	...	...
D31E-734	4	55	15.12	-67	08	35.5	20.203	0.153	0.106	0.267	...	...
D31E-735	4	55	23.94	-67	11	10.2	20.204	0.140	0.036	0.226	...	...
D31W-688	4	54	50.04	-67	13	29.0	20.204	0.131	0.218	0.250	...	...
D31W-689	4	54	49.86	-67	13	31.4	20.209	0.120	0.192	0.246	...	...
D31W-691	4	54	51.39	-67	11	12.6	20.210	0.151	-0.003	0.245	...	...
D31W-695	4	54	49.05	-67	13	46.0	20.236	0.133	0.319	0.298	...	...
D31W-715	4	54	51.56	-67	12	00.9	20.292	0.120	0.004	0.216	...	...
D31W-719	4	55	14.13	-67	13	19.1	20.307	0.188	-0.161	0.270	...	...
D31W-723	4	54	59.47	-67	12	57.0	20.314	0.129	-0.208	0.218	...	...
D31E-742	4	55	13.11	-67	11	51.3	20.317	0.143	-0.304	0.225	...	...
D31E-740	4	55	18.80	-67	10	30.4	20.318	0.145	0.180	0.268	...	...
D31E-741	4	55	02.72	-67	09	57.4	20.321	0.133	0.210	0.314	...	...
D31W-725	4	54	44.48	-67	12	01.8	20.332	0.133	0.086	0.223	...	...
D31W-730	4	54	43.01	-67	12	17.4	20.336	0.171	-0.154	0.253	...	...
D31W-728	4	54	45.99	-67	13	02.4	20.339	0.185	-0.044	0.303	...	...
D31W-731	4	54	46.75	-67	10	19.3	20.343	0.165	-0.029	0.272	...	...
D31W-743	4	54	57.19	-67	11	01.7	20.368	0.118	-0.727	0.170	...	...
D31W-739	4	54	45.94	-67	11	17.8	20.376	0.138	-0.011	0.316	...	...
D31W-746	4	54	54.56	-67	13	30.1	20.407	0.148	-0.247	0.274	...	...
D31W-748	4	54	38.28	-67	13	53.0	20.420	0.166	-0.061	0.269	...	...
D31E-750	4	55	11.85	-67	11	53.8	20.421	0.164	0.008	0.320	...	...
D31W-750	4	55	02.96	-67	13	45.1	20.431	0.200	-0.222	0.268	...	...
D31W-753	4	54	51.24	-67	12	37.8	20.442	0.201	-0.160	0.295	...	...
D31W-754	4	54	50.57	-67	12	33.6	20.462	0.216	0.181	0.345	...	...
D31E-753	4	55	05.72	-67	10	22.7	20.465	0.169	0.277	0.325	...	...
D31W-760	4	54	43.97	-67	12	00.6	20.488	0.191	-0.268	0.279	...	...
D31W-759	4	55	14.27	-67	13	20.8	20.496	0.207	0.202	0.336	...	...
D31E-755	4	55	28.26	-67	10	17.4	20.501	0.160	0.247	0.333	...	...
D31W-769	4	54	38.67	-67	13	09.0	20.578	0.207	0.195	0.375	...	...
D31E-764	4	55	09.08	-67	10	34.8	20.585	0.234	-0.629	0.324	...	...
D31E-767	4	55	15.60	-67	09	29.7	20.625	0.199	-0.483	0.274	...	...
D31W-786	4	55	13.01	-67	12	42.3	20.655	0.198	-0.140	0.302	...	...
D31W-791	4	55	13.32	-67	13	23.4	20.683	0.210	-0.350	0.282	...	...
D31E-773	4	55	13.19	-67	11	43.2	20.727	0.220	-0.532	0.312	...	...
D31W-796	4	54	58.62	-67	12	27.9	20.763	0.284	-0.043	0.397	...	...

Table 4c

D50SW-1	4	59	23.19	-70	11	45.2	11.741	0.006	0.222	0.009	-0.929	0.009
D50NW-1	4	59	26.49	-70	08	38.0	12.103	0.004	0.052	0.009	-0.804	0.009
D50SE-1	5	00	10.33	-70	11	09.8	13.026	0.001	-0.188	0.001	-1.019	0.001
D50S-3	4	59	45.73	-70	11	02.7	13.786	0.004	-0.182	0.006	-0.957	0.008
D50SW-2	4	59	24.39	-70	11	48.0	13.827	0.015	-0.056	0.077	-1.102	0.102
D50SE-2	5	00	07.85	-70	11	05.0	13.913	0.004	0.541	0.006	0.003	0.011
D50SE-3	5	00	28.71	-70	13	52.5	13.971	0.004	1.587	0.009	2.460	0.350
D50NE-1b	4	59	54.73	-70	08	07.4	13.993	...	-0.025	...	-1.028	...
D50SW-3	4	59	19.36	-70	11	26.8	14.003	0.002	-0.190	0.003	-1.084	0.004
D50SE-4	5	00	03.75	-70	14	05.7	14.183	0.003	-0.050	0.005	-0.529	0.007
D50S-5	4	59	48.47	-70	12	20.3	14.201	0.002	-0.035	0.006	-0.438	0.008
D50NW-3	4	59	11.41	-70	08	19.0	14.280	0.003	0.746	0.005	0.176	0.013
D50NE-2	5	00	17.65	-70	10	08.7	14.341	0.003	0.565	0.005	-0.022	0.013
D50S-7	4	59	45.44	-70	13	52.3	14.406	0.006	1.554	0.013	2.176	0.261
D50NE-1a	4	59	54.73	-70	08	07.4	14.493	...	-0.025	...	-1.028	...
D50S-8	5	00	11.07	-70	14	31.3	14.862	0.004	-0.189	0.007	-0.821	0.010
D50SW-5	4	59	31.13	-70	12	01.7	14.876	0.004	-0.203	0.007	-0.987	0.008
D50NE-4	4	59	57.96	-70	10	09.7	15.027	0.003	-0.054	0.004	-0.793	0.010
D50SW-6	4	59	32.92	-70	11	33.2	15.116	0.004	-0.177	0.008	-1.024	0.011
D50SE-5	5	00	30.66	-70	13	57.0	15.143	0.004	-0.146	0.008	-0.700	0.012
D50SW-7	4	59	38.83	-70	12	24.2	15.151	0.004	0.638	0.010	0.042	0.023
D50NE-5	4	59	51.06	-70	08	19.9	15.152	0.004	-0.119	0.007	-0.954	0.010
D50NW-5	4	59	45.30	-70	10	35.5	15.166	0.021	-0.143	0.025	-0.945	0.011
D50S-12	4	59	44.24	-70	11	48.1	15.208	0.004	-0.155	0.008	-0.875	0.012
D50NE-6	4	59	51.10	-70	09	26.6	15.297	0.005	-0.141	0.007	-0.812	0.011
D50NW-6	4	59	45.90	-70	09	39.8	15.375	0.004	0.676	0.009	-0.087	0.021
D50SW-8	4	59	33.25	-70	11	55.6	15.439	0.004	-0.186	0.007	-0.954	0.012
D50NW-7	4	59	05.74	-70	09	51.1	15.453	0.005	0.501	0.009	0.210	0.022
D50NE-7	4	59	48.60	-70	10	27.9	15.471	0.004	-0.150	0.005	-0.761	0.014
D50NW-9	4	59	35.14	-70	07	00.0	15.481	0.006	-0.108	0.013	-0.916	0.022
D50NW-8	4	59	07.71	-70	09	59.3	15.540	0.006	1.280	0.017	1.616	0.168
D50NW-11	4	59	06.27	-70	10	07.4	15.558	0.011	0.377	0.026	0.172	0.098
D50NE-8	5	00	19.20	-70	08	41.0	15.575	0.009	-0.114	0.023	-0.816	0.027
D50NW-12	4	59	14.61	-70	09	27.2	15.607	0.006	0.339	0.011	0.171	0.024
D50NE-9	5	00	16.41	-70	09	11.3	15.610	0.005	-0.159	0.008	-0.807	0.013
D50SE-7	5	00	42.63	-70	12	59.9	15.629	0.005	-0.148	0.008	-0.918	0.014
D50NW-13	4	59	07.83	-70	10	07.8	15.674	0.006	0.349	0.011	0.230	0.028
D50NW-14	4	59	37.26	-70	09	10.1	15.685	0.019	-0.158	0.028	-1.008	0.034
D50NW-15	4	59	33.73	-70	09	41.8	15.708	0.004	-0.183	0.010	-1.022	0.022
D50NE-10	4	59	57.07	-70	09	39.0	15.787	0.006	-0.084	0.008	-0.890	0.014
D50NW-16	4	59	44.82	-70	09	50.1	15.797	0.017	-0.180	0.029	-1.001	0.028
D50NE-11	5	00	24.04	-70	08	54.5	15.909	0.006	-0.044	0.009	-0.916	0.016
D50SE-8	5	00	21.80	-70	12	55.7	15.914	0.017	1.634	0.027	1.469	0.203
D50S-15	4	59	41.63	-70	11	52.1	15.982	0.006	-0.143	0.012	-0.873	0.017
D50S-14	4	59	58.74	-70	13	14.0	15.991	0.008	0.702	0.015	0.233	0.044
D50NW-19	4	59	37.42	-70	09	17.7	15.993	0.011	-0.062	0.028	-0.948	0.035
D50NW-17	4	59	09.67	-70	10	13.0	16.012	0.006	0.926	0.014	0.598	0.065
D50NW-18	4	59	42.89	-70	08	02.9	16.016	0.006	1.011	0.013	0.827	0.083
D50NE-13	5	00	31.35	-70	10	40.0	16.028	0.005	-0.104	0.009	-0.773	0.027
D50S-16	4	59	50.39	-70	14	05.8	16.040	0.007	-0.159	0.011	-0.785	0.017
D50NE-14	5	00	25.84	-70	10	52.3	16.045	0.007	-0.116	0.011	-0.601	0.020
D50NW-20	4	59	05.81	-70	10	42.2	16.052	0.006	1.236	0.021	0.910	0.121
D50NW-22	4	59	38.56	-70	10	09.5	16.073	0.006	-0.105	0.011	-0.900	0.015
D50NE-12	5	00	11.65	-70	09	08.7	16.086	0.007	1.647	0.019	...	...
D50NW-23	4	59	32.91	-70	09	49.1	16.087	0.006	-0.159	0.013	-0.930	0.019
D50NW-21	4	59	10.78	-70	10	13.9	16.109	0.006	0.780	0.015	0.365	0.056
D50SW-12	4	59	36.79	-70	12	32.9	16.116	0.007	-0.173	0.011	-0.988	0.016
D50SW-10	4	59	20.48	-70	13	19.9	16.128	0.006	0.939	0.016	0.718	0.094
D50NE-15	5	00	03.12	-70	09	44.4	16.169	0.019	0.507	0.025	0.078	0.035
D50SW-13	4	59	21.80	-70	11	57.3	16.172	0.007	-0.141	0.011	-0.882	0.017
D50S-20	4	59	45.04	-70	12	37.6	16.186	0.008	-0.058	0.014	-0.627	0.020
D50NW-24	4	59	10.90	-70	09	42.6	16.187	0.007	1.303	0.021	1.230	0.155
D50SW-11	4	59	35.23	-70	13	06.8	16.188	0.007	1.674	0.025	1.380	0.278
D50SE-11	5	00	12.06	-70	11	20.6	16.196	0.007	1.070	0.017	0.862	0.115

D50SW-14	4	59	26.94	-70	11	47.9	16.198	0.065	-0.008	0.158	-0.940	0.196
D50NE-16	5	00	07.53	-70	08	21.9	16.215	0.008	-0.132	0.011	-0.727	0.017
D50SE-12	5	00	07.13	-70	11	08.5	16.249	0.008	1.416	0.028	1.920	0.363
D50NE-17	5	00	07.16	-70	10	43.6	16.271	0.007	-0.099	0.011	-0.626	0.022
D50NW-26	4	59	22.82	-70	08	47.6	16.280	0.006	1.482	0.024	...	...
D50NW-30	4	59	22.77	-70	09	31.3	16.281	0.007	-0.089	0.013	-0.819	0.020
D50SE-13	5	00	44.93	-70	10	50.8	16.290	0.009	1.621	0.027	...	...
D50NW-27	4	59	10.48	-70	08	52.1	16.291	0.015	0.891	0.024	0.515	0.093
D50NW-25	4	59	07.20	-70	08	07.3	16.325	0.008	3.369	0.087	...	...
D50SW-15	4	59	00.43	-70	13	20.6	16.326	0.007	-0.075	0.013	-0.710	0.022
D50NW-29	4	59	08.34	-70	07	52.1	16.337	0.008	1.356	0.025	...	...
D50SE-16	5	00	13.67	-70	12	18.0	16.353	0.007	-0.121	0.011	-0.545	0.020
D50SW-17	4	59	20.49	-70	14	15.5	16.381	0.009	0.432	0.018	-0.550	0.036
D50SW-18	4	59	26.88	-70	11	39.3	16.384	0.010	-0.072	0.016	-1.048	0.023
D50SE-17	5	00	22.71	-70	12	11.2	16.402	0.007	0.829	0.016	0.544	0.074
D50SE-15	5	00	40.38	-70	12	26.3	16.404	0.008	1.441	0.021	...	...
D50S-23	4	59	48.33	-70	13	56.0	16.411	0.010	-0.161	0.015	-0.786	0.021
D50SW-16	4	59	24.06	-70	11	36.4	16.415	0.012	1.303	0.037	0.229	0.235
D50NW-32	4	59	22.11	-70	10	18.1	16.433	0.008	0.451	0.017	0.189	0.043
D50SE-19	5	00	28.18	-70	11	08.3	16.434	0.009	0.749	0.024	0.394	0.074
D50SW-19	4	59	23.52	-70	11	45.0	16.442	0.127	-0.023	0.212	...	...
D50NW-31	4	59	07.76	-70	10	23.5	16.445	0.011	1.148	0.029	0.988	0.224
D50SE-21	5	00	09.88	-70	11	55.5	16.460	0.007	-0.167	0.012	-0.769	0.020
D50SE-18	5	00	44.15	-70	10	57.7	16.463	0.007	1.599	0.026	...	...
D50NW-33	4	59	06.02	-70	10	07.3	16.473	0.027	1.379	0.291	0.603	0.844
D50NE-18	4	59	53.06	-70	08	13.0	16.478	0.008	1.720	0.022	...	...
D50SE-20	5	00	29.61	-70	13	47.5	16.480	0.008	1.806	0.030	...	...
D50NW-36	4	59	25.73	-70	10	41.8	16.485	0.009	-0.116	0.015	-0.874	0.025
D50NE-19	5	00	05.34	-70	08	29.3	16.489	0.010	1.790	0.035	...	...
D50NW-34	4	59	35.10	-70	09	58.2	16.504	0.007	1.632	0.029	...	...
D50NE-21	4	59	58.33	-70	08	54.4	16.518	0.008	1.378	0.021	...	...
D50NE-20	5	00	16.75	-70	07	14.7	16.528	0.009	1.783	0.035	...	...
D50SW-20	4	59	34.01	-70	11	32.7	16.533	0.014	1.682	0.035	...	...
D50NE-22	5	00	02.62	-70	07	54.4	16.541	0.009	1.149	0.023	1.461	0.241
D50NW-35	4	59	04.36	-70	08	57.2	16.546	0.007	1.658	0.026	...	...
D50S-26	4	59	52.02	-70	12	11.4	16.552	0.011	-0.131	0.017	-0.659	0.023
D50NE-26	4	59	52.20	-70	09	24.0	16.568	0.010	-0.142	0.014	-0.768	0.025
D50NE-27	4	59	55.65	-70	09	06.6	16.586	0.010	-0.101	0.015	-0.664	0.028
D50S-27	4	59	41.27	-70	12	08.0	16.587	0.010	-0.049	0.015	-0.413	0.034
D50SW-22	4	59	19.78	-70	11	11.8	16.593	0.008	1.124	0.023	1.114	0.221
D50NE-32	4	59	51.35	-70	10	48.6	16.597	0.009	-0.063	0.014	-0.667	0.022
D50NE-23	5	00	31.20	-70	10	20.9	16.603	0.009	1.243	0.025	...	...
D50SE-28	5	00	35.67	-70	13	25.1	16.608	0.008	-0.141	0.014	-0.702	0.021
D50SE-27	5	00	35.17	-70	12	49.5	16.613	0.009	0.573	0.020	0.211	0.066
D50SE-23	5	00	33.63	-70	12	45.3	16.615	0.006	1.691	0.028	...	...
D50NW-38	4	59	35.07	-70	09	20.5	16.619	0.009	-0.138	0.015	-0.903	0.020
D50NW-37	4	59	36.95	-70	10	18.4	16.623	0.009	1.238	0.032	...	...
D50S-30	4	59	52.98	-70	12	57.7	16.627	0.011	0.290	0.021	-0.489	0.037
D50NE-24	5	00	19.14	-70	07	31.3	16.628	0.008	1.632	0.032	...	...
D50S-29	4	59	58.41	-70	11	21.8	16.628	0.010	0.610	0.028	0.227	0.067
D50SE-24	5	00	18.47	-70	11	33.5	16.629	0.008	1.594	0.030	...	...
D50NE-25	5	00	12.08	-70	10	46.2	16.632	0.010	1.594	0.029	...	...
D50NE-29	5	00	07.40	-70	08	43.9	16.641	0.010	1.088	0.020	...	...
D50NE-28	5	00	10.20	-70	10	17.9	16.642	0.011	1.195	0.028	...	...
D50SE-26	5	00	20.28	-70	11	33.7	16.642	0.008	1.369	0.029	...	...
D50NE-31	5	00	25.97	-70	08	19.3	16.649	0.008	1.228	0.023	...	...
D50SW-23	4	59	27.07	-70	11	48.7	16.651	0.098	-0.165	0.210	-0.907	0.253
D50NE-30	5	00	10.82	-70	08	03.6	16.667	0.008	1.640	0.032	...	...
D50SE-32	5	00	32.06	-70	11	06.5	16.673	0.007	-0.202	0.017	-0.743	0.028
D50SE-34	5	00	26.42	-70	11	45.3	16.686	0.009	-0.189	0.015	-0.787	0.025
D50S-31	4	59	51.53	-70	13	28.9	16.695	0.010	1.137	0.033	1.272	0.228
D50SE-29	5	00	05.13	-70	12	10.3	16.695	0.009	1.305	0.033	...	...
D50NE-34	5	00	13.78	-70	09	20.9	16.712	0.010	-0.171	0.015	-0.728	0.028
D50NW-41	4	59	20.79	-70	09	09.2	16.714	0.009	0.005	0.016	-0.409	0.033
D50NW-39	4	59	05.13	-70	07	12.2	16.721	0.016	1.078	0.079	0.756	0.199
D50SE-30	5	00	03.68	-70	10	59.9	16.727	0.010	1.671	0.036	...	...

D50NW-42	4	59	07.02	-70	10	02.3	16.735	0.028	-0.036	0.036	-0.049	0.166
D50SE-31	5	00	17.97	-70	11	18.4	16.736	0.009	1.623	0.033	...	...
D50NE-33	5	00	14.58	-70	09	55.0	16.738	0.011	1.092	0.024	1.071	0.265
D50NE-35	4	59	53.18	-70	08	20.1	16.747	0.009	-0.141	0.014	-0.769	0.023
D50SE-35	5	00	17.95	-70	11	30.1	16.750	0.011	1.170	0.030	...	...
D50SE-33	5	00	24.83	-70	12	02.4	16.755	0.015	1.512	0.032	...	...
D50S-33	4	59	44.68	-70	13	10.4	16.757	0.009	1.766	0.033	...	...
D50SW-24	4	59	04.29	-70	13	05.1	16.757	0.008	1.037	0.028	0.707	0.138
D50S-38	4	59	52.81	-70	11	13.3	16.765	0.011	-0.126	0.018	-0.616	0.027
D50NE-37	4	59	50.43	-70	09	27.8	16.779	0.014	-0.026	0.025	-0.349	0.044
D50NW-40	4	59	19.59	-70	10	27.1	16.780	0.010	1.690	0.035	...	...
D50SE-39	5	00	44.26	-70	11	07.2	16.784	0.008	-0.135	0.016	-0.646	0.028
D50SW-28	4	59	05.18	-70	13	41.3	16.785	0.011	-0.073	0.018	-0.649	0.032
D50SE-36	5	00	38.15	-70	13	36.1	16.786	0.009	1.634	0.034	...	...
D50S-39	4	59	51.86	-70	12	17.6	16.792	0.011	-0.185	0.018	-0.811	0.025
D50SE-37	5	00	46.08	-70	12	14.2	16.796	0.011	1.578	0.028	...	...
D50SE-38	5	00	02.82	-70	13	32.3	16.801	0.010	1.059	0.022	0.549	0.133
D50SW-27	4	58	56.70	-70	13	32.6	16.802	0.010	1.041	0.027	0.922	0.186
D50S-37	4	59	45.27	-70	14	44.7	16.807	0.008	1.123	0.027	...	...
D50SW-25	4	59	32.58	-70	12	54.7	16.808	0.009	1.468	0.033	...	...
D50NW-43	4	59	23.59	-70	07	04.5	16.813	0.009	1.660	0.037	...	...
D50S-36	4	59	56.55	-70	13	06.1	16.816	0.011	1.639	0.041	...	...
D50NE-39	5	00	03.38	-70	07	55.7	16.818	0.009	-0.018	0.013	-0.425	0.028
D50S-41	4	59	39.77	-70	14	43.2	16.821	0.015	-0.142	0.026	-0.580	0.034
D50NE-36	5	00	21.50	-70	08	22.7	16.829	0.010	1.522	0.028	...	...
D50S-43	4	59	45.02	-70	12	34.8	16.849	0.011	-0.162	0.020	-0.746	0.029
D50NE-38	5	00	22.40	-70	10	18.9	16.858	0.011	1.700	0.034	...	...
D50SE-40	5	00	40.14	-70	11	51.3	16.858	0.009	1.120	0.027	...	...
D50NE-40	5	00	26.29	-70	09	44.0	16.859	0.008	-0.077	0.018	-0.682	0.033
D50NW-45	4	59	37.84	-70	09	14.1	16.864	0.029	-0.289	0.060	-0.684	0.082
D50NE-41	4	59	52.11	-70	08	58.8	16.873	0.010	0.017	0.016	-0.299	0.037
D50SW-26	4	59	04.53	-70	11	41.7	16.878	0.011	2.929	0.118	...	...
D50NE-42	5	00	13.76	-70	08	02.3	16.879	0.010	-0.140	0.019	-0.702	0.035
D50SE-41	5	00	43.73	-70	13	19.0	16.879	0.009	1.382	0.031	...	...
D50S-40	4	59	39.55	-70	14	04.3	16.882	0.011	1.303	0.035	...	...
D50S-44	4	59	49.27	-70	14	26.2	16.898	0.010	-0.112	0.019	-0.678	0.037
D50NE-44	4	59	51.52	-70	10	56.5	16.905	0.011	-0.164	0.017	-0.785	0.028
D50S-45	4	59	46.18	-70	11	55.7	16.916	0.010	-0.213	0.021	-0.752	0.033
D50SW-30	4	59	23.83	-70	12	05.8	16.928	0.009	0.968	0.031	0.757	0.164
D50NW-44	4	59	13.34	-70	07	19.5	16.929	0.007	1.433	0.035	...	...
D50SW-29	4	59	00.97	-70	11	20.7	16.936	0.017	1.526	0.041	...	...
D50NW-46	4	59	40.01	-70	08	41.4	16.945	0.009	0.817	0.025	0.452	0.103
D50NW-48	4	59	31.58	-70	08	30.5	16.945	0.030	0.056	0.038	-0.660	0.039
D50SE-42	5	00	35.35	-70	11	03.9	16.947	0.011	1.453	0.039	...	...
D50NE-43	5	00	24.36	-70	08	55.5	16.950	0.012	1.242	0.034	...	...
D50SW-34	4	59	24.74	-70	11	47.6	16.961	0.066	-1.397	0.456	-0.095	0.724
D50SE-43	5	00	18.06	-70	11	49.5	16.966	0.010	1.424	0.033	...	...
D50NW-49	4	59	04.90	-70	09	29.0	16.968	0.011	0.135	0.018	-0.086	0.049
D50NW-47	4	59	27.92	-70	09	44.9	16.973	0.010	1.181	0.040	...	...
D50S-46	4	59	58.72	-70	14	25.5	16.986	0.013	-0.185	0.022	-0.547	0.034
D50NE-47	4	59	50.02	-70	07	56.7	16.987	0.012	-0.033	0.016	-0.533	0.034
D50NE-45	5	00	02.99	-70	09	21.9	17.003	0.011	1.650	0.031	...	...
D50SW-32	4	59	31.21	-70	14	11.4	17.010	0.011	1.213	0.036	...	...
D50NE-46	5	00	02.19	-70	07	38.9	17.012	0.011	1.534	0.029	...	...
D50NE-51	5	00	18.09	-70	10	44.5	17.019	0.010	-0.144	0.014	-0.781	0.032
D50SW-35	4	59	28.92	-70	11	54.7	17.021	0.010	-0.099	0.022	-0.598	0.044
D50SE-45	5	00	40.57	-70	13	57.5	17.030	0.018	-0.102	0.031	-0.608	0.036
D50S-48	4	59	40.49	-70	11	34.9	17.040	0.013	-0.123	0.021	-0.879	0.030
D50NE-53	5	00	26.09	-70	07	13.1	17.042	0.056	-0.090	0.105	...	...
D50NW-50	4	59	34.79	-70	10	34.7	17.064	0.010	1.602	0.039	...	...
D50NE-49	5	00	18.78	-70	10	19.3	17.065	0.014	1.430	0.039	...	...
D50NW-51	4	59	28.54	-70	10	32.4	17.071	0.010	1.462	0.042	...	...
D50NW-53	4	59	43.28	-70	10	04.9	17.071	0.011	0.480	0.025	-0.184	0.073
D50S-50	4	59	47.95	-70	14	00.3	17.072	0.013	-0.065	0.022	-0.351	0.039
D50SW-38	4	59	30.98	-70	13	16.9	17.075	0.010	-0.036	0.019	-0.427	0.043
D50NE-55	4	59	50.67	-70	07	29.5	17.077	0.011	0.065	0.019	-0.430	0.039

D50NE-48	5	00	20.46	-70	09	10.9	17.078	0.012	1.822	0.046	...	...
D50S-47	5	00	00.59	-70	11	23.5	17.087	0.012	1.737	0.058	...	...
D50NE-50	5	00	30.69	-70	09	56.5	17.091	0.012	1.527	0.040	...	...
D50NE-52	4	59	48.68	-70	08	15.7	17.114	0.013	1.629	0.047	...	...
D50SW-37	4	59	07.18	-70	11	20.2	17.114	0.012	0.890	0.033	0.486	0.167
D50NE-56	5	00	08.56	-70	07	57.5	17.115	0.011	0.878	0.026	...	...
D50NE-54	5	00	23.93	-70	08	10.7	17.131	0.013	1.571	0.039	...	...
D50SW-36	4	59	04.72	-70	11	22.7	17.134	0.013	1.518	0.044	...	...
D50SE-46	5	00	06.58	-70	11	33.4	17.142	0.010	0.782	0.024	...	...
D50NE-59	5	00	21.08	-70	09	52.7	17.152	0.115	-0.282	0.131	...	...
D50SW-39	4	59	19.60	-70	13	28.2	17.156	0.013	1.344	0.046	...	...
D50NW-54	4	59	37.83	-70	10	17.6	17.157	0.010	1.670	0.045	...	...
D50NE-57	5	00	21.19	-70	10	13.4	17.159	0.014	1.506	0.040	...	...
D50SE-49	5	00	26.33	-70	12	02.2	17.159	0.052	-0.109	0.061	-0.546	0.038
D50SW-42	4	59	32.85	-70	10	57.8	17.159	0.017	0.024	0.028	-0.413	0.047
D50S-53	4	59	42.15	-70	13	19.4	17.169	0.012	-0.093	0.021	-0.610	0.033
D50NE-58	5	00	19.53	-70	07	26.3	17.170	0.013	1.392	0.068	...	...
D50S-52	4	59	30.02	-70	14	20.2	17.172	0.013	1.465	0.047	...	...
D50SE-47	5	00	23.21	-70	13	52.7	17.173	0.010	1.449	0.041	...	...
D50NW-57	4	59	34.74	-70	10	38.6	17.183	0.011	-0.032	0.021	-0.791	0.039
D50SW-41	4	59	11.78	-70	13	27.1	17.187	0.011	1.013	0.035	...	...
D50NW-55	4	59	03.81	-70	09	39.1	17.188	0.012	0.988	0.035	...	...
D50NE-61	5	00	23.89	-70	07	10.2	17.200	0.026	-0.328	0.257	...	...
D50S-56	4	59	45.42	-70	13	42.2	17.207	0.013	-0.063	0.030	-0.246	0.053
D50SE-48	5	00	37.83	-70	10	35.8	17.212	0.012	1.374	0.040	...	...
D50NW-61	4	59	35.45	-70	08	57.1	17.224	0.011	-0.119	0.018	-0.763	0.034
D50NW-60	4	59	16.17	-70	10	33.1	17.225	0.013	-0.042	0.025	-0.396	0.047
D50SE-51	5	00	42.23	-70	10	57.8	17.228	0.012	1.148	0.035	...	...
D50SE-50	5	00	23.45	-70	12	06.9	17.229	0.011	1.530	0.042	...	...
D50NE-60	5	00	06.43	-70	08	52.6	17.233	0.012	1.382	0.037	...	...
D50NW-58	4	59	30.45	-70	06	59.6	17.241	0.405	0.907	0.459	...	...
D50SW-48	4	59	27.04	-70	11	50.5	17.241	0.049	-0.214	0.060	-0.390	0.090
D50NW-59	4	59	43.47	-70	09	59.6	17.245	0.009	0.783	0.031	0.338	0.176
D50SW-44	4	59	09.56	-70	11	30.7	17.246	0.012	1.588	0.052	...	...
D50S-57	4	59	52.61	-70	14	26.0	17.251	0.015	-0.127	0.024	-0.637	0.039
D50SW-45	4	59	34.16	-70	11	16.2	17.255	0.012	1.303	0.050	0.320	0.227
D50SE-52	5	00	29.40	-70	13	32.9	17.259	0.015	0.104	0.071	-0.831	0.091
D50NW-63	4	59	38.17	-70	09	13.8	17.263	0.050	-0.091	0.076	-0.871	0.081
D50NE-63	4	59	49.02	-70	10	00.5	17.266	0.034	0.939	0.122	0.114	0.180
D50SW-47	4	59	06.36	-70	12	37.8	17.275	0.012	0.929	0.036	0.187	0.155
D50NE-64	5	00	21.05	-70	07	48.9	17.277	0.015	-0.127	0.023	-0.582	0.046
D50NW-65	4	59	44.14	-70	09	08.5	17.280	0.011	-0.034	0.023	-0.658	0.039
D50NE-62	5	00	07.67	-70	10	13.6	17.281	0.013	1.323	0.041	...	...
D50NW-68	4	59	39.72	-70	09	54.4	17.282	0.012	-0.082	0.030	-0.806	0.045
D50NE-66	4	59	55.31	-70	09	38.0	17.283	0.016	-0.118	0.027	-0.571	0.058
D50NW-66	4	59	18.96	-70	10	43.4	17.284	0.013	0.032	0.024	-0.200	0.069
D50NW-69	4	59	08.64	-70	07	48.1	17.287	0.012	-0.028	0.023	-0.504	0.043
D50SW-46	4	59	01.07	-70	11	26.1	17.287	0.018	1.758	0.072	...	...
D50SW-50	4	59	24.46	-70	12	01.7	17.295	0.014	-0.130	0.026	-0.643	0.043
D50SW-49	4	59	13.52	-70	13	58.0	17.305	0.014	0.910	0.039	0.430	0.178
D50NW-62	4	59	33.41	-70	09	33.2	17.309	0.012	1.306	0.040	...	...
D50SE-58	5	00	27.29	-70	14	07.3	17.310	0.014	-0.137	0.026	-0.676	0.041
D50SE-53	5	00	43.10	-70	12	25.7	17.314	0.012	1.301	0.039	...	...
D50NW-67	4	59	30.91	-70	08	13.7	17.315	0.011	0.749	0.033	0.151	0.137
D50SE-54	5	00	09.00	-70	12	25.9	17.318	0.026	1.242	0.045	...	...
D50SE-55	5	00	26.27	-70	13	27.2	17.318	0.011	0.854	0.029	0.302	0.158
D50SE-56	5	00	23.36	-70	12	44.8	17.320	0.131	0.604	0.189	...	...
D50SE-61	5	00	39.05	-70	12	25.7	17.322	0.022	-0.162	0.031	-0.400	0.046
D50NW-72	4	59	40.30	-70	10	20.9	17.326	0.013	-0.087	0.022	-0.608	0.043
D50NE-65	4	59	50.24	-70	09	26.8	17.343	0.019	1.362	0.061	...	...
D50NW-70	4	59	42.73	-70	09	00.4	17.344	0.012	0.880	0.039	0.372	0.173
D50NW-64	4	59	34.66	-70	09	43.1	17.346	0.009	1.621	0.053	...	...
D50NW-73	4	59	12.10	-70	08	15.6	17.350	0.008	-0.078	0.015	-0.583	0.045
D50S-59	4	59	53.45	-70	12	55.5	17.352	0.016	1.188	0.048	...	...
D50SW-52	4	59	36.95	-70	11	36.2	17.357	0.015	-0.039	0.026	-0.759	0.040
D50SE-57	5	00	43.30	-70	11	30.2	17.364	0.011	1.335	0.048	...	...

D50NE-70	5	00	16.33	-70	08	18.2	17.367	0.017	-0.113	0.023	-0.737	0.035
D50NW-75	4	59	07.89	-70	09	21.5	17.367	0.014	-0.056	0.025	-0.502	0.052
D50NE-67	5	00	22.73	-70	07	39.6	17.371	0.013	1.284	0.038	...	...
D50NE-71	5	00	25.34	-70	07	33.2	17.371	0.017	-0.134	0.024	-0.641	0.043
D50NE-68	5	00	17.85	-70	10	18.7	17.372	0.013	1.025	0.042	...	...
D50SW-53	4	58	58.73	-70	10	32.9	17.372	0.015	0.038	0.029	-0.388	0.049
D50SE-62	5	00	06.65	-70	14	17.8	17.376	0.026	1.054	0.047	...	...
D50SE-59	5	00	07.82	-70	12	02.0	17.383	0.012	1.476	0.046	...	...
D50S-60	4	59	41.59	-70	13	04.0	17.385	0.016	1.375	0.068	...	...
D50NE-69	5	00	13.14	-70	09	13.7	17.391	0.014	0.693	0.031	0.161	0.155
D50SE-60	5	00	29.45	-70	11	08.7	17.391	0.014	1.488	0.052	...	...
D50NW-71	4	59	05.18	-70	08	18.2	17.392	0.012	1.638	0.050	...	...
D50SW-55	4	58	55.52	-70	11	04.2	17.393	0.013	-0.024	0.028	-0.406	0.055
D50SE-63	5	00	28.97	-70	12	40.0	17.400	0.020	1.160	0.047	...	...
D50NW-74	4	59	34.50	-70	06	58.2	17.413	0.044	1.289	0.626	...	...
D50NE-72	5	00	16.25	-70	09	37.7	17.416	0.012	0.686	0.027	0.122	0.105
D50SE-65	5	00	26.84	-70	12	40.1	17.421	0.018	1.269	0.050	...	...
D50S-66	4	59	55.53	-70	12	57.1	17.422	0.015	-0.086	0.026	-0.293	0.054
D50NW-78	4	59	08.11	-70	09	59.5	17.431	0.025	-0.006	0.039	-0.479	0.062
D50S-69	4	59	42.78	-70	13	41.4	17.433	0.014	-0.099	0.024	-0.693	0.035
D50NW-79	4	59	05.14	-70	10	21.0	17.434	0.014	-0.006	0.024	-0.368	0.067
D50SE-66	5	00	38.18	-70	10	48.7	17.434	0.012	0.653	0.028	0.359	0.122
D50NW-76	4	59	16.34	-70	07	49.3	17.438	0.011	1.423	0.049	...	...
D50NW-81	4	59	04.69	-70	10	11.4	17.444	0.017	0.029	0.028	-0.109	0.074
D50NW-82	4	59	42.28	-70	07	01.3	17.444	0.020	-0.098	0.030	-0.898	0.052
D50NW-83	4	59	04.70	-70	08	39.1	17.445	0.013	-0.100	0.023	-0.804	0.043
D50NW-77	4	59	06.77	-70	08	06.7	17.447	0.014	1.459	0.057	...	...
D50NE-73	4	59	48.44	-70	08	09.0	17.450	0.017	1.443	0.048	...	...
D50SW-58	4	59	20.28	-70	13	30.7	17.450	0.014	-0.060	0.029	-0.615	0.054
D50S-65	4	59	52.61	-70	12	54.9	17.452	0.013	0.929	0.042	...	...
D50SW-54	4	59	23.40	-70	14	00.8	17.456	0.015	1.740	0.071	...	...
D50NW-93	4	59	37.05	-70	09	09.0	17.457	0.031	-0.851	0.078	-0.737	0.097
D50NW-86	4	59	26.14	-70	09	25.3	17.464	0.011	-0.001	0.027	-0.414	0.058
D50S-67	4	59	59.78	-70	13	32.7	17.466	0.017	0.836	0.045	...	...
D50NE-74	5	00	08.18	-70	07	18.8	17.468	0.015	1.277	0.048	...	...
D50S-64	4	59	53.09	-70	13	21.6	17.470	0.026	1.546	0.337	-0.984	0.426
D50SW-57	4	59	35.38	-70	13	56.0	17.471	0.019	0.715	0.038	...	...
D50NE-79	5	00	26.68	-70	09	58.3	17.476	0.016	-0.034	0.026	-0.313	0.052
D50NW-90	4	59	05.51	-70	10	01.2	17.482	0.012	-0.068	0.026	-0.200	0.078
D50S-70	5	00	09.15	-70	14	43.7	17.485	0.015	0.867	0.040	...	...
D50NE-76	5	00	17.25	-70	09	08.9	17.487	0.015	0.714	0.035	0.331	0.154
D50NW-91	4	59	22.90	-70	09	15.2	17.487	0.012	0.045	0.028	-0.583	0.059
D50NE-82	4	59	53.82	-70	09	32.9	17.491	0.011	0.016	0.023	-0.420	0.054
D50NE-75	4	59	48.22	-70	07	56.8	17.492	0.019	1.447	0.054	...	...
D50S-68	4	59	53.02	-70	12	26.1	17.492	0.017	1.410	0.060	...	...
D50NE-81	4	59	51.53	-70	09	28.5	17.495	0.015	0.248	0.028	0.283	0.110
D50SW-59	4	59	14.58	-70	13	31.3	17.502	0.012	0.041	0.028	-0.225	0.068
D50SW-60	4	59	25.65	-70	11	35.5	17.503	0.019	0.049	0.035	-0.050	0.136
D50SE-68	5	00	38.08	-70	10	53.7	17.506	0.016	0.777	0.038	0.848	0.280
D50NE-78	5	00	03.83	-70	09	57.1	17.507	0.018	0.941	0.046	...	...
D50SW-56	4	59	24.13	-70	13	54.4	17.507	0.016	1.664	0.070	...	...
D50NE-77	5	00	28.68	-70	10	17.2	17.510	0.020	1.136	0.057	...	...
D50S-74	4	59	53.01	-70	11	59.9	17.516	0.020	-0.099	0.032	-0.659	0.044
D50NW-84	4	59	45.11	-70	07	23.1	17.520	0.013	1.542	0.068	...	...
D50SW-61	4	59	27.08	-70	12	01.8	17.520	0.021	0.124	0.061	-0.742	0.088
D50S-76	4	59	56.90	-70	14	16.6	17.525	0.023	-0.199	0.037	-0.694	0.051
D50NW-89	4	59	30.65	-70	07	12.9	17.526	0.013	1.067	0.045	...	...
D50NW-85	4	59	37.13	-70	07	01.6	17.529	0.012	1.559	0.049	...	...
D50S-72	4	59	50.86	-70	13	32.4	17.535	0.016	1.136	0.048	...	...
D50NE-80	5	00	27.46	-70	07	36.3	17.539	0.015	1.409	0.047	...	...
D50SE-69	5	00	46.34	-70	11	46.3	17.539	0.015	-0.056	0.028	...	...
D50NW-92	4	59	21.36	-70	08	03.0	17.540	0.012	1.087	0.042	...	...
D50NW-88	4	59	12.27	-70	07	31.4	17.543	0.013	1.689	0.061	...	...
D50NE-87	4	59	57.40	-70	09	50.1	17.545	0.015	-0.144	0.024	-0.714	0.042
D50NW-96	4	59	25.32	-70	10	41.8	17.554	0.017	0.008	0.033	-0.680	0.059
D50NW-94	4	59	29.91	-70	09	23.7	17.555	0.013	1.132	0.044	...	...

D50SW-64	4	58	57.13	-70	10	51.0	17.555	0.015	-0.077	0.028	-0.712	0.049
D50SW-63	4	59	32.05	-70	12	21.5	17.556	0.016	-0.044	0.028	-0.679	0.047
D50NE-83	5	00	21.17	-70	10	47.0	17.569	0.014	1.160	0.053	...	...
D50NE-89	5	00	24.51	-70	09	32.0	17.571	0.026	-0.007	0.041	-0.694	0.052
D50S-75	4	59	54.06	-70	12	40.5	17.572	0.014	1.196	0.059	...	...
D50SW-65	4	59	31.65	-70	13	58.8	17.574	0.017	-0.153	0.031	-0.626	0.062
D50NE-84	4	59	55.31	-70	07	27.4	17.575	0.013	1.288	0.046	...	...
D50NW-97	4	59	40.83	-70	09	19.1	17.576	0.016	0.013	0.030	-0.496	0.064
D50NW-95	4	59	42.19	-70	07	43.2	17.579	0.014	0.851	0.034	...	...
D50NE-90	5	00	05.63	-70	10	50.9	17.581	0.016	0.050	0.029	0.059	0.089
D50NE-91	5	00	30.18	-70	07	37.4	17.587	0.017	-0.037	0.028	-0.297	0.070
D50NE-86	5	00	18.42	-70	07	50.0	17.589	0.013	1.303	0.047	...	...
D50NW-99	4	59	05.25	-70	10	37.4	17.590	0.014	0.016	0.026	-0.443	0.056
D50NE-85	4	59	50.41	-70	09	50.5	17.594	0.014	1.449	0.053	...	...
D50SE-70	5	00	06.17	-70	13	19.4	17.598	0.016	1.048	0.048	...	...
D50NW-102	4	59	07.23	-70	10	01.2	17.606	0.050	-0.153	0.078	-0.806	0.194
D50NE-88	5	00	01.90	-70	07	23.7	17.608	0.020	1.182	0.053	...	...
D50S-77	4	59	53.16	-70	12	18.3	17.610	0.020	1.314	0.061	...	...
D50SW-67	4	59	37.55	-70	13	26.3	17.611	0.017	0.137	0.034	-0.063	0.097
D50S-79	4	59	58.68	-70	11	35.8	17.614	0.017	1.138	0.059	...	...
D50SE-72	5	00	22.74	-70	12	49.0	17.615	0.014	-0.081	0.024	-0.455	0.060
D50NW-103	4	59	09.38	-70	09	28.2	17.616	0.011	-0.130	0.022	-0.659	0.044
D50NW-104	4	59	29.14	-70	09	05.6	17.617	0.013	-0.149	0.028	-0.783	0.049
D50S-81	5	00	00.28	-70	12	46.1	17.618	0.016	0.746	0.047	0.260	0.151
D50NW-100	4	59	33.40	-70	08	32.1	17.630	0.015	0.881	0.037	...	...
D50SW-69	4	59	19.87	-70	11	02.0	17.631	0.019	0.073	0.053	-0.811	0.077
D50S-83	5	00	09.59	-70	14	25.8	17.633	0.016	0.853	0.048	0.371	0.181
D50SE-74	5	00	24.98	-70	12	45.7	17.636	0.022	-0.069	0.035	-0.261	0.059
D50SW-66	4	59	22.89	-70	13	42.3	17.640	0.015	0.977	0.067	...	...
D50SE-75	5	00	16.34	-70	11	23.0	17.645	0.014	-0.004	0.029	-0.394	0.065
D50S-86	4	59	43.83	-70	12	14.0	17.648	0.019	0.035	0.036	-0.043	0.074
D50NE-92	4	59	50.26	-70	10	41.2	17.656	0.015	1.320	0.061	...	...
D50NE-93	5	00	19.56	-70	08	07.6	17.658	0.019	1.288	0.056	...	...
D50NE-97	5	00	30.45	-70	07	14.6	17.663	0.018	-0.054	0.031	-0.832	0.054
D50NW-101	4	59	03.77	-70	08	40.4	17.667	0.014	1.303	0.050	...	...
D50NE-98	5	00	17.60	-70	08	57.7	17.670	0.015	0.016	0.028	-0.046	0.078
D50NW-107	4	59	34.29	-70	07	31.0	17.674	0.049	0.485	0.064	-0.016	0.139
D50NW-110	4	59	37.41	-70	09	07.2	17.682	0.036	-0.011	0.065	-0.837	0.095
D50SE-73	5	00	37.61	-70	12	13.1	17.682	0.013	1.029	0.043	...	...
D50SW-71	4	59	09.97	-70	13	56.6	17.683	0.015	-0.112	0.029	-0.663	0.051
D50S-84	4	59	38.88	-70	14	25.3	17.688	0.016	1.449	0.058	...	...
D50NW-105	4	59	08.30	-70	08	17.5	17.690	0.013	1.264	0.054	...	...
D50NW-106	4	59	08.61	-70	09	42.5	17.690	0.032	1.070	0.059	...	...
D50NE-95	5	00	12.48	-70	07	52.0	17.691	0.015	0.802	0.033	...	...
D50SE-79	5	00	22.37	-70	11	42.9	17.701	0.020	-0.064	0.033	-0.410	0.062
D50NE-101	5	00	24.55	-70	10	01.5	17.703	0.027	0.053	0.036	-0.623	0.060
D50SE-76	5	00	27.12	-70	12	57.2	17.704	0.015	1.291	0.061	...	...
D50NE-102	5	00	23.19	-70	08	23.6	17.705	0.019	-0.137	0.027	-0.643	0.059
D50SW-75	4	59	20.22	-70	11	35.5	17.710	0.017	-0.073	0.030	0.030	0.088
D50SE-77	5	00	13.29	-70	14	11.4	17.711	0.019	1.325	0.058	...	...
D50NE-94	5	00	28.05	-70	10	20.4	17.713	0.019	1.351	0.064	...	...
D50NW-108	4	59	39.81	-70	10	19.0	17.714	0.016	1.285	0.056	...	...
D50NE-105	5	00	13.04	-70	08	55.3	17.715	0.030	-0.233	0.038	-0.659	0.053
D50NE-96	5	00	27.66	-70	10	01.7	17.716	0.019	1.198	0.049	...	...
D50NE-99	4	59	54.32	-70	10	10.5	17.718	0.016	0.892	0.037	...	...
D50S-92	4	59	56.86	-70	12	55.8	17.718	0.019	-0.151	0.034	-0.629	0.056
D50SE-78	5	00	43.98	-70	10	43.2	17.720	0.017	0.773	0.043	...	...
D50NE-100	4	59	47.91	-70	10	40.2	17.724	0.019	0.952	0.047	...	...
D50NE-103	5	00	03.78	-70	08	25.1	17.725	0.029	0.099	0.068	-0.667	0.091
D50NW-109	4	59	12.49	-70	08	43.9	17.725	0.016	1.139	0.055	...	...
D50S-94	4	59	50.73	-70	13	40.6	17.726	0.019	-0.157	0.033	-0.540	0.059
D50SW-77	4	59	26.89	-70	11	59.9	17.730	0.036	-0.075	0.050	-0.583	0.099
D50NW-112	4	59	43.43	-70	07	36.5	17.734	0.014	0.936	0.045	...	...
D50NW-113	4	59	29.07	-70	07	28.2	17.734	0.012	0.888	0.037	...	...
D50S-88	4	59	49.75	-70	11	19.6	17.734	0.015	1.349	0.066	...	...
D50SW-78	4	59	15.28	-70	13	49.4	17.736	0.016	0.015	0.030	-0.319	0.071

D50NW-117	4	59	32.83	-70	07	06.4	17.739	0.016	-0.146	0.032	-0.729	0.051
D50SW-72	4	59	01.02	-70	11	49.4	17.741	0.027	1.026	0.079	0.017	0.240
D50S-90	4	59	41.02	-70	12	10.8	17.744	0.021	1.096	0.056	...	...
D50NE-109	5	00	05.61	-70	10	29.6	17.745	0.017	-0.072	0.031	-0.503	0.069
D50S-96	4	59	50.20	-70	11	46.8	17.748	0.022	-0.153	0.033	-0.615	0.057
D50SW-73	4	59	26.36	-70	10	53.1	17.749	0.015	1.135	0.064	...	...
D50S-89	4	59	59.00	-70	12	35.6	17.750	0.021	1.259	0.062	...	...
D50S-93	4	59	44.61	-70	11	18.2	17.757	0.021	0.704	0.047	0.017	0.181
D50SW-74	4	59	03.99	-70	12	32.2	17.757	0.017	1.243	0.073	...	...
D50SE-83	5	00	23.96	-70	11	00.2	17.758	0.015	0.819	0.046	...	...
D50S-97	5	00	00.60	-70	12	08.1	17.760	0.023	-0.048	0.037	-0.458	0.063
D50SE-81	5	00	40.14	-70	13	38.2	17.761	0.018	0.926	0.047	...	...
D50SE-82	5	00	23.94	-70	11	30.2	17.762	0.020	0.921	0.047	...	...
D50SE-84	5	00	33.35	-70	12	53.5	17.765	0.020	-0.156	0.031	-0.358	0.061
D50NE-106	4	59	52.26	-70	10	44.9	17.768	0.018	0.964	0.052	...	...
D50NW-115	4	59	13.79	-70	08	42.1	17.775	0.016	1.233	0.073	...	...
D50SE-80	5	00	31.05	-70	11	58.1	17.778	0.018	1.342	0.057	...	...
D50NW-121	4	59	47.82	-70	07	08.6	17.779	0.017	-0.090	0.031	-0.764	0.047
D50NW-114	4	59	05.91	-70	06	59.7	17.780	0.021	1.416	0.070	...	...
D50NE-104	5	00	16.48	-70	08	24.6	17.782	0.018	1.369	0.058	...	...
D50NW-116	4	59	45.30	-70	07	20.7	17.784	0.017	1.419	0.077	...	...
D50NE-107	5	00	30.34	-70	07	42.2	17.785	0.017	1.266	0.050	...	...
D50NE-112	5	00	10.64	-70	07	39.9	17.785	0.024	-0.067	0.033	-0.502	0.069
D50NE-108	5	00	17.29	-70	07	25.7	17.786	0.023	0.908	0.049	...	...
D50NW-119	4	59	21.40	-70	09	24.4	17.786	0.016	0.746	0.044	...	...
D50S-100	5	00	01.70	-70	14	42.0	17.787	0.026	0.095	0.042	-0.315	0.072
D50S-101	4	59	53.40	-70	11	15.2	17.787	0.022	-0.076	0.037	-0.430	0.066
D50SW-76	4	59	01.64	-70	11	12.0	17.788	0.048	1.450	0.098	...	...
D50SW-79	4	59	21.38	-70	13	06.0	17.795	0.017	1.091	0.063	...	...
D50S-104	4	59	44.94	-70	14	15.2	17.796	0.023	-0.145	0.036	-0.653	0.050
D50NW-120	4	59	23.98	-70	08	10.5	17.799	0.014	0.812	0.040	...	...
D50SE-88	5	00	35.36	-70	11	38.9	17.801	0.025	-0.127	0.035	-0.547	0.060
D50SW-84	4	59	28.45	-70	11	53.6	17.801	0.032	-0.201	0.053	-0.714	0.071
D50SW-82	4	59	36.49	-70	12	13.4	17.802	0.022	0.138	0.037	-0.810	0.069
D50NW-118	4	59	40.26	-70	07	34.2	17.804	0.014	1.326	0.063	...	...
D50S-95	4	59	50.54	-70	12	47.5	17.805	0.020	1.210	0.072	...	...
D50SW-80	4	59	28.89	-70	14	09.3	17.806	0.019	1.231	0.067	...	...
D50NE-111	5	00	17.19	-70	08	59.0	17.809	0.016	1.133	0.055	...	...
D50S-105	4	59	43.52	-70	11	35.4	17.812	0.020	-0.006	0.040	-0.769	0.061
D50SE-86	5	00	04.64	-70	13	09.7	17.815	0.017	0.869	0.062	...	...
D50SE-85	5	00	26.31	-70	13	01.6	17.822	0.018	1.134	0.063	...	...
D50NW-123	4	59	44.31	-70	09	48.4	17.825	0.039	0.871	0.111	...	...
D50NE-110	4	59	54.86	-70	10	14.7	17.831	0.018	1.671	0.082	...	...
D50NE-113	4	59	53.31	-70	10	07.0	17.832	0.015	1.029	0.047	...	...
D50NE-120	5	00	21.31	-70	09	47.2	17.839	0.023	-0.090	0.033	-0.727	0.057
D50SW-81	4	59	34.21	-70	12	01.8	17.843	0.018	1.276	0.069	...	...
D50SE-91	5	00	35.09	-70	12	32.1	17.846	0.017	-0.078	0.029	-0.402	0.059
D50NW-125	4	59	12.76	-70	09	38.9	17.848	0.019	-0.087	0.036	-0.293	0.069
D50SE-87	5	00	19.56	-70	13	00.6	17.849	0.015	1.285	0.059	...	...
D50NW-124	4	59	11.53	-70	10	26.0	17.851	0.017	-0.006	0.031	-0.430	0.082
D50NW-122	4	59	45.19	-70	09	05.7	17.852	0.014	1.588	0.077	...	...
D50SW-85	4	59	39.40	-70	13	15.9	17.852	0.020	0.833	0.058	...	...
D50NE-114	4	59	58.99	-70	08	47.4	17.853	0.021	1.039	0.086	...	...
D50NE-115	5	00	02.54	-70	09	03.5	17.861	0.021	1.120	0.054	...	...
D50NE-116	4	59	56.42	-70	08	23.2	17.861	0.015	0.771	0.047	...	...
D50SW-89	4	59	20.87	-70	13	30.7	17.861	0.021	-0.095	0.040	-0.467	0.080
D50S-103	4	59	42.82	-70	11	55.6	17.862	0.022	1.405	0.074	...	...
D50NW-127	4	59	35.45	-70	09	55.0	17.864	0.017	-0.034	0.033	-0.354	0.085
D50SW-83	4	59	07.37	-70	13	16.3	17.864	0.021	1.472	0.077	...	...
D50NE-118	5	00	26.36	-70	08	29.8	17.865	0.018	0.626	0.049	0.061	0.185
D50SE-89	5	00	04.42	-70	12	23.3	17.865	0.019	1.045	0.051	...	...
D50SE-95	5	00	32.82	-70	13	17.1	17.874	0.014	-0.065	0.034	-0.300	0.075
D50NE-117	5	00	11.81	-70	08	35.0	17.877	0.020	1.013	0.053	...	...
D50SW-86	4	59	38.66	-70	13	43.5	17.881	0.022	1.069	0.063	...	...
D50SE-96	5	00	14.02	-70	11	22.2	17.883	0.016	-0.085	0.027	-0.625	0.053
D50SW-88	4	59	33.12	-70	11	36.4	17.884	0.021	0.479	0.062	...	...

D50NW-129	4	59	11.45	-70	09	44.2	17.886	0.020	0.058	0.037	-0.370	0.084
D50NE-125	5	00	18.48	-70	07	46.8	17.887	0.026	-0.040	0.037	-0.399	0.089
D50NE-119	5	00	10.06	-70	10	47.7	17.891	0.019	1.172	0.063	...	...
D50SE-92	5	00	21.10	-70	11	23.5	17.891	0.015	0.891	0.048	...	...
D50SW-92	4	59	28.12	-70	11	44.6	17.894	0.023	-0.094	0.041	-0.375	0.080
D50SE-93	5	00	02.44	-70	12	37.5	17.896	0.016	1.016	0.047	...	...
D50NW-130	4	59	35.89	-70	07	43.2	17.897	0.028	0.259	0.092	-0.356	0.136
D50SE-97	5	00	13.61	-70	12	13.5	17.898	0.018	-0.035	0.032	-0.186	0.093
D50NE-122	5	00	28.20	-70	09	50.6	17.901	0.046	0.946	0.075	...	...
D50SE-99	5	00	05.03	-70	12	57.4	17.903	0.044	-0.123	0.094	-0.724	0.145
D50SE-94	5	00	12.18	-70	13	39.9	17.904	0.020	0.624	0.051	...	...
D50NW-131	4	59	18.47	-70	09	54.2	17.905	0.019	-0.041	0.034	-0.231	0.075
D50SW-95	4	59	37.47	-70	11	51.6	17.905	0.023	-0.039	0.041	-0.251	0.100
D50NE-121	5	00	07.28	-70	09	16.7	17.908	0.027	1.281	0.070	...	...
D50SW-93	4	59	03.35	-70	10	43.3	17.909	0.022	0.140	0.042	-0.592	0.080
D50SW-96	4	58	59.91	-70	10	58.5	17.909	0.022	-0.106	0.037	-0.626	0.064
D50SW-87	4	59	05.33	-70	12	33.1	17.911	0.019	1.519	0.090	...	...
D50NW-132	4	59	12.75	-70	09	44.7	17.912	0.019	-0.171	0.034	-0.128	0.095
D50NW-126	4	59	34.12	-70	07	44.2	17.916	0.014	1.186	0.052	...	...
D50NE-123	5	00	26.01	-70	07	36.0	17.922	0.022	0.994	0.046	...	...
D50NE-124	4	59	47.91	-70	07	16.5	17.922	0.022	0.837	0.048	...	...
D50SW-90	4	58	59.31	-70	12	22.4	17.923	0.018	1.158	0.066	...	...
D50S-115	4	59	50.85	-70	13	11.2	17.924	0.025	-0.123	0.039	-0.567	0.065
D50SW-97	4	59	12.11	-70	11	39.3	17.925	0.048	-0.079	0.063	-0.569	0.077
D50NE-130	4	59	52.05	-70	07	57.0	17.929	0.021	0.030	0.036	-0.523	0.077
D50S-110	4	59	49.64	-70	14	31.9	17.932	0.020	0.708	0.055	0.261	0.200
D50SW-91	4	59	33.32	-70	11	16.9	17.932	0.020	1.115	0.079	...	...
D50NE-131	4	59	56.88	-70	09	33.0	17.937	0.023	0.010	0.037	-0.626	0.071
D50S-107	4	59	49.14	-70	11	28.8	17.937	0.031	1.164	0.069	...	...
D50NW-134	4	59	08.10	-70	10	23.0	17.938	0.025	-0.049	0.048	-0.560	0.102
D50SW-98	4	59	38.61	-70	14	12.6	17.938	0.027	0.096	0.045	-0.845	0.068
D50SW-99	4	59	09.40	-70	13	11.6	17.938	0.022	0.003	0.043	-0.473	0.075
D50SE-105	5	00	21.73	-70	11	52.3	17.941	0.143	-0.480	0.171	-0.540	0.085
D50NE-126	5	00	16.01	-70	10	05.5	17.942	0.029	1.184	0.072	...	...
D50NW-128	4	59	36.72	-70	10	35.6	17.942	0.017	1.501	0.097	...	...
D50SW-94	4	59	11.24	-70	12	38.0	17.945	0.020	0.933	0.064	...	...
D50NW-135	4	59	07.75	-70	10	13.9	17.946	0.049	-0.038	0.064	-0.470	0.091
D50SE-98	5	00	42.34	-70	11	33.4	17.947	0.028	0.920	0.060	...	...
D50NE-127	5	00	09.23	-70	07	18.5	17.950	0.022	1.300	0.063	...	...
D50NW-137	4	59	20.05	-70	10	05.9	17.955	0.016	-0.084	0.027	-0.251	0.094
D50S-123	4	59	59.89	-70	12	43.6	17.956	0.051	-0.245	0.064	0.184	0.085
D50NE-128	5	00	26.20	-70	07	13.8	17.959	0.127	1.043	0.507	-3.041	0.603
D50NE-134	5	00	20.47	-70	10	40.9	17.960	0.018	-0.048	0.031	-0.611	0.062
D50S-113	4	59	41.83	-70	11	58.4	17.964	0.025	0.916	0.064	...	...
D50SW-101	4	59	31.79	-70	13	43.1	17.967	0.020	-0.173	0.037	-0.636	0.070
D50NE-129	4	59	51.60	-70	07	30.7	17.969	0.034	1.021	0.170	...	...
D50SE-100	5	00	11.63	-70	11	58.0	17.970	0.015	0.949	0.047	...	...
D50SE-107	5	00	22.18	-70	11	50.2	17.971	0.058	-0.078	0.073	-0.913	0.061
D50NW-139	4	59	22.26	-70	07	22.2	17.974	0.020	0.031	0.036	-0.685	0.070
D50SE-102	5	00	11.81	-70	11	16.6	17.977	0.020	0.933	0.053	...	...
D50NE-136	5	00	02.55	-70	08	38.4	17.980	0.032	0.217	0.047	-0.354	0.116
D50NW-133	4	59	09.48	-70	08	30.2	17.981	0.017	1.164	0.062	...	...
D50S-126	4	59	52.11	-70	14	04.9	17.981	0.022	-0.016	0.038	-0.370	0.082
D50S-127	4	59	57.07	-70	14	40.5	17.982	0.026	-0.081	0.043	0.049	0.095
D50SE-101	5	00	08.31	-70	12	52.8	17.987	0.018	1.250	0.062	...	...
D50SE-109	5	00	07.79	-70	14	20.9	17.987	0.025	-0.005	0.055	0.367	0.206
D50NE-133	5	00	09.12	-70	09	59.8	17.990	0.023	0.678	0.051	...	...
D50NE-137	5	00	02.01	-70	08	15.8	17.991	0.070	0.013	0.084	-0.504	0.106
D50SE-103	5	00	37.88	-70	11	55.3	17.992	0.033	0.873	0.074	...	...
D50SE-104	5	00	08.58	-70	11	40.0	17.993	0.019	0.840	0.050	...	...
D50NE-139	4	59	52.16	-70	08	47.6	17.996	0.024	-0.093	0.035	-0.462	0.075
D50NW-142	4	59	11.95	-70	10	06.0	17.997	0.019	0.010	0.034	-0.739	0.069
D50SW-106	4	59	29.20	-70	11	31.7	17.997	0.022	-0.252	0.036	-0.486	0.082
D50S-121	4	59	40.40	-70	14	29.0	17.999	0.026	1.155	0.072	...	...
D50SE-113	5	00	04.30	-70	11	58.5	18.000	0.021	-0.159	0.034	-0.465	0.066
D50NW-138	4	59	24.20	-70	09	43.5	18.003	0.019	0.985	0.053	...	...

D50SW-105	4	59	22.41	-70	12	36.0	18.008	0.021	0.020	0.037	-0.502	0.079
D50NW-136	4	59	25.34	-70	06	58.6	18.013	0.044	1.497	0.246	...	...
D50SW-102	4	59	30.92	-70	11	11.8	18.013	0.021	0.795	0.061	0.346	0.352
D50NE-135	4	59	53.59	-70	07	55.8	18.014	0.017	1.052	0.061	...	...
D50NE-132	5	00	00.88	-70	09	28.3	18.015	0.021	1.394	0.064	...	...
D50SE-110	5	00	14.99	-70	11	34.6	18.015	0.113	0.624	0.136	...	...
D50SE-117	5	00	10.90	-70	13	38.4	18.017	0.021	-0.078	0.037	-0.312	0.083
D50S-124	4	59	40.33	-70	11	37.8	18.019	0.028	1.220	0.078	...	...
D50SW-112	4	59	24.61	-70	11	44.5	18.020	0.096	-1.257	0.140	1.362	0.335
D50NW-144	4	59	28.01	-70	08	46.3	18.022	0.034	0.135	0.088	-1.156	0.112
D50SW-100	4	59	16.57	-70	12	21.5	18.029	0.017	1.508	0.099	...	...
D50SE-112	5	00	18.61	-70	13	54.8	18.030	0.023	0.681	0.054	...	...
D50NE-140	4	59	56.64	-70	09	50.4	18.031	0.023	-0.057	0.036	-0.477	0.088
D50S-132	4	59	53.18	-70	14	27.3	18.031	0.024	-0.070	0.041	-0.361	0.086
D50NW-146	4	59	44.94	-70	08	10.8	18.037	0.018	-0.050	0.034	-0.247	0.100
D50NE-142	4	59	47.34	-70	09	35.6	18.038	0.019	-0.017	0.034	-0.355	0.086
D50SE-111	5	00	29.58	-70	13	01.2	18.039	0.021	1.055	0.065	...	...
D50NE-138	4	59	47.52	-70	09	05.4	18.040	0.021	1.114	0.059	...	...
D50SE-115	5	00	23.50	-70	12	45.1	18.040	0.025	0.709	0.064	-1.219	0.109
D50NE-143	5	00	16.80	-70	09	05.2	18.041	0.026	-0.119	0.045	-0.268	0.095
D50NE-144	4	59	56.81	-70	08	30.5	18.044	0.020	-0.067	0.037	-0.559	0.098
D50NW-148	4	59	05.01	-70	10	01.6	18.050	0.018	-0.033	0.038	-0.209	0.111
D50NW-143	4	59	26.24	-70	09	31.0	18.051	0.015	1.100	0.058	...	...
D50SE-114	5	00	16.96	-70	12	03.9	18.051	0.020	1.023	0.067	...	...
D50SE-116	5	00	32.65	-70	10	41.8	18.052	0.019	0.960	0.059	0.213	0.288
D50SW-104	4	59	21.02	-70	11	56.7	18.053	0.027	1.096	0.076	...	...
D50SW-109	4	59	26.39	-70	11	42.8	18.054	0.051	0.120	0.072	-0.241	0.110
D50NE-145	5	00	13.77	-70	09	54.3	18.056	0.016	-0.040	0.034	-0.572	0.076
D50NE-146	4	59	54.09	-70	10	37.0	18.056	0.020	-0.144	0.031	-0.474	0.080
D50NW-145	4	59	34.11	-70	09	10.8	18.058	0.019	0.806	0.053	...	...
D50SW-111	4	59	34.16	-70	11	01.6	18.059	0.025	-0.033	0.055	-0.608	0.094
D50NW-149	4	59	04.99	-70	09	41.5	18.069	0.022	-0.053	0.044	-0.220	0.115
D50S-136	4	59	59.49	-70	12	22.8	18.070	0.030	0.048	0.052	0.084	0.114
D50SW-113	4	59	07.41	-70	11	23.9	18.073	0.023	-0.037	0.041	-0.079	0.122
D50SW-107	4	59	38.74	-70	13	21.6	18.075	0.023	1.127	0.083	...	...
D50SE-119	5	00	28.20	-70	13	48.9	18.080	0.036	0.837	0.071	...	...
D50SW-115	4	59	27.44	-70	12	00.0	18.080	0.045	-0.114	0.076	-0.675	0.116
D50SE-121	5	00	10.42	-70	11	03.3	18.081	0.017	0.750	0.048	...	...
D50NE-141	5	00	05.39	-70	07	45.3	18.082	0.020	1.067	0.074	...	...
D50SE-118	5	00	25.69	-70	11	47.4	18.086	0.023	1.171	0.094	...	...
D50SW-108	4	59	36.45	-70	12	59.6	18.090	0.022	1.319	0.094	...	...
D50SE-120	5	00	26.59	-70	12	09.7	18.092	0.014	1.075	0.060	...	...
D50NE-147	5	00	21.56	-70	08	03.0	18.100	0.032	0.868	0.074	...	...
D50NW-147	4	59	18.79	-70	09	09.5	18.105	0.023	1.447	0.076	...	...
D50NE-149	5	00	29.02	-70	09	48.4	18.112	0.020	0.686	0.050	...	...
D50SW-110	4	59	21.96	-70	12	24.9	18.112	0.023	1.418	0.099	...	...
D50SW-114	4	59	24.86	-70	12	20.6	18.112	0.023	0.790	0.072	...	...
D50SW-118	4	59	24.72	-70	11	08.8	18.112	0.022	0.022	0.051	-0.532	0.098
D50NW-156	4	59	19.98	-70	07	02.3	18.113	0.021	-0.004	0.036	-0.156	0.113
D50SE-126	5	00	03.79	-70	12	17.0	18.113	0.024	-0.073	0.039	-0.362	0.085
D50NE-148	5	00	02.05	-70	09	58.8	18.114	0.025	1.192	0.072	...	...
D50S-141	4	59	42.03	-70	12	26.9	18.114	0.030	0.033	0.050	0.137	0.146
D50S-142	4	59	51.20	-70	13	03.0	18.116	0.028	-0.175	0.046	0.063	0.101
D50NW-158	4	59	23.44	-70	10	30.2	18.119	0.022	-0.064	0.036	-0.387	0.086
D50NE-152	4	59	48.01	-70	07	30.3	18.120	0.030	-0.005	0.050	-0.428	0.082
D50SE-122	5	00	20.32	-70	12	48.3	18.120	0.023	1.006	0.067	...	...
D50NW-150	4	59	28.87	-70	08	16.1	18.121	0.023	0.992	0.065	...	...
D50SE-124	5	00	42.71	-70	10	55.1	18.122	0.023	0.950	0.064	...	...
D50SE-127	5	00	32.91	-70	13	27.4	18.122	0.035	0.029	0.054	0.084	0.118
D50SE-128	5	00	09.81	-70	11	00.5	18.126	0.020	0.004	0.042	-0.540	0.103
D50NE-151	5	00	15.26	-70	10	22.8	18.129	0.025	0.700	0.044	...	...
D50S-143	4	59	49.19	-70	11	39.8	18.130	0.030	0.008	0.052	-0.291	0.119
D50NE-156	5	00	25.16	-70	10	29.1	18.136	0.027	-0.048	0.043	-0.573	0.092
D50SE-125	5	00	17.25	-70	12	12.9	18.136	0.020	1.037	0.057	...	...
D50NE-150	5	00	27.94	-70	10	35.4	18.137	0.019	1.090	0.076	...	...
D50SE-130	5	00	31.37	-70	12	14.1	18.137	0.029	-0.033	0.047	-0.488	0.084

D50SW-119	4	59	24.82	-70	11	36.2	18.137	0.056	0.031	0.079	0.336	0.300
D50NW-152	4	59	16.33	-70	08	52.3	18.140	0.018	1.088	0.064	...	...
D50NW-153	4	59	44.01	-70	07	28.8	18.147	0.018	1.092	0.069	...	...
D50NW-160	4	59	04.37	-70	09	38.7	18.149	0.024	0.042	0.043	-0.103	0.134
D50SW-122	4	59	32.84	-70	11	49.3	18.150	0.029	-0.323	0.045	-0.540	0.072
D50S-139	4	59	53.23	-70	14	12.3	18.156	0.025	1.105	0.103	...	...
D50S-147	4	59	47.01	-70	11	05.8	18.156	0.032	-0.042	0.056	0.095	0.136
D50NW-154	4	59	15.01	-70	08	37.0	18.161	0.017	1.148	0.078	...	...
D50NW-162	4	59	06.92	-70	09	43.6	18.163	0.022	0.025	0.042	-0.398	0.096
D50SW-120	4	59	29.43	-70	12	11.8	18.166	0.023	0.303	0.051	-0.075	0.158
D50NW-157	4	59	15.84	-70	08	35.0	18.169	0.022	1.080	0.072	...	...
D50NW-164	4	59	40.67	-70	09	23.8	18.169	0.024	-0.147	0.039	-0.656	0.075
D50SW-121	4	59	03.02	-70	11	35.7	18.169	0.029	0.257	0.067	-0.170	0.170
D50SW-124	4	59	12.91	-70	13	44.5	18.169	0.022	-0.150	0.042	-0.253	0.095
D50SE-133	5	00	41.71	-70	13	57.0	18.170	0.023	-0.075	0.044	-0.457	0.103
D50NE-153	5	00	22.20	-70	07	22.9	18.171	0.022	0.915	0.054	...	...
D50SE-129	5	00	30.28	-70	12	50.6	18.173	0.019	0.936	0.065	...	...
D50SW-117	4	59	34.01	-70	13	52.9	18.174	0.023	1.646	0.143	...	...
D50NW-155	4	59	20.34	-70	07	50.8	18.175	0.022	1.428	0.094	...	...
D50NE-154	5	00	23.14	-70	09	27.4	18.176	0.031	1.003	0.064	...	...
D50NE-159	5	00	11.15	-70	08	04.2	18.177	0.025	-0.076	0.042	-0.135	0.124
D50SE-132	5	00	45.35	-70	12	54.9	18.177	0.044	0.415	0.097	-0.282	0.182
D50SW-128	4	59	24.94	-70	12	48.9	18.179	0.137	-0.301	0.158	-0.436	0.079
D50NW-166	4	59	37.67	-70	07	08.3	18.180	0.076	0.075	0.095	-0.426	0.107
D50NE-158	4	59	59.07	-70	08	28.2	18.181	0.029	0.715	0.057	...	...
D50SE-131	5	00	29.82	-70	12	12.2	18.182	0.021	0.670	0.050	0.130	0.246
D50SW-116	4	59	15.26	-70	10	48.9	18.182	0.041	2.126	0.190	...	...
D50SW-125	4	59	02.70	-70	12	01.0	18.183	0.028	0.163	0.051	-0.461	0.116
D50SW-129	4	59	25.77	-70	11	45.9	18.183	0.041	-0.232	0.075	-0.335	0.113
D50SW-127	4	59	36.79	-70	11	20.5	18.185	0.026	0.021	0.051	-0.989	0.086
D50SW-130	4	59	23.05	-70	13	05.0	18.187	0.025	-0.141	0.042	-0.244	0.097
D50NE-155	4	59	53.45	-70	10	01.6	18.188	0.025	1.184	0.114	...	...
D50NE-162	5	00	03.04	-70	10	26.7	18.190	0.031	-0.166	0.044	-0.419	0.099
D50S-148	4	59	41.37	-70	13	46.7	18.190	0.042	0.728	0.085	...	...
D50NW-170	4	59	37.06	-70	09	36.1	18.191	0.052	-0.189	0.069	-0.630	0.089
D50NE-157	5	00	10.48	-70	10	38.0	18.192	0.023	1.171	0.080	...	...
D50NW-169	4	59	24.22	-70	07	06.4	18.196	0.029	0.041	0.052	-0.554	0.093
D50NW-159	4	59	15.30	-70	06	59.7	18.197	0.023	1.533	0.092	...	...
D50S-152	4	59	57.04	-70	13	39.0	18.197	0.024	-0.016	0.046	-0.121	0.131
D50SW-131	4	59	28.24	-70	12	04.8	18.197	0.030	0.078	0.051	-0.493	0.113
D50SE-136	5	00	04.37	-70	14	13.8	18.199	0.024	0.064	0.045	-0.222	0.116
D50NW-172	4	59	41.66	-70	07	21.2	18.205	0.019	-0.186	0.036	-0.713	0.063
D50NW-173	4	59	31.79	-70	09	40.7	18.210	0.023	-0.125	0.038	-0.647	0.074
D50NW-161	4	59	33.48	-70	08	03.7	18.212	0.022	1.210	0.082	...	...
D50NE-166	5	00	14.44	-70	09	35.7	18.216	0.027	-0.151	0.040	-0.439	0.078
D50NW-163	4	59	15.39	-70	07	53.2	18.216	0.023	1.074	0.079	...	...
D50S-156	4	59	54.20	-70	12	56.6	18.224	0.032	0.055	0.055	0.020	0.138
D50SE-140	5	00	36.57	-70	10	58.5	18.225	0.028	-0.110	0.044	-0.667	0.085
D50SW-126	4	59	31.02	-70	13	06.7	18.226	0.025	1.069	0.087	...	...
D50NW-167	4	59	45.62	-70	09	49.1	18.227	0.021	1.093	0.077	...	...
D50SW-135	4	59	24.84	-70	11	39.0	18.230	0.065	-0.032	0.101	0.838	0.478
D50SE-135	5	00	07.31	-70	13	50.4	18.231	0.022	1.286	0.082	...	...
D50SW-136	4	59	38.90	-70	10	46.3	18.231	0.028	-0.057	0.046	0.038	0.149
D50NE-161	5	00	21.01	-70	10	22.5	18.232	0.023	1.079	0.069	...	...
D50NE-160	5	00	04.68	-70	08	18.4	18.235	0.029	1.226	0.081	...	...
D50NE-169	5	00	08.35	-70	10	49.5	18.235	0.026	-0.006	0.043	-0.298	0.128
D50NW-171	4	59	13.52	-70	09	59.3	18.236	0.026	0.862	0.060	...	...
D50SE-137	5	00	04.12	-70	12	13.6	18.239	0.026	0.755	0.063	...	...
D50SE-141	5	00	40.70	-70	12	41.3	18.239	0.026	0.173	0.052	-0.310	0.119
D50NW-168	4	59	19.61	-70	07	27.2	18.241	0.020	1.212	0.081	...	...
D50NE-163	5	00	17.07	-70	08	10.7	18.242	0.027	0.998	0.072	...	...
D50SW-123	4	59	19.78	-70	14	16.8	18.244	0.040	1.742	0.183	...	...
D50NE-165	5	00	18.52	-70	07	40.7	18.247	0.025	0.953	0.070	...	...
D50SW-138	4	59	29.31	-70	11	38.9	18.249	0.032	-0.369	0.174	0.516	0.262
D50NE-164	5	00	27.14	-70	09	02.1	18.250	0.024	1.100	0.066	...	...
D50SE-138	5	00	08.31	-70	11	05.1	18.252	0.039	0.854	0.115	...	...

D50NE-171	5	00	03.37	-70	08	54.1	18.253	0.031	-0.024	0.044	-0.209	0.098
D50NW-178	4	59	08.51	-70	09	17.0	18.255	0.019	0.058	0.035	0.013	0.143
D50NW-174	4	59	21.58	-70	10	03.6	18.256	0.021	0.839	0.062	...	...
D50SW-133	4	59	15.70	-70	11	10.0	18.259	0.027	1.112	0.089	...	...
D50NW-175	4	59	04.74	-70	10	31.7	18.262	0.025	0.849	0.060	...	...
D50NE-167	4	59	50.70	-70	07	26.9	18.263	0.027	0.702	0.059	...	...
D50NW-179	4	59	12.37	-70	07	24.2	18.263	0.029	-0.063	0.050	-0.431	0.084
D50S-159	4	59	44.98	-70	12	53.7	18.265	0.021	0.030	0.044	-0.290	0.118
D50SW-139	4	59	24.76	-70	14	09.8	18.265	0.027	-0.001	0.048	-0.186	0.137
D50NE-175	5	00	14.87	-70	09	31.0	18.266	0.034	-0.157	0.047	0.020	0.114
D50SW-134	4	59	30.93	-70	11	53.3	18.271	0.036	0.948	0.109	...	...
D50SW-132	4	58	56.43	-70	11	20.6	18.272	0.033	1.435	0.129	...	...
D50SW-140	4	59	00.10	-70	13	29.8	18.274	0.024	0.058	0.049	-0.444	0.108
D50NE-173	5	00	02.41	-70	08	18.9	18.280	0.042	0.303	0.081	-0.145	0.207
D50NE-168	5	00	04.09	-70	07	26.6	18.284	0.028	1.146	0.085	...	...
D50SE-146	5	00	24.08	-70	13	56.2	18.284	0.027	0.147	0.046	-0.067	0.138
D50SW-142	4	59	24.13	-70	14	16.8	18.285	0.036	0.087	0.076	-0.899	0.114
D50SW-144	4	59	34.61	-70	11	37.1	18.285	0.027	-0.013	0.048	-0.228	0.138
D50SE-144	5	00	40.55	-70	10	44.3	18.287	0.022	0.978	0.084	...	...
D50NE-170	5	00	25.06	-70	07	16.2	18.289	0.040	0.934	0.064	...	...
D50NW-176	4	59	38.60	-70	10	40.0	18.292	0.023	1.426	0.107	...	...
D50NW-183	4	59	37.34	-70	10	31.8	18.296	0.020	-0.049	0.035	-0.178	0.117
D50S-158	4	59	48.56	-70	13	13.2	18.296	0.031	1.153	0.106	...	...
D50NW-181	4	59	44.34	-70	09	25.0	18.297	0.022	0.078	0.047	...	...
D50SE-145	5	00	18.12	-70	13	24.5	18.297	0.039	0.821	0.074	...	...
D50NW-177	4	59	15.80	-70	09	12.9	18.298	0.027	1.088	0.083	...	...
D50SE-148	5	00	08.77	-70	11	23.9	18.299	0.027	-0.033	0.043	-0.237	0.125
D50SW-146	4	59	38.53	-70	13	18.1	18.306	0.029	0.293	0.062	-0.276	0.153
D50S-163	5	00	01.91	-70	11	27.0	18.310	0.030	0.203	0.053	-0.079	0.141
D50SE-151	5	00	22.68	-70	11	15.5	18.310	0.025	-0.178	0.040	-0.328	0.094
D50NE-179	5	00	17.37	-70	09	42.0	18.311	0.035	0.023	0.050	-0.499	0.087
D50NE-174	5	00	16.10	-70	07	21.3	18.314	0.028	0.957	0.075	...	...
D50NW-186	4	59	37.32	-70	09	27.9	18.314	0.023	-0.092	0.043	-0.647	0.091
D50NE-172	5	00	25.30	-70	08	04.1	18.316	0.027	1.302	0.084	...	...
D50SE-152	5	00	32.81	-70	12	12.5	18.318	0.028	-0.033	0.043	-0.111	0.128
D50NW-180	4	59	22.55	-70	08	01.1	18.319	0.026	1.094	0.080	...	...
D50NW-188	4	59	09.70	-70	09	50.1	18.320	0.081	0.010	0.138	-0.953	0.148
D50NE-176	5	00	24.26	-70	10	48.5	18.324	0.036	0.980	0.080	...	...
D50SE-154	5	00	14.69	-70	11	40.3	18.328	0.036	0.009	0.055	-0.238	0.118
D50SW-143	4	59	12.03	-70	12	11.8	18.328	0.028	1.041	0.092	...	...
D50S-161	4	59	51.11	-70	12	13.3	18.330	0.026	1.191	0.096	...	...
D50SE-147	5	00	24.63	-70	12	07.9	18.331	0.021	1.020	0.073	...	...
D50SW-151	4	59	05.97	-70	11	46.6	18.331	0.052	0.230	0.073	-0.288	0.162
D50NE-178	4	59	54.26	-70	08	29.0	18.332	0.030	0.948	0.077	...	...
D50SW-148	4	59	30.73	-70	12	32.2	18.334	0.033	0.769	0.089	...	...
D50NW-190	4	59	42.23	-70	09	25.0	18.337	0.025	-0.103	0.040	-0.655	0.087
D50NE-177	5	00	04.32	-70	09	30.2	18.338	0.033	1.105	0.081	...	...
D50NE-186	5	00	03.18	-70	07	47.2	18.338	0.031	-0.249	0.047	-0.344	0.093
D50NW-193	4	59	15.99	-70	08	44.7	18.340	0.026	-0.142	0.040	-0.107	0.126
D50NW-182	4	59	15.49	-70	09	38.9	18.343	0.036	1.103	0.083	...	...
D50S-174	4	59	48.88	-70	11	12.9	18.343	0.042	-0.079	0.061	0.322	0.154
D50SE-150	5	00	42.71	-70	11	12.8	18.343	0.031	0.880	0.076	...	...
D50NW-194	4	59	17.87	-70	10	36.8	18.344	0.024	-0.097	0.045	-0.171	0.122
D50S-166	4	59	29.53	-70	14	21.3	18.344	0.034	0.569	0.072	...	...
D50S-176	4	59	51.49	-70	13	56.6	18.344	0.032	-0.204	0.050	-0.642	0.076
D50NW-191	4	59	18.50	-70	10	43.2	18.345	0.032	0.046	0.058	-0.038	0.181
D50SE-149	5	00	31.52	-70	12	01.2	18.346	0.023	0.949	0.070	...	...
D50NE-181	5	00	27.39	-70	09	28.2	18.349	0.033	0.758	0.070	...	...
D50SW-147	4	59	02.51	-70	14	09.6	18.351	0.033	1.309	0.111	...	...
D50SW-156	4	59	24.94	-70	11	11.6	18.352	0.062	0.349	0.091	...	...
D50NE-187	4	59	53.24	-70	07	17.9	18.353	0.030	-0.053	0.042	-0.426	0.084
D50NW-196	4	59	13.41	-70	08	55.3	18.353	0.025	-0.042	0.048	-0.127	0.121
D50SW-153	4	59	39.20	-70	13	46.5	18.353	0.032	0.727	0.074	...	...
D50SE-155	5	00	36.69	-70	13	43.1	18.354	0.034	0.568	0.062	...	...
D50SW-160	4	58	57.61	-70	10	48.6	18.355	0.029	0.146	0.056	0.501	0.239
D50NW-197	4	59	32.52	-70	10	05.9	18.357	0.024	0.048	0.052	...	...

D50NE-180	5	00	29.37	-70	07	19.5	18.358	0.024	1.019	0.072	...	...
D50NW-198	4	59	44.54	-70	09	47.6	18.364	0.047	0.127	0.106	-0.850	0.147
D50NW-200	4	59	21.06	-70	10	10.5	18.364	0.123	-0.055	0.152	-0.440	0.135
D50NE-182	4	59	56.51	-70	09	54.9	18.365	0.024	1.124	0.077	...	...
D50NW-184	4	59	42.39	-70	08	30.8	18.365	0.022	1.285	0.082	...	...
D50S-175	4	59	47.53	-70	12	49.2	18.365	0.033	0.379	0.068	...	...
D50NW-189	4	59	21.22	-70	09	34.3	18.366	0.026	0.874	0.066	...	...
D50SE-160	5	00	45.25	-70	12	53.4	18.366	0.028	0.715	0.130	...	...
D50NE-183	5	00	01.30	-70	10	56.1	18.367	0.034	1.081	0.087	...	...
D50S-171	4	59	55.63	-70	13	10.6	18.368	0.026	0.754	0.073	...	...
D50SE-153	5	00	33.78	-70	12	23.6	18.370	0.024	1.142	0.075	...	...
D50NW-187	4	59	23.11	-70	08	35.7	18.371	0.022	1.219	0.093	...	...
D50SE-158	5	00	31.61	-70	13	55.8	18.371	0.027	0.896	0.066	...	...
D50NE-194	5	00	20.25	-70	10	34.3	18.372	0.031	-0.007	0.047	-0.263	0.121
D50SE-159	5	00	45.29	-70	11	53.9	18.372	0.023	0.854	0.074	...	...
D50SE-162	5	00	22.05	-70	12	07.7	18.373	0.027	0.724	0.070	...	...
D50SW-165	4	59	01.23	-70	13	16.6	18.373	0.029	-0.135	0.051	-0.383	0.113
D50SE-157	5	00	23.73	-70	11	36.2	18.374	0.026	0.987	0.069	...	...
D50SW-154	4	58	55.77	-70	14	03.6	18.378	0.026	1.260	0.118	...	...
D50NE-184	5	00	19.52	-70	09	39.2	18.379	0.033	1.224	0.097	...	...
D50SE-156	5	00	15.59	-70	11	26.2	18.379	0.029	1.131	0.133	...	...
D50NE-188	5	00	09.40	-70	07	23.1	18.380	0.034	0.526	0.062	...	...
D50S-182	4	59	51.21	-70	11	38.2	18.381	0.038	-0.005	0.059	0.046	0.174
D50NE-198	5	00	16.85	-70	07	22.8	18.382	0.032	0.076	0.051	-0.267	0.134
D50SW-149	4	58	57.79	-70	12	09.1	18.383	0.030	1.534	0.144	...	...
D50NW-195	4	59	31.09	-70	09	02.2	18.384	0.028	0.772	0.082	...	...
D50SW-161	4	59	09.93	-70	13	08.8	18.385	0.030	0.837	0.089	...	...
D50NW-205	4	59	20.43	-70	10	01.5	18.387	0.028	-0.033	0.048	-0.038	0.146
D50NE-200	5	00	20.37	-70	08	28.8	18.388	0.033	-0.011	0.053	-0.182	0.145
D50SW-158	4	58	59.02	-70	12	11.6	18.392	0.029	1.154	0.106	...	...
D50NE-191	5	00	07.51	-70	08	39.4	18.393	0.030	0.642	0.067	...	...
D50NE-202	5	00	12.54	-70	08	07.9	18.393	0.024	-0.048	0.042	-0.407	0.113
D50NW-207	4	59	06.26	-70	10	16.6	18.393	0.048	-0.092	0.079	0.162	0.401
D50NE-189	5	00	03.12	-70	10	06.8	18.394	0.034	0.753	0.073	...	...
D50S-177	5	00	10.08	-70	14	40.6	18.394	0.032	0.895	0.068	...	...
D50NW-192	4	59	12.75	-70	07	12.3	18.396	0.068	1.211	0.268	...	...
D50SE-164	5	00	26.24	-70	12	53.8	18.396	0.026	1.157	0.084	...	...
D50NE-192	5	00	21.33	-70	10	49.4	18.397	0.026	0.689	0.076	...	...
D50NE-193	5	00	25.62	-70	08	55.8	18.397	0.032	0.614	0.075	...	...
D50NW-201	4	59	29.50	-70	09	30.0	18.401	0.022	0.697	0.061	...	...
D50NE-201	5	00	22.26	-70	08	57.2	18.402	0.032	0.183	0.057	...	...
D50S-185	4	59	49.26	-70	11	37.5	18.402	0.036	0.079	0.065	0.409	0.253
D50SW-164	4	59	31.87	-70	13	46.8	18.406	0.028	0.775	0.083	...	...
D50SE-168	5	00	11.10	-70	14	04.9	18.407	0.031	0.711	0.069	...	...
D50SE-170	5	00	11.25	-70	12	24.0	18.407	0.023	0.058	0.045	-0.041	0.163
D50SW-167	4	59	16.45	-70	11	25.3	18.408	0.032	0.185	0.065	0.004	0.189
D50SW-168	4	59	12.22	-70	13	58.6	18.409	0.032	0.131	0.057	-0.566	0.111
D50NE-190	5	00	26.20	-70	08	07.2	18.410	0.030	1.079	0.093	...	...
D50NE-195	5	00	20.65	-70	08	10.0	18.411	0.029	0.913	0.075	...	...
D50SE-169	5	00	21.93	-70	13	49.3	18.411	0.026	0.780	0.076	...	...
D50SW-163	4	59	04.56	-70	12	37.3	18.411	0.050	0.982	0.107	...	...
D50SE-165	5	00	30.42	-70	10	57.3	18.412	0.027	1.176	0.108	...	...
D50SW-166	4	58	59.48	-70	13	04.9	18.412	0.031	0.631	0.071	-0.308	0.228
D50NW-199	4	59	20.11	-70	07	49.0	18.415	0.024	1.245	0.124	...	...
D50S-180	4	59	42.24	-70	11	47.2	18.415	0.040	1.036	0.111	...	...
D50NE-209	4	59	47.95	-70	10	04.9	18.419	0.033	0.011	0.051	-0.018	0.147
D50NW-209	4	59	36.87	-70	09	06.6	18.420	0.073	0.220	0.133	-1.638	0.154
D50NE-196	5	00	16.96	-70	07	37.5	18.422	0.039	1.140	0.117	...	...
D50NE-197	5	00	07.83	-70	08	57.6	18.422	0.031	1.044	0.101	...	...
D50NE-199	5	00	04.45	-70	08	12.3	18.422	0.028	0.927	0.083	...	...
D50SE-166	5	00	29.00	-70	13	53.4	18.424	0.062	1.224	0.166	...	...
D50NE-211	5	00	09.28	-70	07	35.6	18.425	0.032	0.011	0.056	-0.486	0.112
D50S-189	4	59	46.69	-70	13	32.1	18.425	0.033	-0.067	0.056	-0.403	0.107
D50NW-202	4	59	11.82	-70	08	10.4	18.426	0.021	1.139	0.081	...	...
D50SE-163	5	00	43.48	-70	11	03.6	18.426	0.027	1.911	0.188	...	...
D50NW-204	4	59	45.91	-70	07	15.7	18.427	0.024	0.979	0.087	...	...

D50NE-213	4	59	52.50	-70	10	05.8	18.429	0.030	0.017	0.049	-0.128	0.165
D50SE-167	5	00	20.61	-70	14	14.9	18.429	0.027	1.299	0.106	...	...
D50NW-208	4	59	35.75	-70	10	30.2	18.431	0.022	0.716	0.069	...	...
D50NE-216	5	00	04.74	-70	10	03.9	18.433	0.041	-0.021	0.122	0.290	0.260
D50SW-172	4	58	58.01	-70	11	49.3	18.433	0.030	0.110	0.058	-0.786	0.119
D50SE-179	5	00	10.82	-70	13	26.7	18.436	0.030	-0.059	0.046	-0.479	0.108
D50SW-174	4	59	31.66	-70	11	44.0	18.438	0.051	0.022	0.074	-0.295	0.155
D50NW-203	4	59	14.27	-70	10	43.4	18.439	0.025	1.325	0.101	...	...
D50NW-206	4	59	17.27	-70	10	23.1	18.439	0.026	1.072	0.078	...	...
D50NE-207	5	00	05.98	-70	07	41.1	18.441	0.058	0.664	0.095	...	...
D50SE-172	5	00	43.03	-70	13	23.7	18.441	0.033	0.666	0.074	...	...
D50NW-211	4	59	31.84	-70	10	40.3	18.443	0.023	0.083	0.049	-0.728	0.126
D50SW-169	4	58	58.87	-70	12	04.0	18.443	0.036	0.863	0.107	-0.046	0.373
D50NW-212	4	59	27.15	-70	07	07.4	18.445	0.036	0.060	0.063	-0.183	0.144
D50NE-205	4	59	57.51	-70	08	04.1	18.446	0.035	0.864	0.067	...	...
D50SE-181	5	00	09.47	-70	12	10.2	18.446	0.028	-0.036	0.049	-0.131	0.152
D50NE-203	5	00	27.43	-70	08	53.0	18.448	0.031	0.932	0.093	...	...
D50SE-175	5	00	37.10	-70	12	55.0	18.448	0.026	0.528	0.058	...	...
D50SE-183	5	00	29.43	-70	12	23.0	18.448	0.029	-0.092	0.047	-0.434	0.114
D50SW-170	4	59	21.01	-70	14	04.7	18.448	0.031	0.962	0.096	...	...
D50S-194	4	59	49.02	-70	12	33.6	18.449	0.034	-0.127	0.060	-0.589	0.099
D50NE-214	5	00	26.74	-70	08	29.4	18.450	0.028	0.478	0.070	...	...
D50NE-210	5	00	18.52	-70	07	22.5	18.452	0.032	0.775	0.085	...	...
D50NE-220	5	00	15.28	-70	08	01.9	18.453	0.034	-0.004	0.055	...	...
D50NE-208	4	59	48.33	-70	10	47.8	18.455	0.037	0.959	0.084	...	...
D50SE-173	5	00	39.93	-70	11	54.1	18.455	0.031	0.811	0.078	...	...
D50NE-204	4	59	58.09	-70	07	21.3	18.458	0.030	1.168	0.100	...	...
D50S-197	4	59	55.07	-70	11	24.6	18.459	0.037	-0.208	0.055	-0.237	0.118
D50SE-186	5	00	41.06	-70	11	01.4	18.461	0.034	-0.113	0.056	-0.451	0.121
D50SW-173	4	59	04.90	-70	12	57.9	18.462	0.029	0.781	0.082	...	...
D50NE-224	4	59	49.07	-70	09	55.9	18.463	0.033	-0.214	0.049	-0.590	0.080
D50S-187	5	00	08.16	-70	14	40.4	18.465	0.033	1.102	0.099	...	...
D50SW-178	4	59	10.92	-70	12	54.4	18.465	0.029	0.515	0.063	...	...
D50NE-212	5	00	14.68	-70	07	29.5	18.467	0.033	1.009	0.065	...	...
D50SW-179	4	59	31.46	-70	12	24.0	18.467	0.034	0.484	0.080	...	...
D50S-190	5	00	00.81	-70	13	57.4	18.469	0.030	0.876	0.075	...	...
D50SW-184	4	59	31.83	-70	12	03.3	18.470	0.042	-0.207	0.073	-0.571	0.114
D50NW-216	4	59	08.72	-70	08	18.8	18.472	0.036	-0.009	0.056	...	...
D50S-188	4	59	42.89	-70	13	32.9	18.472	0.028	1.154	0.081	...	...
D50SE-177	5	00	37.96	-70	11	50.9	18.472	0.026	0.932	0.093	...	...
D50SE-188	5	00	24.83	-70	11	57.5	18.473	0.052	-0.150	0.074	-0.041	0.124
D50SW-176	4	59	02.97	-70	11	05.8	18.473	0.033	0.717	0.077	...	...
D50SW-181	4	59	01.52	-70	11	49.9	18.474	0.034	0.204	0.083	-0.029	0.217
D50SE-174	5	00	23.50	-70	11	08.6	18.476	0.033	1.283	0.116	...	...
D50NW-214	4	59	36.78	-70	09	36.0	18.477	0.066	0.335	0.145	...	...
D50NW-220	4	59	36.81	-70	09	16.1	18.477	0.055	-0.077	0.080	...	...
D50SE-176	5	00	28.68	-70	11	43.7	18.477	0.034	1.078	0.106	...	...
D50SE-185	5	00	17.94	-70	11	24.7	18.477	0.040	0.241	0.068	-0.528	0.139
D50NW-218	4	59	10.42	-70	09	57.6	18.478	0.026	0.104	0.048	-0.290	0.166
D50NE-225	4	59	47.34	-70	08	52.3	18.481	0.030	-0.173	0.046	-0.597	0.104
D50NE-215	4	59	48.91	-70	10	16.0	18.482	0.034	1.123	0.094	...	...
D50SE-180	5	00	38.88	-70	12	19.5	18.483	0.029	0.880	0.092	...	...
D50NE-219	5	00	18.45	-70	07	37.5	18.485	0.037	0.742	0.082	...	...
D50NW-213	4	59	44.35	-70	10	03.3	18.485	0.024	0.781	0.072	...	...
D50SW-180	4	59	22.25	-70	11	36.0	18.485	0.040	0.710	0.094	...	...
D50NE-218	5	00	02.11	-70	10	54.7	18.486	0.029	0.878	0.079	...	...
D50SE-184	5	00	09.45	-70	14	08.2	18.486	0.035	0.684	0.096	...	...
D50NW-225	4	59	37.83	-70	09	17.2	18.487	0.056	-0.142	0.129	...	...
D50SW-175	4	59	19.49	-70	11	02.8	18.487	0.067	1.066	0.245	...	...
D50NE-217	5	00	18.83	-70	08	33.5	18.489	0.034	1.140	0.101	...	...
D50SW-177	4	58	58.13	-70	12	19.2	18.490	0.029	1.088	0.109	...	...
D50SE-182	5	00	25.16	-70	11	43.1	18.491	0.030	0.910	0.095	...	...
D50SE-187	5	00	23.94	-70	12	51.1	18.492	0.134	0.538	0.159	...	...
D50S-202	4	59	40.46	-70	13	05.5	18.494	0.030	-0.023	0.061	-0.001	0.152
D50S-204	4	59	33.50	-70	14	33.5	18.498	0.036	-0.035	0.067	-0.009	0.174
D50NW-227	4	59	29.47	-70	09	37.7	18.500	0.025	0.017	0.051	-0.228	0.147

D50SW-186	4	59	26.48	-70	12	36.5	18.501	0.028	0.151	0.064	-0.552	0.143
D50NE-222	5	00	17.24	-70	07	42.5	18.504	0.036	0.909	0.082	...	...
D50NE-223	5	00	08.26	-70	08	53.7	18.504	0.041	0.824	0.154	...	...
D50SW-188	4	58	58.22	-70	10	40.2	18.505	0.053	0.142	0.078	...	...
D50NE-221	4	59	52.82	-70	07	59.7	18.506	0.037	1.079	0.093	...	...
D50SW-183	4	59	15.19	-70	12	43.6	18.506	0.032	0.782	0.085	...	...
D50SE-190	5	00	02.53	-70	13	28.0	18.507	0.029	0.609	0.067	...	...
D50SE-194	5	00	24.13	-70	13	00.5	18.512	0.029	-0.070	0.053	-0.100	0.139
D50S-206	4	59	47.81	-70	13	48.6	18.515	0.038	-0.039	0.061	-0.178	0.133
D50NE-232	5	00	01.80	-70	07	47.8	18.516	0.044	-0.084	0.061	-0.666	0.127
D50SE-193	5	00	42.96	-70	10	35.4	18.516	0.033	0.064	0.062	...	...
D50NW-215	4	59	04.82	-70	07	45.7	18.517	0.028	1.199	0.117	...	...
D50NW-228	4	59	10.50	-70	10	02.0	18.517	0.042	0.398	0.082	...	...
D50SE-191	5	00	03.53	-70	13	00.8	18.517	0.033	0.618	0.071	...	...
D50S-207	4	59	37.31	-70	14	20.4	18.518	0.043	-0.014	0.067	-0.555	0.136
D50NE-233	5	00	23.13	-70	09	29.2	18.520	0.042	-0.032	0.063	-0.607	0.121
D50NE-236	5	00	02.82	-70	09	53.4	18.520	0.026	-0.174	0.051	-0.426	0.131
D50SW-185	4	59	31.32	-70	12	51.5	18.520	0.047	0.690	0.094	...	...
D50SW-190	4	58	56.63	-70	12	52.5	18.520	0.033	-0.004	0.059	...	...
D50S-208	4	59	44.33	-70	13	14.6	18.522	0.036	-0.008	0.062	...	...
D50NW-230	4	59	13.41	-70	07	10.1	18.523	0.047	-0.126	0.065	-0.337	0.125
D50S-200	4	59	57.22	-70	11	53.3	18.523	0.035	0.741	0.082	...	...
D50SE-189	5	00	37.45	-70	11	16.1	18.523	0.029	0.984	0.081	...	...
D50SW-191	4	59	35.14	-70	13	27.2	18.524	0.034	-0.061	0.056	-0.552	0.127
D50NE-235	4	59	48.74	-70	08	52.2	18.527	0.032	0.052	0.057	...	...
D50SE-196	5	00	35.01	-70	13	26.4	18.527	0.028	0.131	0.055	0.079	0.203
D50NE-227	5	00	13.11	-70	09	37.4	18.528	0.038	0.825	0.070	...	...
D50NE-228	5	00	05.33	-70	09	32.2	18.528	0.028	0.796	0.077	...	...
D50NW-217	4	59	26.25	-70	07	17.7	18.528	0.036	1.272	0.136	...	...
D50NW-223	4	59	09.86	-70	07	04.1	18.530	0.031	1.016	0.107	...	...
D50NW-234	4	59	11.68	-70	07	43.3	18.532	0.041	-0.151	0.068	-0.163	0.138
D50NE-240	5	00	09.77	-70	08	32.8	18.533	0.035	-0.026	0.052	-0.738	0.109
D50NW-224	4	59	06.01	-70	09	33.2	18.533	0.030	0.959	0.087	...	...
D50NE-226	5	00	30.63	-70	08	18.6	18.534	0.038	0.998	0.095	...	...
D50S-201	4	59	47.05	-70	12	08.1	18.534	0.034	1.001	0.089	...	...
D50NW-235	4	59	42.55	-70	07	56.3	18.537	0.032	-0.100	0.051	-0.133	0.134
D50S-213	4	59	58.71	-70	13	42.7	18.538	0.044	-0.054	0.070	0.178	0.178
D50SE-192	5	00	15.20	-70	11	26.4	18.540	0.033	1.107	0.153	...	...
D50NE-230	5	00	29.44	-70	09	06.4	18.542	0.032	0.728	0.092	...	...
D50NE-238	5	00	25.94	-70	07	17.0	18.542	0.037	0.280	0.064	...	...
D50NW-231	4	59	11.55	-70	07	10.2	18.543	0.032	0.343	0.065	...	...
D50NW-236	4	59	19.55	-70	08	59.8	18.543	0.024	0.039	0.053	...	...
D50SE-199	5	00	46.29	-70	13	22.3	18.546	0.032	0.062	0.060	...	...
D50SE-200	5	00	15.17	-70	12	18.0	18.549	0.029	-0.064	0.050	0.192	0.161
D50SW-193	4	59	01.40	-70	13	27.2	18.550	0.034	0.244	0.064	-0.230	0.177
D50NE-231	4	59	54.05	-70	10	23.8	18.552	0.035	0.932	0.081	...	...
D50NE-237	5	00	25.59	-70	10	41.7	18.556	0.038	0.616	0.082	...	...
D50NE-239	5	00	01.34	-70	08	18.2	18.556	0.040	0.554	0.077	...	...
D50NW-237	4	59	12.20	-70	10	14.4	18.556	0.029	-0.070	0.057	-0.080	0.152
D50NW-233	4	59	38.22	-70	10	05.2	18.557	0.031	0.488	0.060	...	...
D50NW-240	4	59	31.79	-70	10	29.5	18.559	0.030	-0.096	0.047	-0.268	0.163
D50NE-229	5	00	27.88	-70	08	15.2	18.560	0.029	1.213	0.109	...	...
D50NW-242	4	59	09.59	-70	09	49.1	18.560	0.032	-0.257	0.109	...	...
D50SE-198	5	00	10.58	-70	11	48.5	18.561	0.034	0.507	0.066	...	...
D50SW-187	4	59	16.26	-70	12	38.2	18.562	0.038	1.531	0.166	...	...
D50SW-189	4	59	28.17	-70	11	20.1	18.562	0.032	1.251	0.125	...	...
D50S-209	4	59	33.58	-70	14	27.9	18.563	0.041	0.722	0.091	...	...
D50NW-241	4	59	25.54	-70	08	53.6	18.564	0.028	-0.098	0.057	-0.419	0.132
D50NE-234	5	00	20.15	-70	08	30.2	18.565	0.037	0.966	0.096	...	...
D50SE-195	5	00	42.50	-70	11	44.6	18.566	0.035	1.086	0.094	...	...
D50NE-244	4	59	54.10	-70	09	58.2	18.568	0.062	0.039	0.104	...	...
D50NW-229	4	59	40.08	-70	10	24.9	18.568	0.032	0.967	0.076	...	...
D50S-211	4	59	55.47	-70	13	43.8	18.570	0.042	0.792	0.128	...	...
D50NW-232	4	59	26.17	-70	10	23.3	18.572	0.032	0.876	0.088	...	...
D50S-215	4	59	55.75	-70	14	23.8	18.572	0.040	0.689	0.093	...	...
D50SE-201	5	00	38.01	-70	13	52.3	18.572	0.027	0.467	0.063	...	...

D50NE-246	5	00	29.78	-70	07	12.8	18.575	0.050	-0.025	0.065	-0.673	0.111
D50NE-248	5	00	29.13	-70	09	12.2	18.578	0.034	-0.026	0.054	-0.432	0.161
D50S-212	4	59	53.38	-70	11	35.0	18.579	0.038	0.964	0.127	...	...
D50NE-242	5	00	06.09	-70	07	28.5	18.581	0.035	0.661	0.081	...	...
D50SE-206	5	00	33.75	-70	12	14.4	18.581	0.041	-0.009	0.065	-0.341	0.140
D50SW-196	4	59	04.43	-70	13	20.8	18.581	0.030	0.233	0.066	0.092	0.236
D50S-219	4	59	52.36	-70	13	21.0	18.583	0.073	0.338	0.115	-0.475	0.154
D50SW-201	4	59	08.25	-70	10	51.8	18.584	0.032	0.131	0.067	-0.754	0.131
D50NE-241	5	00	15.66	-70	08	13.8	18.585	0.024	0.879	0.086	...	...
D50NE-250	4	59	54.42	-70	09	20.0	18.587	0.043	0.006	0.060	-0.806	0.117
D50SW-200	4	58	59.02	-70	11	46.7	18.587	0.038	0.245	0.074	...	...
D50SW-198	4	59	22.10	-70	14	12.4	18.588	0.055	0.314	0.085	...	...
D50SW-199	4	59	08.11	-70	14	13.5	18.592	0.032	0.401	0.075	-0.873	0.149
D50NE-251	5	00	13.59	-70	10	18.1	18.593	0.032	0.053	0.050	-0.108	0.180
D50SE-211	5	00	20.13	-70	13	41.0	18.596	0.031	-0.064	0.054	-0.669	0.108
D50NE-255	5	00	18.12	-70	09	57.6	18.598	0.072	0.022	0.095	0.051	0.209
D50SE-209	5	00	12.54	-70	11	20.6	18.598	0.037	0.158	0.066	-0.310	0.186
D50SW-204	4	59	34.80	-70	11	48.4	18.599	0.035	0.021	0.064	-0.585	0.122
D50S-223	5	00	00.51	-70	12	10.2	18.600	0.041	0.325	0.087	...	...
D50SW-208	4	58	58.38	-70	12	02.5	18.600	0.226	-0.339	0.259	-0.340	0.127
D50NE-243	5	00	14.35	-70	08	10.3	18.603	0.033	0.890	0.082	...	...
D50NW-247	4	59	21.06	-70	07	05.3	18.603	0.030	0.072	0.056	-0.476	0.135
D50SE-202	5	00	35.04	-70	13	42.4	18.605	0.031	0.819	0.105	...	...
D50NW-248	4	59	07.93	-70	10	11.8	18.606	0.053	0.025	0.083	...	...
D50SE-207	5	00	23.77	-70	12	39.1	18.606	0.040	0.509	0.083	...	...
D50SE-203	5	00	02.68	-70	11	10.7	18.607	0.030	0.710	0.099	...	...
D50SE-210	5	00	30.57	-70	11	37.3	18.607	0.037	0.277	0.072	...	...
D50NE-257	4	59	55.08	-70	08	46.5	18.609	0.032	0.052	0.058	0.103	0.269
D50SE-216	5	00	30.59	-70	11	12.8	18.610	0.032	-0.189	0.058	-0.167	0.134
D50SW-209	4	59	34.32	-70	14	10.9	18.610	0.062	-0.145	0.082	-0.263	0.133
D50NW-238	4	59	04.84	-70	08	34.2	18.611	0.023	1.146	0.107	...	...
D50SE-204	5	00	37.09	-70	13	32.3	18.611	0.026	0.779	0.071	...	...
D50SW-195	4	59	38.20	-70	12	30.7	18.612	0.034	0.985	0.125	...	...
D50NE-245	4	59	58.80	-70	08	56.0	18.613	0.036	0.894	0.091	...	...
D50SW-220	4	59	29.19	-70	10	46.6	18.614	0.072	-0.378	0.090	-0.319	0.117
D50S-220	4	59	47.89	-70	12	06.0	18.615	0.040	0.828	0.093	...	...
D50SE-208	5	00	06.60	-70	11	48.2	18.615	0.028	0.563	0.082	...	...
D50NW-239	4	59	21.63	-70	07	19.9	18.616	0.029	1.233	0.128	...	...
D50SW-212	4	58	57.21	-70	14	05.2	18.616	0.032	-0.021	0.063	-0.342	0.145
D50NE-249	5	00	21.52	-70	07	24.4	18.617	0.043	0.721	0.083	...	...
D50NW-243	4	59	15.18	-70	09	43.1	18.617	0.029	0.958	0.095	...	...
D50NW-245	4	59	14.00	-70	07	04.1	18.617	0.071	0.786	0.113	...	...
D50NE-247	5	00	24.78	-70	07	59.9	18.619	0.034	0.943	0.089	...	...
D50NE-258	4	59	59.90	-70	09	38.0	18.619	0.032	0.038	0.052	-0.323	0.183
D50NE-259	5	00	10.53	-70	09	18.9	18.619	0.035	-0.142	0.053	-0.697	0.094
D50SW-219	4	59	25.19	-70	12	53.2	18.620	0.036	-0.138	0.066	-0.458	0.118
D50NE-256	5	00	28.21	-70	08	29.2	18.621	0.035	0.384	0.071	...	...
D50S-224	4	59	53.81	-70	14	24.2	18.622	0.040	0.702	0.108	...	...
D50NW-244	4	59	17.98	-70	07	22.1	18.623	0.029	1.043	0.115	...	...
D50SW-217	4	59	21.16	-70	10	59.0	18.625	0.043	0.001	0.069	-0.369	0.164
D50SW-218	4	59	26.72	-70	12	06.9	18.625	0.039	-0.025	0.062	-0.202	0.167
D50SE-220	5	00	35.36	-70	13	57.2	18.626	0.032	0.022	0.065	-0.283	0.179
D50SW-214	4	59	06.77	-70	11	45.6	18.626	0.068	0.168	0.094	-0.400	0.169
D50NW-252	4	59	25.90	-70	08	36.8	18.627	0.112	-0.094	0.224	...	...
D50SE-212	5	00	04.38	-70	12	54.2	18.627	0.031	0.626	0.074	...	...
D50SW-197	4	59	00.31	-70	12	52.9	18.627	0.033	1.251	0.155	...	...
D50SW-205	4	59	28.50	-70	12	56.2	18.627	0.040	0.497	0.090	...	...
D50SW-216	4	59	03.73	-70	12	20.9	18.628	0.035	0.075	0.072	...	...
D50NE-252	5	00	13.05	-70	10	19.3	18.629	0.034	0.891	0.079	...	...
D50SE-214	5	00	31.07	-70	12	20.4	18.629	0.048	0.322	0.083	-0.299	0.218
D50SE-221	5	00	31.57	-70	13	15.8	18.629	0.031	0.074	0.054	...	...
D50NW-251	4	59	32.70	-70	07	24.1	18.630	0.032	0.042	0.058	-0.598	0.116
D50SW-215	4	59	35.99	-70	11	26.7	18.630	0.037	0.176	0.075	...	...
D50NE-253	5	00	12.42	-70	09	27.3	18.631	0.046	0.880	0.095	...	...
D50NW-246	4	59	14.86	-70	09	39.1	18.632	0.031	0.755	0.094	...	...
D50SW-223	4	59	34.15	-70	13	59.9	18.633	0.041	-0.071	0.064	-0.415	0.127

D50NW-255	4	59	36.43	-70	09	11.3	18.634	0.062	-0.122	0.127	...	...
D50NE-261	4	59	52.53	-70	09	27.9	18.635	0.041	0.013	0.064	0.188	0.225
D50NE-254	5	00	13.38	-70	09	57.2	18.637	0.026	0.955	0.081	...	...
D50SW-203	4	59	34.49	-70	12	07.6	18.638	0.038	1.174	0.131	...	...
D50NW-253	4	59	46.13	-70	08	26.1	18.639	0.030	0.134	0.062	...	...
D50NW-258	4	59	12.37	-70	09	34.4	18.640	0.029	-0.050	0.054	-0.029	0.182
D50NE-263	5	00	18.42	-70	07	29.6	18.641	0.041	0.024	0.066	...	...
D50SE-226	5	00	23.97	-70	13	24.9	18.643	0.029	-0.023	0.054	...	...
D50SE-224	5	00	36.50	-70	13	46.5	18.645	0.035	0.147	0.060	...	...
D50SE-227	5	00	38.41	-70	12	00.7	18.645	0.031	-0.063	0.050	-0.342	0.123
D50SE-213	5	00	05.16	-70	12	43.4	18.646	0.035	0.823	0.088	...	...
D50SE-218	5	00	20.32	-70	12	17.9	18.646	0.033	0.552	0.074	...	...
D50S-232	4	59	47.22	-70	13	22.2	18.647	0.044	0.633	0.102	...	...
D50SW-206	4	59	33.15	-70	11	01.5	18.647	0.057	0.809	0.145	-0.598	0.298
D50SE-228	5	00	37.26	-70	11	45.8	18.649	0.031	-0.054	0.053	-0.057	0.201
D50NE-266	5	00	21.08	-70	07	36.7	18.650	0.033	0.034	0.063	...	...
D50SE-229	5	00	07.71	-70	13	47.9	18.650	0.041	-0.048	0.063	-0.218	0.196
D50SW-222	4	59	25.67	-70	14	08.2	18.651	0.038	0.451	0.090	...	...
D50SE-215	5	00	15.24	-70	11	36.5	18.656	0.040	0.875	0.133	...	...
D50SW-202	4	59	13.59	-70	11	46.9	18.661	0.046	1.824	0.232	...	...
D50SW-207	4	59	36.43	-70	14	07.9	18.661	0.031	1.081	0.140	...	...
D50NW-264	4	59	31.05	-70	07	33.5	18.662	0.051	-0.066	0.085	-0.105	0.190
D50NW-250	4	59	14.69	-70	09	42.7	18.663	0.025	0.949	0.092	...	...
D50S-238	4	59	44.95	-70	11	38.3	18.663	0.054	0.509	0.095	...	...
D50NE-260	5	00	12.19	-70	09	36.5	18.666	0.028	0.860	0.080	...	...
D50NW-273	4	59	37.97	-70	10	40.1	18.666	0.066	-0.414	0.086	-0.060	0.159
D50SE-222	5	00	07.11	-70	12	31.4	18.666	0.024	0.895	0.095	...	...
D50SW-211	4	59	04.68	-70	12	21.3	18.666	0.037	1.138	0.170	...	...
D50SE-225	5	00	20.46	-70	12	36.3	18.667	0.043	0.658	0.096	...	...
D50NW-260	4	59	35.22	-70	10	04.1	18.669	0.032	0.190	0.061	0.121	0.234
D50SW-230	4	59	21.36	-70	11	35.1	18.669	0.043	-0.003	0.076	0.132	0.231
D50SE-223	5	00	39.69	-70	14	16.2	18.670	0.035	0.957	0.106	...	...
D50NE-262	4	59	47.13	-70	08	32.9	18.671	0.033	0.787	0.084	...	...
D50NW-261	4	59	04.73	-70	10	08.8	18.671	0.033	0.180	0.071	0.268	0.320
D50SW-221	4	59	01.99	-70	12	05.2	18.671	0.053	0.934	0.125	...	...
D50S-245	4	59	40.48	-70	13	13.1	18.673	0.036	0.174	0.079	...	...
D50NE-264	4	59	56.10	-70	07	17.6	18.674	0.037	0.769	0.083	...	...
D50NE-270	5	00	09.72	-70	10	48.8	18.674	0.037	-0.180	0.056	-0.572	0.135
D50NW-269	4	59	35.19	-70	10	26.4	18.674	0.032	-0.001	0.057	...	...
D50NW-257	4	59	13.75	-70	07	26.6	18.675	0.031	0.786	0.093	...	...
D50NW-268	4	59	03.98	-70	10	08.9	18.675	0.036	0.067	0.062	-0.099	0.213
D50SW-225	4	59	04.40	-70	12	45.5	18.675	0.035	0.599	0.105	...	...
D50S-247	4	59	53.27	-70	12	41.8	18.677	0.035	0.029	0.069	-0.056	0.197
D50NW-262	4	59	23.02	-70	07	22.8	18.678	0.035	0.326	0.069	...	...
D50S-236	4	59	49.29	-70	13	19.8	18.679	0.054	1.025	0.214	...	...
D50NW-276	4	59	04.90	-70	09	56.4	18.684	0.039	-0.174	0.059	-0.089	0.150
D50SE-237	5	00	40.81	-70	12	39.1	18.684	0.036	0.165	0.075	...	...
D50NW-256	4	59	15.73	-70	08	22.2	18.685	0.033	1.022	0.110	...	...
D50SW-210	4	59	14.54	-70	12	32.8	18.685	0.042	1.596	0.198	...	...
D50SW-227	4	59	25.81	-70	12	23.7	18.685	0.043	0.592	0.092	...	...
D50SE-236	5	00	44.15	-70	13	57.0	18.687	0.033	0.548	0.081	...	...
D50NW-259	4	59	08.89	-70	09	56.2	18.688	0.036	0.685	0.093	...	...
D50NW-266	4	59	08.02	-70	07	36.8	18.689	0.038	0.441	0.084	...	...
D50S-243	4	59	53.44	-70	14	21.5	18.689	0.045	0.686	0.104	...	...
D50SE-234	5	00	33.82	-70	12	37.1	18.695	0.033	0.805	0.075	...	...
D50NE-267	5	00	14.91	-70	08	53.8	18.697	0.037	0.836	0.084	...	...
D50NE-268	5	00	27.06	-70	10	20.6	18.697	0.052	0.679	0.095	...	...
D50SE-235	5	00	25.05	-70	13	32.3	18.699	0.032	0.849	0.098	...	...
D50NE-275	4	59	59.96	-70	10	54.2	18.702	0.035	-0.177	0.052	-0.518	0.109
D50NW-277	4	59	14.28	-70	07	22.7	18.702	0.036	0.014	0.062	-0.288	0.173
D50NW-270	4	59	44.18	-70	07	23.4	18.707	0.028	0.739	0.076	...	...
D50NW-278	4	59	07.73	-70	07	27.6	18.707	0.033	0.086	0.051	...	...
D50S-255	5	00	00.10	-70	12	27.0	18.707	0.055	-0.039	0.088	-0.235	0.147
D50NE-269	5	00	25.04	-70	10	52.4	18.708	0.024	0.685	0.071	...	...
D50NW-265	4	59	07.64	-70	08	42.2	18.709	0.036	0.906	0.107	...	...
D50SW-236	4	59	38.20	-70	11	48.2	18.712	0.308	0.173	0.354	...	...

D50NE-280	5	00	31.43	-70	10	12.5	18.715	0.046	-0.211	0.076	...	...
D50NE-277	4	59	55.54	-70	07	12.4	18.719	0.041	-0.001	0.063	-0.750	0.109
D50SW-242	4	59	10.34	-70	14	16.5	18.719	0.048	0.051	0.084	-0.562	0.177
D50SW-228	4	59	24.75	-70	12	54.6	18.720	0.038	1.242	0.156	...	...
D50NE-273	5	00	04.77	-70	07	32.0	18.722	0.052	0.675	0.107	...	...
D50NW-291	4	59	37.06	-70	09	18.0	18.722	0.071	-0.628	0.098	-0.098	0.145
D50SE-243	5	00	44.90	-70	14	07.2	18.722	0.035	0.006	0.071	...	...
D50SE-246	5	00	22.40	-70	13	36.5	18.722	0.032	-0.082	0.055	-0.606	0.126
D50S-263	4	59	43.13	-70	14	42.1	18.723	0.045	-0.104	0.068	-0.059	0.156
D50NE-271	4	59	47.80	-70	09	56.7	18.724	0.036	0.971	0.112	...	...
D50SE-248	5	00	19.32	-70	11	48.9	18.724	0.050	-0.104	0.078	...	...
D50SW-237	4	59	00.04	-70	12	01.5	18.724	0.044	0.430	0.094	...	...
D50NW-275	4	59	05.39	-70	08	07.1	18.725	0.022	0.777	0.089	...	...
D50NW-283	4	59	05.68	-70	09	31.0	18.728	0.038	0.013	0.071	-0.430	0.154
D50NE-282	4	59	48.03	-70	09	00.6	18.729	0.041	0.026	0.063	...	...
D50NE-276	4	59	46.83	-70	08	53.5	18.730	0.039	0.262	0.081	...	...
D50NW-279	4	59	22.40	-70	07	18.7	18.732	0.028	0.613	0.083	...	...
D50SW-241	4	59	03.61	-70	10	33.4	18.732	0.044	0.409	0.084	...	...
D50SE-249	5	00	34.28	-70	14	09.4	18.733	0.034	0.075	0.058	...	...
D50NW-285	4	59	23.17	-70	09	17.8	18.735	0.032	0.027	0.068	-0.268	0.185
D50S-264	4	59	40.59	-70	13	23.2	18.735	0.049	0.050	0.078	...	...
D50SE-245	5	00	22.09	-70	11	10.8	18.735	0.043	0.269	0.084	...	...
D50NW-280	4	59	24.56	-70	08	40.1	18.737	0.029	0.648	0.090	...	...
D50SE-251	5	00	31.05	-70	12	08.6	18.737	0.034	0.111	0.079	-0.259	0.230
D50SW-250	4	59	00.27	-70	13	09.0	18.737	0.032	-0.169	0.063	-0.434	0.146
D50SW-235	4	59	30.87	-70	11	57.3	18.738	0.050	0.841	0.132	...	...
D50SE-240	5	00	18.18	-70	14	00.7	18.739	0.029	0.753	0.093	...	...
D50SE-231	5	00	09.47	-70	11	09.9	18.740	0.022	1.971	0.220	...	...
D50SE-255	5	00	33.94	-70	12	59.4	18.740	0.034	-0.171	0.058	0.053	0.336
D50SE-254	5	00	38.64	-70	13	07.9	18.741	0.033	-0.084	0.058	-0.562	0.122
D50SW-229	4	59	10.55	-70	12	20.0	18.741	0.038	1.730	0.196	...	...
D50NW-287	4	59	37.17	-70	09	33.8	18.742	0.040	-0.072	0.073	...	...
D50SE-239	5	00	23.57	-70	12	27.2	18.742	0.038	0.916	0.102	...	...
D50SW-249	4	59	36.93	-70	12	03.2	18.742	0.040	0.161	0.076	-0.217	0.219
D50NE-274	5	00	29.94	-70	09	57.2	18.743	0.037	1.137	0.103	...	...
D50NW-289	4	59	36.55	-70	10	27.3	18.744	0.033	-0.074	0.065	...	...
D50NE-286	5	00	08.06	-70	08	06.7	18.746	0.031	0.023	0.055	-0.343	0.154
D50S-265	4	59	57.59	-70	12	45.1	18.746	0.046	0.080	0.077	...	...
D50NE-288	4	59	48.73	-70	09	16.7	18.747	0.035	-0.062	0.057	-0.357	0.181
D50SW-239	4	59	31.54	-70	13	52.5	18.748	0.034	0.895	0.104	...	...
D50NW-293	4	59	44.61	-70	08	34.5	18.750	0.034	0.006	0.064	...	...
D50NE-278	5	00	16.92	-70	09	28.4	18.751	0.035	0.742	0.083	...	...
D50NW-294	4	59	36.74	-70	10	00.5	18.751	0.036	-0.152	0.066	...	...
D50NW-295	4	59	28.81	-70	10	02.9	18.752	0.027	-0.115	0.055	-0.399	0.125
D50SE-242	5	00	31.01	-70	12	13.1	18.752	0.047	0.763	0.117	...	...
D50SE-244	5	00	25.18	-70	12	14.7	18.753	0.034	0.690	0.084	...	...
D50SW-247	4	59	31.37	-70	11	55.3	18.753	0.050	0.555	0.109	...	...
D50S-257	4	59	45.06	-70	12	57.4	18.754	0.041	0.853	0.129	...	...
D50SW-238	4	59	37.40	-70	12	50.2	18.754	0.054	1.044	0.143	...	...
D50SW-240	4	59	32.58	-70	11	01.0	18.754	0.043	0.998	0.224	...	...
D50SE-252	5	00	22.01	-70	13	27.5	18.755	0.040	0.420	0.082	...	...
D50SW-234	4	59	35.16	-70	12	15.5	18.755	0.043	1.270	0.157	...	...
D50NW-288	4	59	03.87	-70	07	05.3	18.757	0.045	0.259	0.076	...	...
D50NE-289	5	00	16.86	-70	10	01.6	18.758	0.044	0.114	0.068	-0.531	0.189
D50SW-245	4	59	05.18	-70	13	47.8	18.758	0.041	0.835	0.302	...	...
D50SW-251	4	59	12.09	-70	13	16.3	18.759	0.044	0.202	0.082	...	...
D50NE-283	5	00	02.60	-70	08	40.5	18.760	0.053	0.656	0.102	...	...
D50SW-254	4	59	02.17	-70	10	34.4	18.761	0.039	0.166	0.072	...	...
D50SW-257	4	59	28.74	-70	11	49.7	18.761	0.046	-0.044	0.116	-0.823	0.179
D50NE-292	5	00	07.78	-70	08	25.2	18.762	0.036	-0.123	0.064	0.102	0.214
D50S-260	4	59	55.62	-70	13	45.3	18.764	0.039	0.992	0.115	...	...
D50NE-284	4	59	53.35	-70	07	36.8	18.765	0.046	0.690	0.103	...	...
D50NW-299	4	59	06.25	-70	10	14.3	18.766	0.087	-0.065	0.122	-0.255	0.184
D50NW-300	4	59	37.08	-70	10	20.3	18.766	0.045	-0.074	0.086	...	...
D50NW-292	4	59	45.18	-70	09	21.9	18.767	0.032	0.402	0.065	...	...
D50NW-296	4	59	09.37	-70	10	05.3	18.767	0.039	0.067	0.076	-0.421	0.199

D50S-269	4	59	58.10	-70	11	17.9	18.767	0.092	-0.299	0.115	-0.271	0.131
D50NW-281	4	59	30.94	-70	10	23.5	18.768	0.037	1.287	0.204	...	...
D50NE-279	5	00	22.20	-70	10	33.8	18.770	0.042	1.094	0.122	...	...
D50S-267	4	59	47.49	-70	11	27.8	18.772	0.043	-0.055	0.069	0.139	0.210
D50SE-257	5	00	04.89	-70	13	49.8	18.772	0.049	0.313	0.086	...	...
D50SE-265	5	00	05.24	-70	12	56.4	18.772	0.042	-0.182	0.072	-0.622	0.250
D50SW-243	4	59	09.36	-70	11	58.3	18.772	0.040	1.282	0.164	...	...
D50SW-261	4	59	00.99	-70	13	58.2	18.772	0.040	-0.049	0.068	-0.402	0.165
D50SW-246	4	58	56.87	-70	11	14.1	18.773	0.040	1.045	0.139	...	...
D50SE-264	5	00	19.45	-70	14	00.4	18.774	0.039	-0.032	0.063	-0.643	0.126
D50SW-248	4	59	12.92	-70	14	10.0	18.774	0.039	1.030	0.134	...	...
D50SE-247	5	00	27.20	-70	14	14.1	18.777	0.035	1.173	0.125	...	...
D50SW-253	4	59	15.72	-70	13	45.2	18.778	0.037	0.607	0.096	...	...
D50NE-281	5	00	06.63	-70	10	22.2	18.779	0.051	1.178	0.133	...	...
D50NW-290	4	59	05.27	-70	07	13.3	18.781	0.090	0.791	0.412	...	...
D50NW-298	4	59	07.29	-70	10	02.5	18.781	0.170	0.284	0.213	...	...
D50NW-284	4	59	05.37	-70	07	35.0	18.783	0.035	1.277	0.136	...	...
D50SW-262	4	59	27.68	-70	12	51.2	18.783	0.043	0.215	0.077	-0.777	0.142
D50NE-293	5	00	30.25	-70	09	31.7	18.784	0.033	0.327	0.076	...	...
D50NE-287	5	00	07.66	-70	07	44.1	18.785	0.036	0.894	0.137	...	...
D50SE-263	5	00	38.58	-70	12	51.2	18.785	0.044	0.426	0.110	...	...
D50SW-268	4	59	23.82	-70	11	06.8	18.785	0.086	-0.150	0.111	...	...
D50SE-268	5	00	42.34	-70	13	14.9	18.786	0.050	-0.049	0.096	-0.491	0.144
D50SW-263	4	59	07.44	-70	11	55.6	18.787	0.048	0.270	0.095	...	...
D50SW-266	4	59	16.82	-70	13	59.7	18.788	0.083	0.120	0.176	-0.605	0.263
D50SE-256	5	00	05.32	-70	11	52.8	18.789	0.030	0.783	0.084	...	...
D50SE-267	5	00	33.51	-70	13	30.2	18.791	0.040	0.072	0.061	-0.373	0.148
D50S-266	4	59	58.60	-70	11	06.2	18.792	0.048	0.719	0.099	...	...
D50SE-258	5	00	45.33	-70	13	11.7	18.792	0.033	0.786	0.094	...	...
D50SE-270	5	00	29.08	-70	14	03.4	18.792	0.037	-0.029	0.065	-0.550	0.155
D50SW-273	4	58	55.35	-70	13	17.0	18.793	0.052	-0.173	0.083	-0.298	0.154
D50NW-303	4	59	10.00	-70	07	18.5	18.795	0.034	0.116	0.063	...	...
D50SE-262	5	00	27.12	-70	13	01.2	18.795	0.050	0.713	0.101	...	...
D50SW-252	4	58	59.87	-70	13	43.0	18.795	0.041	1.010	0.122	...	...
D50SE-274	5	00	13.75	-70	13	17.3	18.798	0.036	0.007	0.064	...	...
D50NE-298	5	00	26.49	-70	07	27.8	18.799	0.050	0.077	0.078	...	...
D50SW-260	4	59	09.39	-70	13	14.5	18.799	0.050	0.650	0.135	...	...
D50SW-259	4	59	03.86	-70	11	39.2	18.800	0.037	0.843	0.117	...	...
D50SW-244	4	59	23.68	-70	12	34.6	18.801	0.040	1.837	0.237	...	...
D50SW-274	4	59	24.55	-70	11	19.4	18.801	0.050	-0.136	0.082	...	...
D50NE-307	4	59	54.00	-70	09	36.0	18.804	0.044	-0.079	0.076	-0.784	0.124
D50SW-269	4	59	08.49	-70	12	55.4	18.804	0.039	0.214	0.092	...	...
D50SW-271	4	59	15.62	-70	12	32.9	18.805	0.043	0.114	0.080	-0.290	0.216
D50NW-309	4	59	17.15	-70	09	14.8	18.806	0.039	-0.030	0.066	...	...
D50NE-290	5	00	30.33	-70	10	46.9	18.809	0.045	1.161	0.176	...	...
D50NE-291	5	00	00.75	-70	07	32.7	18.809	0.046	1.127	0.115	...	...
D50SW-277	4	59	38.01	-70	11	05.2	18.810	0.043	0.008	0.079	-0.205	0.191
D50SE-277	5	00	39.27	-70	13	47.7	18.811	0.041	0.120	0.080	...	...
D50SE-282	5	00	39.82	-70	13	13.2	18.812	0.036	-0.102	0.069	...	...
D50SE-283	5	00	35.46	-70	14	05.7	18.812	0.054	-0.153	0.076	...	...
D50SW-255	4	59	22.62	-70	11	21.1	18.812	0.044	1.326	0.174	...	...
D50SE-281	5	00	43.90	-70	14	00.0	18.813	0.041	-0.005	0.070	...	...
D50SW-272	4	58	55.64	-70	13	42.5	18.813	0.043	0.304	0.098	...	...
D50NE-310	5	00	23.60	-70	08	59.6	18.814	0.042	-0.160	0.059	0.069	0.230
D50NW-301	4	59	22.07	-70	07	12.2	18.814	0.039	0.766	0.097	...	...
D50SW-276	4	59	13.54	-70	12	43.6	18.814	0.063	0.105	0.107	...	...
D50SE-273	5	00	32.95	-70	12	34.1	18.815	0.037	0.408	0.084	...	...
D50SE-284	5	00	06.38	-70	13	02.3	18.815	0.034	-0.120	0.057	...	...
D50NE-303	5	00	19.77	-70	07	27.3	18.816	0.051	0.308	0.138	...	...
D50SE-280	5	00	36.90	-70	10	49.3	18.817	0.035	0.076	0.069	...	...
D50NE-312	5	00	20.26	-70	08	52.4	18.818	0.055	-0.127	0.077	-0.510	0.146
D50NW-308	4	59	06.46	-70	07	05.3	18.818	0.026	0.275	0.065	...	...
D50SE-275	5	00	20.18	-70	11	45.8	18.819	0.037	0.499	0.087	...	...
D50SW-256	4	59	34.83	-70	12	50.1	18.820	0.038	1.480	0.171	...	...
D50NE-300	5	00	06.97	-70	09	57.7	18.821	0.035	0.567	0.082	...	...
D50S-282	4	59	54.91	-70	13	44.4	18.822	0.045	-0.088	0.088	...	...

D50SE-271	5	00	19.19	-70	12	47.4	18.823	0.061	0.701	0.116	...	...
D50NE-311	5	00	19.60	-70	09	37.5	18.825	0.049	0.076	0.079	...	...
D50NE-294	4	59	58.80	-70	09	31.5	18.826	0.036	0.849	0.101	...	...
D50NW-312	4	59	10.10	-70	10	25.0	18.826	0.035	0.127	0.071	...	...
D50SW-258	4	59	13.01	-70	11	47.9	18.827	0.061	1.475	0.246	...	...
D50NE-315	5	00	00.52	-70	09	23.3	18.828	0.041	-0.132	0.058	...	...
D50SE-278	5	00	09.84	-70	11	06.3	18.828	0.037	0.473	0.159	...	...
D50S-289	4	59	48.90	-70	12	19.6	18.829	0.053	-0.687	0.125	0.719	0.286
D50NE-301	5	00	23.45	-70	09	31.0	18.831	0.044	0.800	0.104	...	...
D50NW-310	4	59	27.62	-70	07	14.8	18.831	0.035	0.556	0.082	...	...
D50SW-280	4	58	58.75	-70	13	31.4	18.831	0.049	0.112	0.089	...	...
D50SW-284	4	59	17.39	-70	11	53.9	18.831	0.050	0.005	0.089	...	...
D50NE-297	5	00	01.55	-70	10	19.8	18.833	0.050	0.915	0.109	...	...
D50SE-276	5	00	31.00	-70	12	22.5	18.833	0.052	0.754	0.161	...	...
D50SW-265	4	59	30.03	-70	10	57.5	18.833	0.041	1.202	0.143	...	...
D50S-275	4	59	36.47	-70	14	27.1	18.835	0.044	0.440	0.076	...	...
D50NE-302	5	00	11.19	-70	09	07.5	18.836	0.043	0.798	0.099	...	...
D50SW-285	4	59	21.67	-70	11	19.8	18.837	0.049	-0.067	0.083	0.145	0.267
D50SW-283	4	59	37.04	-70	12	13.1	18.838	0.049	0.199	0.124	...	...
D50NW-311	4	59	29.45	-70	10	12.3	18.839	0.035	0.719	0.095	...	...
D50SE-272	5	00	28.68	-70	13	58.7	18.839	0.038	1.071	0.129	...	...
D50SE-279	5	00	14.50	-70	12	53.0	18.839	0.035	0.672	0.096	...	...
D50SW-279	4	59	30.86	-70	11	03.1	18.839	0.043	0.398	0.099	...	...
D50NW-314	4	59	41.87	-70	10	13.5	18.843	0.041	0.057	0.074	...	...
D50S-283	4	59	52.34	-70	11	33.5	18.843	0.050	0.046	0.086	...	...
D50SW-290	4	59	37.36	-70	13	36.2	18.843	0.040	-0.195	0.066	...	...
D50SW-275	4	59	36.84	-70	12	09.5	18.845	0.046	0.853	0.128	...	...
D50SW-286	4	59	30.46	-70	12	40.8	18.846	0.044	0.079	0.083	-0.746	0.177
D50NE-304	5	00	15.02	-70	10	16.1	18.847	0.045	0.971	0.103	...	...
D50S-280	4	59	54.04	-70	12	46.6	18.849	0.048	0.575	0.101	...	...
D50NE-308	5	00	20.01	-70	08	16.8	18.850	0.036	0.922	0.094	...	...
D50NE-323	5	00	18.78	-70	08	53.7	18.850	0.053	-0.127	0.077	-0.139	0.201
D50NW-307	4	59	10.12	-70	08	51.9	18.850	0.052	1.060	0.142	...	...
D50NW-315	4	59	41.05	-70	07	42.1	18.850	0.031	0.200	0.071	...	...
D50S-276	4	59	41.09	-70	13	25.9	18.853	0.048	0.859	0.132	...	...
D50NW-318	4	59	32.50	-70	08	53.5	18.854	0.039	-0.136	0.070	-0.537	0.144
D50SE-285	5	00	35.16	-70	12	12.7	18.854	0.041	0.718	0.109	...	...
D50SE-296	5	00	30.38	-70	11	47.5	18.855	0.035	-0.090	0.062	...	...
D50NE-306	5	00	11.53	-70	08	59.3	18.856	0.058	1.135	0.155	...	...
D50NE-322	5	00	25.00	-70	08	05.2	18.856	0.044	0.020	0.068	...	...
D50SW-282	4	59	04.80	-70	11	35.6	18.856	0.042	0.628	0.104	...	...
D50SW-281	4	59	08.84	-70	12	37.2	18.857	0.036	0.684	0.105	...	...
D50SE-289	5	00	18.96	-70	11	40.4	18.859	0.051	0.426	0.105	...	...
D50NE-313	5	00	24.77	-70	10	05.5	18.860	0.045	0.845	0.102	...	...
D50SE-286	5	00	17.79	-70	13	21.5	18.860	0.036	0.860	0.115	...	...
D50SE-297	5	00	30.02	-70	12	25.7	18.860	0.038	-0.008	0.066	-0.291	0.185
D50SE-295	5	00	43.95	-70	12	56.7	18.861	0.038	0.068	0.065	...	...
D50S-287	5	00	01.80	-70	14	04.4	18.863	0.040	0.182	0.070	-0.288	0.210
D50SE-288	5	00	42.85	-70	10	48.5	18.864	0.111	0.545	0.179	...	...
D50SW-288	4	59	09.99	-70	13	41.7	18.864	0.043	0.404	0.087	...	...
D50NW-325	4	59	14.47	-70	08	52.8	18.866	0.032	-0.166	0.051	-0.431	0.155
D50S-294	4	59	52.64	-70	11	31.2	18.868	0.053	0.002	0.088	...	...
D50NE-316	4	59	52.93	-70	09	45.0	18.869	0.056	0.691	0.112	...	...
D50SW-270	4	59	12.67	-70	11	51.5	18.870	0.039	1.684	0.239	...	...
D50SW-278	4	59	34.81	-70	12	28.4	18.870	0.043	1.388	0.199	...	...
D50NE-325	5	00	23.77	-70	08	17.6	18.872	0.062	0.039	0.088	...	...
D50SW-292	4	59	26.94	-70	11	55.8	18.872	0.045	0.291	0.108	...	...
D50NE-314	4	59	59.65	-70	07	25.5	18.873	0.039	1.011	0.130	...	...
D50NW-317	4	59	04.87	-70	07	30.1	18.873	0.043	0.341	0.080	...	...
D50S-285	4	59	48.33	-70	12	29.1	18.875	0.053	0.505	0.095	...	...
D50S-296	4	59	41.05	-70	12	15.5	18.875	0.054	0.086	0.097	-0.396	0.199
D50S-301	4	59	39.97	-70	12	04.1	18.875	0.046	-0.174	0.072	-0.591	0.120
D50NE-320	4	59	58.84	-70	08	16.8	18.876	0.048	0.565	0.083	...	...
D50SE-290	5	00	35.47	-70	12	44.3	18.876	0.039	0.633	0.080	...	...
D50NE-321	5	00	13.18	-70	10	28.7	18.879	0.132	0.581	0.167	...	...
D50NE-328	4	59	50.18	-70	09	21.3	18.879	0.062	-0.065	0.083	-0.449	0.187

D50SE-293	5	00	31.44	-70	12	29.1	18.879	0.038	0.564	0.103	...	...
D50NW-329	4	59	16.83	-70	08	22.2	18.880	0.026	-0.073	0.060	-0.568	0.177
D50SE-298	5	00	43.22	-70	10	39.1	18.880	0.074	0.269	0.150	...	...
D50NE-329	5	00	13.71	-70	09	42.3	18.884	0.053	-0.117	0.083	-0.095	0.213
D50SE-294	5	00	29.98	-70	11	59.9	18.885	0.048	0.646	0.086	...	...
D50SE-300	5	00	34.67	-70	11	13.2	18.887	0.039	0.380	0.089	...	...
D50NE-318	5	00	18.78	-70	09	56.7	18.889	0.036	0.932	0.131	...	...
D50S-307	4	59	54.16	-70	13	01.7	18.889	0.053	-0.226	0.076	-0.384	0.135
D50SE-307	5	00	21.86	-70	14	12.5	18.891	0.033	-0.034	0.073	-0.514	0.162
D50NE-317	5	00	27.75	-70	08	51.7	18.893	0.038	1.078	0.152	...	...
D50NW-326	4	59	19.74	-70	09	16.7	18.894	0.033	0.466	0.088	...	...
D50NE-319	5	00	11.39	-70	10	10.1	18.895	0.037	1.003	0.118	...	...
D50SE-314	5	00	15.49	-70	11	47.2	18.896	0.034	-0.258	0.056	...	...
D50NW-320	4	59	31.78	-70	07	05.2	18.898	0.038	0.793	0.112	...	...
D50SE-303	5	00	17.69	-70	10	58.8	18.899	0.057	0.494	0.105	...	...
D50S-304	4	59	57.62	-70	13	26.2	18.900	0.052	0.200	0.083	...	...
D50SE-311	5	00	38.50	-70	12	49.4	18.900	0.089	-0.129	0.122	...	...
D50NE-336	4	59	55.97	-70	08	07.4	18.901	0.074	0.045	0.117	...	...
D50NE-343	5	00	28.64	-70	10	40.0	18.901	0.042	-0.133	0.063	...	...
D50SW-294	4	59	26.74	-70	13	27.9	18.903	0.047	0.772	0.135	...	...
D50NE-333	5	00	19.43	-70	07	28.4	18.904	0.045	0.157	0.078	...	...
D50SW-295	4	59	29.40	-70	12	57.9	18.904	0.040	0.671	0.103	...	...
D50NE-326	5	00	05.88	-70	08	44.0	18.905	0.068	0.703	0.142	...	...
D50NW-323	4	59	04.87	-70	10	26.9	18.905	0.056	0.802	0.155	...	...
D50SE-301	5	00	42.79	-70	12	32.7	18.908	0.034	0.862	0.117	...	...
D50SW-301	4	59	37.11	-70	11	49.2	18.908	0.053	0.180	0.096	0.012	0.277
D50NW-334	4	59	08.06	-70	07	33.4	18.909	0.034	0.038	0.066	...	...
D50SW-299	4	58	57.22	-70	13	36.2	18.910	0.054	0.547	0.118	...	...
D50NE-327	5	00	20.94	-70	10	52.7	18.915	0.049	0.867	0.109	...	...
D50NW-324	4	59	16.96	-70	07	17.1	18.915	0.037	1.049	0.111	...	...
D50SE-304	5	00	09.46	-70	14	06.2	18.915	0.050	0.792	0.146	...	...
D50SE-318	5	00	20.52	-70	11	40.6	18.915	0.034	-0.015	0.059	-0.488	0.172
D50SE-319	5	00	45.36	-70	14	06.1	18.915	0.041	-0.023	0.074	...	...
D50NW-333	4	59	09.22	-70	09	43.5	18.916	0.034	0.230	0.078	-0.671	0.204
D50S-313	4	59	39.62	-70	14	30.9	18.916	0.061	-0.009	0.088	...	...
D50SE-308	5	00	12.52	-70	13	46.3	18.917	0.039	0.462	0.088	...	...
D50NE-335	4	59	46.82	-70	09	59.8	18.918	0.062	0.440	0.129	...	...
D50NW-335	4	59	05.51	-70	07	49.2	18.918	0.032	0.209	0.074	...	...
D50SE-310	5	00	32.53	-70	11	16.4	18.919	0.040	0.353	0.081	...	...
D50SW-302	4	58	58.73	-70	12	25.4	18.919	0.043	0.420	0.098	...	...
D50NW-337	4	59	41.66	-70	09	22.0	18.920	0.040	-0.026	0.074	...	...
D50SW-309	4	59	16.64	-70	10	56.8	18.920	0.044	0.081	0.094	...	...
D50SE-309	5	00	32.40	-70	11	30.5	18.922	0.067	0.518	0.121	...	...
D50SW-291	4	59	14.96	-70	12	26.8	18.922	0.047	1.512	0.223	...	...
D50SW-298	4	59	07.32	-70	13	12.8	18.922	0.051	1.003	0.141	...	...
D50SW-300	4	58	55.35	-70	13	29.3	18.922	0.047	0.562	0.110	...	...
D50SW-312	4	59	31.87	-70	11	03.7	18.922	0.048	0.039	0.118	...	...
D50SE-305	5	00	19.69	-70	12	18.6	18.926	0.044	0.965	0.126	...	...
D50SE-312	5	00	11.75	-70	11	43.0	18.926	0.081	0.479	0.120	...	...
D50SW-310	4	59	38.73	-70	13	49.5	18.928	0.055	0.190	0.094	...	...
D50NW-328	4	59	07.84	-70	07	31.3	18.930	0.039	1.089	0.129	...	...
D50SE-323	5	00	20.54	-70	11	20.5	18.930	0.052	0.010	0.089	...	...
D50SW-306	4	59	16.53	-70	14	01.0	18.930	0.093	0.429	0.240	...	...
D50SE-317	5	00	07.05	-70	14	15.4	18.931	0.080	0.422	0.122	...	...
D50NE-341	4	59	48.94	-70	10	20.4	18.932	0.047	0.640	0.100	...	...
D50NW-342	4	59	23.19	-70	10	34.8	18.932	0.036	-0.023	0.068	...	...
D50S-320	5	00	00.29	-70	14	32.9	18.932	0.049	-0.055	0.087	-0.746	0.158
D50NE-332	5	00	08.46	-70	10	44.1	18.933	0.042	0.827	0.110	...	...
D50NW-341	4	59	42.55	-70	09	28.7	18.933	0.034	-0.008	0.072	-0.080	0.237
D50SW-296	4	59	02.88	-70	10	47.6	18.933	0.041	1.353	0.212	...	...
D50NE-337	5	00	02.55	-70	08	09.0	18.934	0.048	0.783	0.130	...	...
D50NE-351	5	00	02.08	-70	08	06.1	18.934	0.056	-0.109	0.083	-0.172	0.259
D50NW-346	4	59	37.71	-70	09	41.2	18.934	0.032	-0.223	0.057	-0.196	0.190
D50NE-345	4	59	54.64	-70	10	02.7	18.935	0.049	0.575	0.111	...	...
D50NE-346	4	59	55.54	-70	08	09.6	18.935	0.054	0.349	0.127	...	...
D50SW-325	4	59	34.34	-70	11	32.1	18.935	0.136	-0.145	0.206	0.076	0.262

D50NE-354	4	59	47.62	-70	09	47.6	18.936	0.052	-0.130	0.076	-0.364	0.174
D50S-312	5	00	01.78	-70	13	52.6	18.938	0.058	0.666	0.131	...	...
D50SE-316	5	00	39.35	-70	11	19.6	18.940	0.038	0.695	0.098	...	...
D50S-317	4	59	44.01	-70	13	09.7	18.941	0.040	0.273	0.101	...	...
D50NE-349	5	00	30.49	-70	09	03.2	18.945	0.060	0.348	0.115	...	...
D50NE-355	5	00	09.81	-70	07	48.2	18.945	0.051	-0.089	0.086	-0.462	0.171
D50NW-348	4	59	23.81	-70	09	10.4	18.945	0.036	-0.044	0.062	-0.413	0.153
D50NE-338	5	00	17.53	-70	10	47.9	18.946	0.059	1.012	0.131	...	...
D50S-315	4	59	55.54	-70	14	39.2	18.948	0.051	0.696	0.122	...	...
D50SW-307	4	58	57.03	-70	12	40.3	18.948	0.048	0.798	0.146	...	...
D50SW-303	4	59	24.26	-70	14	00.2	18.952	0.053	1.177	0.177	...	...
D50NW-339	4	59	42.19	-70	10	14.2	18.953	0.036	0.676	0.099	...	...
D50S-310	4	59	48.27	-70	12	26.1	18.953	0.053	1.060	0.135	...	...
D50SE-322	5	00	45.82	-70	12	39.6	18.953	0.038	0.574	0.094	...	...
D50NE-342	5	00	01.21	-70	08	22.5	18.954	0.051	1.106	0.137	...	...
D50SE-313	5	00	12.45	-70	11	07.9	18.954	0.037	1.093	0.126	...	...
D50SW-315	4	59	25.11	-70	12	04.1	18.954	0.047	0.672	0.141	...	...
D50SE-331	5	00	35.97	-70	14	01.3	18.955	0.054	-0.049	0.081	...	...
D50NE-339	5	00	04.56	-70	09	09.4	18.956	0.045	1.238	0.162	...	...
D50NE-340	5	00	02.68	-70	07	21.5	18.956	0.060	1.201	0.146	...	...
D50NW-338	4	59	19.84	-70	07	50.8	18.956	0.038	0.796	0.121	...	...
D50SE-333	5	00	20.51	-70	11	11.9	18.956	0.037	-0.148	0.067	...	...
D50SW-332	4	59	05.15	-70	11	08.9	18.956	0.045	-0.200	0.079	...	...
D50SE-327	5	00	07.71	-70	14	02.2	18.957	0.047	0.085	0.079	...	...
D50NE-344	4	59	47.88	-70	07	46.6	18.958	0.059	1.104	0.187	...	...
D50S-329	4	59	38.16	-70	14	32.5	18.958	0.111	-0.178	0.142	...	...
D50NE-361	5	00	27.63	-70	10	45.0	18.959	0.047	-0.068	0.075	...	...
D50SE-335	5	00	42.00	-70	13	14.8	18.959	0.057	-0.089	0.106	...	...
D50SE-326	5	00	43.21	-70	11	53.2	18.960	0.039	0.312	0.085	...	...
D50S-328	5	00	05.10	-70	14	29.9	18.962	0.056	-0.002	0.094	...	...
D50SE-325	5	00	07.75	-70	12	05.4	18.962	0.044	0.445	0.091	...	...
D50SW-329	4	59	35.69	-70	13	18.4	18.962	0.047	0.233	0.094	...	...
D50NW-359	4	59	23.26	-70	07	48.3	18.964	0.040	-0.001	0.075	-0.454	0.201
D50NE-366	5	00	01.04	-70	08	10.2	18.969	0.062	0.001	0.092	...	...
D50SW-317	4	58	56.81	-70	11	17.9	18.970	0.054	0.900	0.169	...	...
D50SW-326	4	59	18.13	-70	11	17.9	18.971	0.048	0.641	0.126	...	...
D50SW-328	4	59	30.83	-70	12	04.5	18.971	0.071	0.458	0.166	...	...
D50NE-359	5	00	08.28	-70	08	24.2	18.972	0.052	0.289	0.096	...	...
D50NW-345	4	59	46.86	-70	07	11.2	18.972	0.044	0.716	0.108	...	...
D50NE-358	5	00	22.13	-70	09	52.4	18.973	0.042	0.373	0.088	...	...
D50NW-362	4	59	38.10	-70	09	24.5	18.974	0.051	-0.229	0.079	...	...
D50SE-337	5	00	11.95	-70	11	27.5	18.974	0.041	0.167	0.080	...	...
D50SE-341	5	00	04.65	-70	11	10.9	18.976	0.041	0.058	0.082	...	...
D50SW-322	4	59	37.66	-70	12	57.7	18.976	0.047	0.942	0.168	...	...
D50NW-343	4	59	34.76	-70	10	42.6	18.978	0.040	1.007	0.123	...	...
D50NW-347	4	59	13.96	-70	09	26.6	18.978	0.047	0.756	0.111	...	...
D50NE-350	5	00	16.40	-70	08	45.8	18.979	0.038	1.051	0.126	...	...
D50NW-340	4	59	24.53	-70	07	07.5	18.979	0.053	1.087	0.187	...	...
D50SE-343	5	00	19.69	-70	12	34.4	18.979	0.039	0.078	0.072	...	...
D50NE-368	5	00	17.31	-70	07	50.0	18.980	0.050	0.230	0.090	...	...
D50NW-351	4	59	42.99	-70	08	06.8	18.980	0.038	0.736	0.114	...	...
D50SE-351	5	00	34.51	-70	13	07.7	18.980	0.044	-0.196	0.068	...	...
D50SW-334	4	59	15.12	-70	13	58.0	18.980	0.052	0.255	0.102	-0.397	0.239
D50SW-340	4	59	20.39	-70	13	44.5	18.982	0.046	0.069	0.093	...	...
D50SW-316	4	59	21.74	-70	12	21.5	18.983	0.047	1.323	0.198	...	...
D50NE-364	5	00	01.97	-70	08	17.6	18.984	0.061	0.360	0.101	-0.760	0.255
D50NW-349	4	59	37.11	-70	08	09.7	18.984	0.039	0.850	0.130	...	...
D50SE-347	5	00	09.27	-70	13	53.7	18.985	0.041	0.091	0.070	...	...
D50NW-357	4	59	41.15	-70	09	00.4	18.986	0.034	0.641	0.096	...	...
D50NW-363	4	59	43.35	-70	07	00.3	18.986	0.045	-0.054	0.078	...	...
D50NW-367	4	59	28.19	-70	08	47.5	18.986	0.079	-0.327	0.157	...	...
D50NE-378	5	00	21.49	-70	10	18.1	18.987	0.043	0.067	0.069	...	...
D50SE-354	5	00	23.06	-70	13	16.5	18.988	0.045	-0.159	0.075	-0.354	0.185
D50SE-355	5	00	25.59	-70	11	43.4	18.989	0.061	-0.173	0.092	-0.393	0.166
D50SW-330	4	59	37.18	-70	12	30.9	18.989	0.060	0.578	0.169	...	...
D50SW-342	4	59	04.45	-70	12	24.5	18.990	0.051	0.143	0.113	...	...

D50NE-375	4	59	48.79	-70	10	34.9	18.992	0.055	0.216	0.097	0.144	0.283
D50NE-357	5	00	12.85	-70	07	23.9	18.993	0.045	0.946	0.106	...	...
D50NE-360	4	59	51.00	-70	10	46.7	18.996	0.063	0.869	0.140	...	...
D50S-330	4	59	47.61	-70	13	58.5	18.996	0.058	0.691	0.148	...	...
D50NE-387	5	00	02.20	-70	08	15.2	18.997	0.177	-0.090	0.300	...	...
D50SW-348	4	59	20.94	-70	11	06.1	18.997	0.051	-0.155	0.083	-0.393	0.205
D50NE-370	5	00	12.35	-70	10	14.5	18.998	0.047	0.609	0.146	...	...
D50NE-362	4	59	59.68	-70	08	25.9	19.002	0.047	0.867	0.132	...	...
D50NW-358	4	59	05.67	-70	09	46.2	19.003	0.046	1.001	0.138	...	...
D50NW-364	4	59	40.73	-70	07	24.7	19.003	0.054	0.351	0.111	...	...
D50NE-371	5	00	01.69	-70	07	51.2	19.004	0.045	0.749	0.118	...	...
D50S-342	4	59	40.43	-70	12	17.7	19.006	0.056	0.024	0.092	-0.530	0.189
D50SE-339	5	00	15.05	-70	12	32.7	19.007	0.038	0.849	0.121	...	...
D50SW-324	4	59	34.25	-70	12	54.5	19.008	0.046	1.596	0.234	...	...
D50SW-349	4	59	00.15	-70	13	17.7	19.008	0.053	0.007	0.098	0.113	0.314
D50NE-367	5	00	01.38	-70	09	39.3	19.009	0.051	0.909	0.126	...	...
D50NW-375	4	59	38.38	-70	09	42.9	19.009	0.035	0.009	0.071	...	...
D50S-343	4	59	58.61	-70	14	11.7	19.009	0.053	0.078	0.093	...	...
D50SE-336	5	00	25.08	-70	12	54.8	19.009	0.035	1.070	0.151	...	...
D50SE-349	5	00	43.51	-70	13	56.9	19.009	0.045	0.552	0.101	...	...
D50NE-365	5	00	06.24	-70	09	30.6	19.010	0.047	0.942	0.128	...	...
D50SE-344	5	00	44.58	-70	13	01.0	19.010	0.076	0.715	0.137	...	...
D50SE-357	5	00	03.95	-70	11	50.4	19.010	0.041	0.059	0.079	...	...
D50NE-376	5	00	20.12	-70	10	32.1	19.013	0.058	0.670	0.111	...	...
D50NE-383	4	59	57.68	-70	08	43.0	19.013	0.047	0.503	0.108	...	...
D50NE-363	5	00	28.31	-70	09	49.4	19.014	0.083	1.073	0.182	...	...
D50NE-373	5	00	10.05	-70	09	58.9	19.014	0.052	0.822	0.109	...	...
D50NE-391	4	59	50.11	-70	09	28.1	19.014	0.078	0.059	0.123	...	...
D50SE-350	5	00	32.50	-70	12	22.5	19.014	0.043	0.606	0.110	...	...
D50SE-362	5	00	29.04	-70	12	54.5	19.014	0.041	-0.173	0.089	...	...
D50NE-372	5	00	24.23	-70	09	44.9	19.015	0.058	0.871	0.122	...	...
D50SE-360	5	00	09.00	-70	12	05.2	19.017	0.050	-0.062	0.076	-0.217	0.230
D50NE-393	4	59	46.91	-70	08	16.6	19.018	0.061	-0.049	0.090	-0.730	0.187
D50NE-381	5	00	02.21	-70	09	26.1	19.020	0.064	0.707	0.151	...	...
D50NE-379	5	00	10.80	-70	09	49.3	19.022	0.051	0.867	0.128	...	...
D50NW-379	4	59	06.22	-70	08	07.0	19.022	0.043	0.017	0.079	-0.316	0.229
D50SE-348	5	00	42.44	-70	12	24.5	19.022	0.046	0.887	0.125	...	...
D50SW-352	4	59	31.42	-70	12	06.6	19.022	0.063	0.091	0.125	...	...
D50NW-380	4	59	29.73	-70	08	45.6	19.023	0.045	0.005	0.074	...	...
D50NE-397	5	00	11.91	-70	07	39.0	19.024	0.062	-0.062	0.090	...	...
D50NW-384	4	59	18.56	-70	09	48.7	19.024	0.043	-0.047	0.075	0.303	0.347
D50SE-366	5	00	31.57	-70	12	20.4	19.024	0.058	-0.023	0.093	...	...
D50NE-380	5	00	08.69	-70	08	13.8	19.026	0.051	0.894	0.120	...	...
D50NE-400	5	00	15.66	-70	08	03.1	19.026	0.055	-0.058	0.088	...	...
D50NE-382	4	59	48.52	-70	09	40.1	19.027	0.050	0.850	0.143	...	...
D50NE-377	5	00	12.06	-70	09	27.2	19.028	0.066	1.016	0.138	...	...
D50NE-384	5	00	19.38	-70	07	57.7	19.028	0.044	0.853	0.124	...	...
D50NW-389	4	59	06.14	-70	09	55.4	19.029	0.047	-0.005	0.080	...	...
D50SE-352	5	00	23.44	-70	13	31.7	19.029	0.042	0.902	0.136	...	...
D50NE-396	5	00	11.37	-70	08	46.0	19.030	0.048	0.105	0.082	...	...
D50SW-350	4	59	21.12	-70	12	19.3	19.030	0.048	0.463	0.128	...	...
D50SE-368	5	00	43.11	-70	13	49.6	19.031	0.040	0.036	0.078	...	...
D50SE-369	5	00	11.51	-70	12	55.9	19.032	0.030	0.036	0.064	...	...
D50NE-386	5	00	25.34	-70	09	43.2	19.033	0.039	0.881	0.136	...	...
D50NE-398	4	59	47.12	-70	07	41.2	19.034	0.055	0.135	0.083	...	...
D50SE-353	5	00	17.91	-70	14	16.6	19.034	0.046	0.968	0.155	...	...
D50NE-390	5	00	19.96	-70	09	36.6	19.035	0.051	0.769	0.134	...	...
D50SW-356	4	59	18.09	-70	11	50.9	19.035	0.064	0.115	0.114	-0.650	0.229
D50NW-397	4	59	34.41	-70	10	39.9	19.036	0.050	-0.160	0.086	...	...
D50SW-357	4	59	12.03	-70	11	21.4	19.036	0.057	0.134	0.103	...	...
D50NW-398	4	59	27.48	-70	08	03.4	19.038	0.045	-0.125	0.080	...	...
D50SE-370	5	00	37.10	-70	13	36.6	19.038	0.035	0.174	0.080	...	...
D50SE-378	5	00	20.57	-70	13	56.1	19.039	0.236	-0.159	0.276	...	...
D50SW-333	4	59	14.12	-70	10	47.1	19.039	0.053	1.642	0.277	...	...
D50SW-365	4	59	26.72	-70	13	24.6	19.039	0.068	-0.316	0.097	...	...
D50SE-367	5	00	19.00	-70	13	22.1	19.040	0.091	0.324	0.138	...	...

D50SE-373	5	00	23.88	-70	13	30.0	19.040	0.043	0.020	0.087	...	...
D50S-347	4	59	33.29	-70	14	37.0	19.042	0.056	0.554	0.133	...	...
D50SW-347	4	59	25.14	-70	10	43.2	19.044	0.051	1.040	0.204	...	...
D50NE-407	5	00	18.58	-70	08	58.6	19.045	0.067	0.105	0.135	-0.708	0.230
D50SE-358	5	00	37.96	-70	11	07.9	19.046	0.043	0.908	0.137	...	...
D50NW-370	4	59	30.59	-70	08	48.1	19.047	0.042	0.962	0.131	...	...
D50NW-385	4	59	26.33	-70	09	19.2	19.049	0.051	0.538	0.117	...	...
D50NW-376	4	59	24.90	-70	08	16.5	19.050	0.051	0.965	0.147	...	...
D50NW-382	4	59	05.96	-70	07	22.4	19.051	0.057	0.633	0.128	...	...
D50NW-396	4	59	22.27	-70	10	28.2	19.051	0.036	0.217	0.077	...	...
D50S-353	4	59	59.47	-70	14	28.1	19.051	0.053	0.570	0.130	...	...
D50NW-378	4	59	06.35	-70	09	05.2	19.052	0.038	0.842	0.122	...	...
D50SW-363	4	59	20.59	-70	13	16.3	19.052	0.059	0.122	0.110	...	...
D50SW-345	4	59	31.36	-70	12	42.0	19.054	0.062	1.373	0.231	...	...
D50NE-412	4	59	59.34	-70	10	14.0	19.056	0.052	-0.033	0.079	-0.207	0.222
D50NW-400	4	59	33.92	-70	08	14.8	19.057	0.036	0.083	0.069	...	...
D50S-350	4	59	48.99	-70	13	56.7	19.057	0.066	0.811	0.162	...	...
D50SE-359	5	00	24.98	-70	13	26.8	19.057	0.046	0.987	0.151	...	...
D50SE-363	5	00	03.82	-70	14	09.9	19.057	0.040	0.827	0.151	-1.004	0.324
D50SE-381	5	00	20.02	-70	12	02.9	19.057	0.035	-0.046	0.065	...	...
D50SW-354	4	59	26.29	-70	12	22.2	19.057	0.058	0.828	0.147	...	...
D50NE-399	5	00	08.43	-70	08	22.1	19.058	0.046	0.689	0.122	...	...
D50S-367	4	59	46.74	-70	13	40.7	19.058	0.050	-0.040	0.085	...	...
D50NE-421	5	00	11.02	-70	09	21.4	19.059	0.063	-0.246	0.087	-0.424	0.156
D50SE-372	5	00	10.16	-70	12	21.4	19.062	0.042	0.656	0.118	...	...
D50SE-380	5	00	09.30	-70	14	11.1	19.063	0.042	0.098	0.097	...	...
D50NW-403	4	59	39.56	-70	07	29.5	19.065	0.039	0.103	0.089	...	...
D50NW-405	4	59	09.06	-70	10	24.4	19.065	0.044	0.016	0.083	-0.556	0.193
D50SE-374	5	00	44.52	-70	10	47.4	19.066	0.045	0.582	0.099	...	...
D50SE-371	5	00	42.35	-70	14	15.9	19.067	0.046	0.767	0.115	...	...
D50SW-369	4	59	29.70	-70	13	41.0	19.069	0.045	0.130	0.088	...	...
D50NE-395	5	00	18.57	-70	09	38.8	19.070	0.046	1.113	0.137	...	...
D50SE-377	5	00	16.37	-70	13	20.2	19.070	0.081	0.579	0.137	...	...
D50SE-386	5	00	39.33	-70	12	21.6	19.070	0.048	-0.010	0.083	-0.337	0.235
D50NE-401	4	59	52.64	-70	09	45.0	19.071	0.088	0.932	0.182	...	...
D50NE-420	5	00	06.20	-70	07	43.1	19.072	0.062	0.130	0.108	...	...
D50SE-376	5	00	19.29	-70	11	41.5	19.073	0.055	0.687	0.145	...	...
D50SE-391	5	00	17.83	-70	12	45.7	19.074	0.060	-0.056	0.090	...	...
D50NW-399	4	59	05.74	-70	07	21.1	19.075	0.058	0.547	0.124	...	...
D50SE-384	5	00	19.51	-70	11	50.4	19.076	0.068	0.170	0.120	-1.109	0.177
D50NW-415	4	59	18.54	-70	08	16.2	19.077	0.040	-0.019	0.081	...	...
D50NW-424	4	59	07.91	-70	07	39.8	19.078	0.107	-0.534	0.129	-0.139	0.164
D50NE-425	5	00	18.38	-70	10	03.1	19.079	0.067	0.013	0.111	-0.098	0.277
D50NW-388	4	59	05.39	-70	08	15.8	19.080	0.041	1.194	0.148	...	...
D50NE-418	5	00	07.26	-70	07	22.2	19.081	0.066	0.438	0.117	...	...
D50NE-404	5	00	10.12	-70	08	28.6	19.082	0.053	1.113	0.175	...	...
D50NW-416	4	59	36.17	-70	09	47.1	19.082	0.043	0.046	0.085	...	...
D50NE-409	4	59	49.92	-70	10	23.7	19.083	0.052	0.790	0.127	...	...
D50NE-426	5	00	30.99	-70	10	44.4	19.083	0.067	0.027	0.101	...	...
D50SW-362	4	59	01.66	-70	11	57.8	19.083	0.057	0.846	0.140	...	...
D50NE-408	4	59	50.30	-70	10	50.3	19.084	0.057	0.877	0.135	...	...
D50S-373	4	59	41.32	-70	11	11.5	19.084	0.057	0.080	0.099	...	...
D50NE-405	4	59	54.86	-70	09	44.1	19.085	0.045	1.113	0.177	...	...
D50SE-401	5	00	42.43	-70	10	43.7	19.086	0.049	-0.089	0.072	...	...
D50SE-403	5	00	15.99	-70	11	55.3	19.086	0.048	-0.127	0.089	...	...
D50SW-372	4	58	57.72	-70	11	16.6	19.086	0.058	0.180	0.107	-0.850	0.209
D50NE-429	4	59	48.85	-70	09	05.6	19.087	0.055	-0.030	0.087	...	...
D50SW-367	4	59	24.13	-70	11	27.6	19.087	0.056	0.677	0.144	...	...
D50NE-438	5	00	31.05	-70	10	46.7	19.090	0.078	-0.349	0.105	...	...
D50SW-337	4	59	03.91	-70	13	40.9	19.092	0.061	2.702	0.695	...	...
D50SW-378	4	59	09.93	-70	12	08.3	19.092	0.056	0.105	0.107	...	...
D50NW-419	4	59	42.63	-70	09	12.8	19.093	0.049	0.120	0.080	...	...
D50S-368	4	59	33.91	-70	14	37.9	19.093	0.050	0.696	0.128	...	...
D50SW-381	4	59	27.48	-70	13	55.7	19.093	0.051	-0.022	0.095	...	...
D50NE-431	4	59	54.52	-70	10	09.2	19.094	0.053	-0.045	0.079	...	...
D50SE-398	5	00	27.75	-70	13	51.2	19.095	0.067	0.234	0.107	...	...

D50SW-373	4	59	12.63	-70	11	24.1	19.095	0.055	0.360	0.115	...	...
D50NE-416	5	00	17.90	-70	10	28.1	19.097	0.054	0.814	0.156	...	...
D50SE-400	5	00	18.26	-70	12	48.5	19.097	0.055	0.169	0.099	...	...
D50NE-414	5	00	30.13	-70	08	56.7	19.098	0.074	0.879	0.142	...	...
D50NE-439	5	00	25.82	-70	07	26.5	19.099	0.067	-0.175	0.098	-0.520	0.191
D50SE-392	5	00	27.94	-70	13	14.9	19.100	0.050	0.547	0.113	...	...
D50NE-432	4	59	48.91	-70	09	58.2	19.101	0.057	0.067	0.094	...	...
D50SE-394	5	00	39.42	-70	13	39.9	19.101	0.051	0.533	0.125	...	...
D50NE-433	5	00	02.98	-70	08	57.3	19.102	0.061	0.049	0.095	...	...
D50S-380	5	00	00.54	-70	12	56.1	19.102	0.068	0.005	0.111	...	...
D50SE-382	5	00	28.53	-70	11	06.9	19.102	0.049	0.939	0.162	...	...
D50SE-407	5	00	02.87	-70	13	15.8	19.102	0.053	0.002	0.092	...	...
D50SE-385	5	00	25.50	-70	11	45.4	19.104	0.065	0.807	0.179	...	...
D50NW-413	4	59	25.99	-70	09	17.7	19.106	0.045	0.699	0.119	...	...
D50SE-395	5	00	24.26	-70	11	59.5	19.108	0.064	0.677	0.124	...	...
D50SE-393	5	00	40.83	-70	14	19.3	19.109	0.057	0.734	0.140	...	...
D50SW-382	4	59	12.80	-70	12	58.6	19.109	0.063	0.359	0.127	...	...
D50SW-384	4	59	34.80	-70	13	57.3	19.110	0.058	0.323	0.110	...	...
D50NW-441	4	59	06.02	-70	10	08.5	19.111	0.269	-0.439	0.327	...	...
D50NE-417	5	00	22.37	-70	08	54.9	19.112	0.063	1.166	0.199	...	...
D50NW-408	4	59	31.33	-70	08	32.4	19.112	0.049	1.036	0.192	...	...
D50NW-417	4	59	07.65	-70	07	38.9	19.112	0.077	0.701	0.242	...	...
D50SE-420	5	00	38.75	-70	13	47.4	19.112	0.208	-0.429	0.245	...	...
D50SW-390	4	59	24.32	-70	11	14.6	19.112	0.081	0.240	0.137	...	...
D50SW-391	4	59	36.87	-70	13	33.6	19.113	0.049	0.132	0.091	...	...
D50NE-444	5	00	16.45	-70	09	29.0	19.114	0.052	-0.108	0.086	...	...
D50NW-435	4	59	04.29	-70	10	15.0	19.115	0.053	-0.225	0.079	-0.395	0.190
D50NW-414	4	59	11.53	-70	08	15.0	19.116	0.030	0.907	0.095	...	...
D50NW-431	4	59	05.70	-70	08	02.0	19.116	0.051	0.023	0.086	...	...
D50SE-396	5	00	33.13	-70	14	08.4	19.116	0.045	0.816	0.143	...	...
D50SW-385	4	59	35.36	-70	13	52.5	19.116	0.053	0.457	0.133	...	...
D50SE-387	5	00	03.49	-70	14	00.7	19.117	0.047	1.055	0.169	...	...
D50S-386	4	59	57.64	-70	13	29.4	19.118	0.065	-0.029	0.094	...	...
D50S-392	4	59	59.26	-70	14	37.3	19.119	0.060	-0.130	0.090	...	...
D50SE-405	5	00	10.27	-70	11	18.2	19.119	0.084	0.420	0.151	...	...
D50SE-422	5	00	22.00	-70	11	49.4	19.119	0.168	-0.335	0.278	...	...
D50SE-402	5	00	44.36	-70	13	20.2	19.120	0.044	0.702	0.121	...	...
D50NW-434	4	59	40.13	-70	08	02.2	19.122	0.053	-0.025	0.089	...	...
D50NW-438	4	59	07.26	-70	10	05.3	19.122	0.054	-0.170	0.098	-0.384	0.226
D50SW-398	4	59	14.94	-70	13	24.0	19.124	0.058	0.113	0.106	...	...
D50NW-446	4	59	26.35	-70	10	25.9	19.128	0.114	-0.330	0.137	...	...
D50SW-383	4	59	26.60	-70	13	01.8	19.128	0.058	0.777	0.167	...	...
D50SW-395	4	59	15.02	-70	12	30.7	19.128	0.090	0.290	0.145	...	...
D50NE-449	5	00	08.26	-70	09	35.3	19.131	0.059	0.057	0.096	...	...
D50SE-425	5	00	12.72	-70	13	14.3	19.131	0.049	-0.079	0.083	...	...
D50NE-437	5	00	06.35	-70	10	07.5	19.132	0.053	0.624	0.121	...	...
D50NE-440	5	00	06.86	-70	07	18.8	19.132	0.054	0.572	0.113	...	...
D50NE-453	4	59	53.83	-70	08	08.3	19.132	0.068	-0.059	0.207	...	...
D50NW-444	4	59	35.40	-70	10	08.6	19.132	0.049	-0.181	0.075	-0.641	0.196
D50NE-434	5	00	01.25	-70	09	23.7	19.134	0.062	0.757	0.113	...	...
D50S-391	4	59	53.89	-70	12	48.6	19.134	0.063	0.213	0.108	...	...
D50NE-461	4	59	49.78	-70	09	57.3	19.135	0.053	-0.187	0.081	-0.253	0.219
D50NE-457	5	00	05.24	-70	10	28.3	19.136	0.053	-0.064	0.094	-0.126	0.305
D50NW-440	4	59	31.25	-70	10	18.8	19.137	0.049	0.148	0.101	...	...
D50NE-445	5	00	17.44	-70	10	17.6	19.139	0.052	0.374	0.121	...	...
D50NW-436	4	59	23.68	-70	10	34.7	19.139	0.051	0.315	0.092	...	...
D50NE-441	5	00	26.68	-70	07	16.4	19.140	0.058	0.709	0.122	...	...
D50NE-436	4	59	57.91	-70	09	51.3	19.142	0.053	0.906	0.143	...	...
D50NE-459	5	00	28.38	-70	08	40.1	19.142	0.054	0.040	0.096	...	...
D50NW-442	4	59	21.08	-70	07	00.8	19.142	0.053	0.242	0.104	...	...
D50SW-376	4	59	22.73	-70	13	51.4	19.143	0.057	1.359	0.228	...	...
D50S-405	4	59	59.99	-70	13	15.6	19.144	0.063	-0.009	0.107	...	...
D50SW-411	4	59	19.89	-70	14	05.4	19.144	0.096	-0.205	0.128	...	...
D50NE-458	5	00	19.51	-70	10	52.8	19.145	0.066	0.143	0.099	...	...
D50NW-448	4	59	26.14	-70	09	21.3	19.145	0.056	-0.053	0.095	...	...
D50SE-429	5	00	04.85	-70	11	38.1	19.145	0.056	0.189	0.095	...	...

D50NE-464	5	00	02.01	-70	07	34.6	19.147	0.061	0.009	0.095	...	...
D50SE-410	5	00	15.61	-70	11	01.6	19.147	0.048	0.829	0.146	...	...
D50SW-407	4	59	06.36	-70	13	22.1	19.147	0.057	0.060	0.109	...	...
D50NE-465	5	00	21.43	-70	07	30.5	19.149	0.062	-0.008	0.095	...	...
D50SE-417	5	00	08.62	-70	12	55.6	19.149	0.057	0.559	0.112	...	...
D50SE-411	5	00	43.24	-70	10	37.4	19.150	0.092	0.868	0.183	...	...
D50SE-413	5	00	17.94	-70	14	10.2	19.151	0.049	0.792	0.127	...	...
D50SW-399	4	59	22.77	-70	11	28.4	19.151	0.054	0.644	0.160	-0.298	0.502
D50NE-455	5	00	27.09	-70	08	54.4	19.152	0.053	0.344	0.110	...	...
D50NW-450	4	59	23.98	-70	07	41.5	19.152	0.044	0.108	0.085	...	...
D50S-387	4	59	52.54	-70	14	29.9	19.152	0.069	0.772	0.152	...	...
D50SE-443	5	00	16.47	-70	14	07.2	19.152	0.056	-0.022	0.094	...	...
D50NE-443	5	00	23.15	-70	09	51.2	19.153	0.053	0.841	0.145	...	...
D50NW-423	4	59	22.37	-70	07	25.2	19.155	0.045	1.282	0.195	...	...
D50S-406	4	59	32.18	-70	14	20.8	19.155	0.068	0.171	0.114	...	...
D50SE-414	5	00	33.64	-70	13	48.9	19.155	0.049	0.879	0.153	...	...
D50NE-466	5	00	20.08	-70	09	44.2	19.156	0.069	0.161	0.112	...	...
D50SE-441	5	00	12.91	-70	12	49.0	19.156	0.046	0.102	0.085	...	...
D50SW-414	4	58	56.81	-70	13	45.6	19.156	0.067	0.015	0.115	...	...
D50NW-449	4	59	16.38	-70	09	00.1	19.158	0.097	0.249	0.138	...	...
D50NW-453	4	59	10.11	-70	09	37.2	19.158	0.038	0.138	0.078	...	...
D50SW-413	4	59	00.03	-70	12	46.9	19.159	0.106	0.076	0.221	...	...
D50NE-471	5	00	15.63	-70	09	48.0	19.160	0.059	0.089	0.098	...	...
D50SE-448	5	00	02.67	-70	12	13.1	19.160	0.053	-0.053	0.090	...	...
D50NE-448	5	00	28.77	-70	09	09.8	19.161	0.054	0.838	0.137	...	...
D50NE-479	5	00	21.41	-70	10	28.8	19.161	0.058	-0.038	0.086	...	...
D50SE-427	5	00	04.36	-70	13	21.8	19.161	0.048	0.610	0.123	...	...
D50NE-477	5	00	11.19	-70	09	34.8	19.162	0.065	-0.013	0.093	...	...
D50NW-462	4	59	16.55	-70	08	42.1	19.162	0.054	-0.048	0.098	...	...
D50SE-421	5	00	24.83	-70	11	33.9	19.162	0.042	0.718	0.116	...	...
D50SE-447	5	00	29.95	-70	12	46.7	19.162	0.051	0.063	0.091	...	...
D50SE-419	5	00	37.56	-70	11	19.0	19.163	0.049	0.818	0.126	...	...
D50SE-428	5	00	14.87	-70	11	37.1	19.163	0.055	0.649	0.165	...	...
D50NE-450	4	59	47.20	-70	07	20.4	19.164	0.050	0.786	0.129	...	...
D50NW-447	4	59	36.42	-70	07	13.7	19.165	0.045	0.486	0.102	...	...
D50NW-472	4	59	14.49	-70	09	20.0	19.165	0.057	-0.320	0.083	...	...
D50SE-431	5	00	34.89	-70	11	05.4	19.165	0.054	0.593	0.140	...	...
D50NE-452	5	00	17.96	-70	07	58.4	19.166	0.054	0.737	0.124	...	...
D50NE-451	5	00	06.21	-70	09	10.2	19.168	0.065	0.849	0.143	...	...
D50NE-460	4	59	53.83	-70	09	57.4	19.168	0.071	0.609	0.223	...	...
D50SE-452	5	00	07.66	-70	11	12.3	19.168	0.062	-0.019	0.105	-0.008	0.314
D50SE-455	5	00	20.20	-70	11	28.4	19.168	0.058	-0.095	0.086	...	...
D50NE-454	5	00	07.52	-70	08	06.7	19.169	0.056	0.782	0.138	...	...
D50S-412	4	59	48.49	-70	14	41.7	19.169	0.062	0.044	0.102	...	...
D50SW-431	4	59	18.77	-70	11	33.4	19.170	0.056	-0.505	0.091	...	...
D50NE-476	4	59	54.90	-70	09	37.4	19.171	0.105	0.217	0.199	-1.250	0.299
D50NE-491	5	00	10.47	-70	08	30.2	19.172	0.062	-0.237	0.090	...	...
D50S-389	4	59	45.83	-70	13	31.8	19.172	0.074	1.144	0.253	-0.913	0.472
D50SE-434	5	00	23.05	-70	11	35.0	19.173	0.049	0.652	0.118	...	...
D50SW-408	4	59	30.18	-70	11	37.7	19.173	0.076	0.627	0.169	...	...
D50NW-464	4	59	24.84	-70	07	24.0	19.174	0.043	0.162	0.088	...	...
D50S-401	5	00	06.84	-70	14	33.7	19.174	0.071	0.835	0.176	...	...
D50SE-430	5	00	23.66	-70	12	23.1	19.174	0.055	0.842	0.153	...	...
D50NW-468	4	59	34.40	-70	10	23.6	19.177	0.037	0.020	0.084	...	...
D50SE-423	5	00	29.88	-70	11	03.8	19.177	0.056	1.009	0.168	...	...
D50SE-436	5	00	28.07	-70	14	09.0	19.177	0.050	0.685	0.137	...	...
D50SW-428	4	59	28.77	-70	11	51.9	19.177	0.117	-0.262	0.157	...	...
D50NW-469	4	59	41.95	-70	09	42.4	19.180	0.052	0.033	0.091	...	...
D50NW-471	4	59	34.50	-70	10	30.8	19.180	0.047	0.032	0.084	...	...
D50SE-432	5	00	02.21	-70	14	05.2	19.180	0.072	0.918	0.143	...	...
D50S-429	4	59	43.09	-70	11	28.5	19.181	0.066	-0.207	0.096	...	...
D50NE-467	5	00	27.86	-70	07	44.8	19.182	0.051	0.775	0.126	...	...
D50SE-461	5	00	42.75	-70	13	30.9	19.182	0.053	0.003	0.091	...	...
D50SW-424	4	59	02.73	-70	12	54.6	19.182	0.057	0.019	0.100	...	...
D50NW-466	4	59	27.74	-70	07	11.1	19.183	0.045	0.258	0.097	...	...
D50NE-468	5	00	30.78	-70	08	20.9	19.189	0.060	0.912	0.173	...	...

D50SW-430	4	59	06.18	-70	13	04.8	19.189	0.064	-0.038	0.107	-0.849	0.195
D50NW-474	4	59	40.54	-70	08	32.2	19.190	0.053	0.149	0.095	...	...
D50SE-469	5	00	36.69	-70	11	31.0	19.190	0.052	-0.147	0.087	...	...
D50NE-463	5	00	07.11	-70	08	58.0	19.191	0.050	1.038	0.169	...	...
D50NE-469	5	00	14.83	-70	09	35.3	19.191	0.058	0.897	0.143	...	...
D50NW-479	4	59	21.32	-70	09	59.5	19.191	0.155	0.079	0.186	...	...
D50SE-465	5	00	39.61	-70	13	33.2	19.191	0.073	0.063	0.146	...	...
D50SW-404	4	58	58.90	-70	11	10.9	19.191	0.096	1.365	0.290	...	...
D50SW-425	4	59	15.39	-70	11	30.4	19.191	0.059	0.163	0.120	-1.073	0.191
D50SE-468	5	00	43.71	-70	11	12.9	19.192	0.063	-0.095	0.101	-0.555	0.204
D50SW-429	4	59	29.35	-70	12	16.4	19.192	0.053	0.062	0.105	-0.520	0.255
D50NE-484	5	00	07.60	-70	09	46.3	19.193	0.072	0.555	0.134	...	...
D50NW-477	4	59	35.09	-70	09	28.3	19.193	0.128	0.168	0.164	...	...
D50SE-445	5	00	05.19	-70	14	14.7	19.193	0.050	0.802	0.145	...	...
D50SE-460	5	00	21.55	-70	12	06.5	19.193	0.056	0.300	0.112	...	...
D50NE-495	4	59	54.68	-70	08	32.7	19.194	0.097	0.203	0.140	...	...
D50NE-497	5	00	21.54	-70	09	14.4	19.194	0.053	0.020	0.092	...	...
D50NW-452	4	59	35.22	-70	10	37.2	19.194	0.057	0.997	0.177	...	...
D50NW-485	4	59	24.48	-70	09	10.7	19.194	0.051	0.004	0.083	...	...
D50NW-489	4	59	05.29	-70	09	32.4	19.195	0.065	-0.094	0.122	...	...
D50SW-396	4	59	00.93	-70	11	14.4	19.195	0.115	1.799	0.399	...	...
D50NE-480	5	00	02.91	-70	08	15.2	19.196	0.067	0.733	0.134	...	...
D50NE-492	5	00	00.18	-70	08	31.2	19.198	0.238	0.346	0.281	...	...
D50SE-454	5	00	36.21	-70	12	08.3	19.198	0.048	0.641	0.125	...	...
D50NE-483	4	59	48.69	-70	09	35.2	19.199	0.048	0.737	0.128	...	...
D50SE-437	5	00	41.19	-70	12	01.8	19.201	0.046	1.240	0.191	...	...
D50NE-473	5	00	01.29	-70	09	33.8	19.202	0.055	1.022	0.167	...	...
D50SE-457	5	00	38.39	-70	13	09.6	19.203	0.065	0.635	0.135	...	...
D50NE-475	4	59	54.04	-70	09	13.7	19.204	0.055	1.011	0.167	...	...
D50SW-435	4	59	14.86	-70	10	49.5	19.204	0.109	0.168	0.190	...	...
D50SW-437	4	59	18.90	-70	11	09.2	19.204	0.068	0.124	0.110	...	...
D50NW-492	4	59	22.63	-70	10	43.0	19.205	0.067	0.052	0.098	...	...
D50SW-436	4	59	30.20	-70	11	04.4	19.205	0.060	0.160	0.117	...	...
D50NW-467	4	59	10.93	-70	10	02.4	19.206	0.056	0.795	0.210	...	...
D50NW-499	4	59	37.66	-70	08	46.3	19.206	0.045	-0.084	0.075	...	...
D50NE-503	5	00	19.66	-70	08	05.4	19.207	0.061	0.186	0.310	...	...
D50SE-475	5	00	28.73	-70	13	19.3	19.207	0.055	0.112	0.109	...	...
D50NW-455	4	59	16.81	-70	07	45.9	19.209	0.044	1.313	0.227	...	...
D50SE-478	5	00	39.26	-70	14	06.2	19.209	0.053	0.062	0.093	...	...
D50NE-486	4	59	47.51	-70	08	17.6	19.210	0.058	0.924	0.189	...	...
D50SE-463	5	00	36.10	-70	11	14.2	19.210	0.046	0.589	0.128	...	...
D50NW-459	4	59	28.93	-70	10	45.3	19.211	0.063	1.191	0.428	...	...
D50NE-489	5	00	14.62	-70	10	39.5	19.212	0.056	0.758	0.128	...	...
D50NE-508	5	00	16.49	-70	10	43.2	19.212	0.120	0.159	0.149	...	...
D50NE-511	5	00	21.68	-70	07	52.8	19.213	0.076	0.132	0.115	...	...
D50SW-412	4	59	24.59	-70	13	44.6	19.214	0.099	1.422	0.307	...	...
D50NW-496	4	59	39.38	-70	09	11.6	19.215	0.044	0.239	0.110	...	...
D50NE-502	4	59	51.01	-70	09	31.9	19.217	0.070	0.413	0.121	-0.827	0.260
D50SE-464	5	00	22.06	-70	13	08.5	19.217	0.042	0.690	0.131	...	...
D50NE-517	4	59	54.63	-70	07	40.6	19.220	0.074	0.034	0.105	...	...
D50SE-462	5	00	17.43	-70	11	24.9	19.220	0.060	0.859	0.176	...	...
D50SE-467	5	00	29.12	-70	12	35.6	19.220	0.053	0.575	0.111	...	...
D50SE-485	5	00	10.96	-70	13	49.3	19.220	0.087	-0.024	0.128	...	...
D50SW-438	4	59	15.62	-70	11	14.4	19.222	0.054	0.432	0.128	...	...
D50SE-488	5	00	16.45	-70	11	03.3	19.223	0.090	-0.041	0.121	...	...
D50SE-490	5	00	43.08	-70	10	48.0	19.223	0.158	-0.089	0.208	...	...
D50NE-519	5	00	05.60	-70	08	44.2	19.225	0.094	0.122	0.146	...	...
D50NE-525	5	00	13.53	-70	09	06.2	19.226	0.061	-0.076	0.095	...	...
D50SW-443	4	58	58.04	-70	14	02.4	19.228	0.057	0.253	0.126	...	...
D50NE-499	5	00	03.05	-70	09	54.4	19.229	0.062	0.771	0.180	...	...
D50NW-490	4	59	12.30	-70	07	15.3	19.229	0.049	0.674	0.117	...	...
D50SE-495	5	00	09.03	-70	14	17.6	19.232	0.090	-0.060	0.132	...	...
D50NE-490	4	59	50.27	-70	08	29.2	19.234	0.059	1.227	0.198	...	...
D50NE-513	5	00	00.30	-70	07	46.0	19.234	0.059	0.498	0.136	...	...
D50S-458	4	59	55.71	-70	12	41.1	19.234	0.059	0.118	0.101	...	...
D50SE-502	5	00	05.79	-70	12	58.2	19.234	0.051	-0.201	0.087	...	...

D50NE-505	4	59	59.28	-70	08	56.7	19.236	0.057	0.813	0.136	...	...
D50SE-476	5	00	29.25	-70	14	12.2	19.236	0.050	0.791	0.149	...	...
D50NE-496	4	59	49.77	-70	09	18.8	19.237	0.052	1.012	0.150	...	...
D50NE-500	5	00	27.57	-70	08	28.9	19.237	0.062	0.952	0.164	...	...
D50SW-456	4	59	05.78	-70	11	40.4	19.238	0.103	-0.016	0.151	...	...
D50NW-520	4	59	09.48	-70	09	56.5	19.239	0.056	-0.014	0.099	...	...
D50NE-518	4	59	52.99	-70	07	40.1	19.240	0.077	0.491	0.202	...	...
D50NW-521	4	59	39.33	-70	10	38.6	19.240	0.055	0.030	0.109	...	...
D50S-462	4	59	30.00	-70	14	34.0	19.240	0.060	0.154	0.111	...	...
D50SE-491	5	00	26.00	-70	11	23.4	19.240	0.058	0.268	0.113	...	...
D50SW-452	4	59	30.62	-70	14	09.9	19.240	0.061	0.192	0.132	...	...
D50NE-504	4	59	53.26	-70	07	43.7	19.241	0.058	0.920	0.149	...	...
D50NW-514	4	59	29.43	-70	10	08.4	19.241	0.047	0.307	0.117	...	...
D50NW-524	4	59	23.15	-70	09	33.4	19.241	0.061	0.002	0.105	...	...
D50S-463	4	59	47.80	-70	13	24.3	19.242	0.073	0.139	0.143	...	...
D50NE-507	5	00	28.10	-70	08	18.0	19.243	0.066	0.935	0.194	...	...
D50NE-526	4	59	54.13	-70	08	21.2	19.243	0.070	0.301	0.119	...	...
D50NW-506	4	59	37.38	-70	09	22.1	19.243	0.059	0.621	0.153	...	...
D50NW-532	4	59	17.09	-70	10	04.1	19.245	0.054	-0.013	0.090	...	...
D50SE-472	5	00	23.15	-70	12	02.9	19.245	0.048	1.054	0.169	...	...
D50NE-509	4	59	51.50	-70	09	32.8	19.246	0.081	0.941	0.178	...	...
D50NW-516	4	59	30.77	-70	07	34.5	19.246	0.086	0.292	0.134	...	...
D50SE-508	5	00	33.22	-70	10	39.5	19.248	0.054	-0.035	0.098	...	...
D50NE-523	5	00	13.05	-70	08	18.9	19.249	0.062	0.634	0.152	...	...
D50NW-531	4	59	42.36	-70	08	57.1	19.249	0.045	0.114	0.090	...	...
D50SW-464	4	58	56.43	-70	12	29.0	19.249	0.057	-0.309	0.093	...	...
D50NE-531	4	59	58.32	-70	08	21.3	19.250	0.067	0.068	0.115	...	...
D50SE-497	5	00	09.05	-70	13	35.6	19.250	0.069	0.339	0.117	...	...
D50NE-521	5	00	00.55	-70	09	36.0	19.251	0.055	0.699	0.140	...	...
D50NW-503	4	59	21.62	-70	07	17.7	19.251	0.048	0.836	0.167	...	...
D50NW-548	4	59	36.29	-70	10	08.5	19.251	0.054	-0.212	0.087	0.283	0.394
D50SW-453	4	59	13.25	-70	12	45.9	19.252	0.071	0.441	0.173	...	...
D50SW-457	4	59	18.23	-70	13	56.9	19.252	0.064	0.145	0.122	...	...
D50NW-511	4	59	26.80	-70	08	09.5	19.253	0.021	0.783	0.105	...	...
D50NW-530	4	59	10.83	-70	10	27.7	19.253	0.041	0.212	0.177	...	...
D50SE-510	5	00	42.04	-70	11	40.0	19.253	0.044	0.075	0.090	...	...
D50NE-514	5	00	04.67	-70	10	46.2	19.254	0.069	0.885	0.151	...	...
D50NW-509	4	59	09.61	-70	10	15.7	19.254	0.061	0.823	0.158	...	...
D50NW-529	4	59	26.89	-70	10	06.2	19.254	0.042	0.263	0.097	...	...
D50NW-538	4	59	13.13	-70	09	30.7	19.254	0.034	0.033	0.075	-0.419	0.275
D50SE-483	5	00	41.19	-70	13	55.8	19.256	0.055	0.926	0.162	...	...
D50SE-493	5	00	27.01	-70	12	38.6	19.256	0.056	0.632	0.115	...	...
D50SE-498	5	00	18.20	-70	11	35.7	19.256	0.058	0.447	0.120	...	...
D50SE-501	5	00	28.74	-70	12	42.3	19.257	0.063	0.345	0.146	...	...
D50SE-512	5	00	38.94	-70	12	11.4	19.258	0.064	0.051	0.111	...	...
D50SE-525	5	00	26.73	-70	12	56.1	19.259	0.088	-0.208	0.118	...	...
D50SW-427	4	59	30.63	-70	11	21.9	19.259	0.066	1.687	0.408	...	...
D50NW-546	4	59	33.60	-70	10	07.1	19.260	0.055	0.028	0.092	...	...
D50S-473	4	59	47.51	-70	13	23.3	19.260	0.081	0.206	0.159	...	...
D50SE-513	5	00	35.76	-70	13	57.9	19.260	0.065	0.088	0.105	...	...
D50SE-520	5	00	37.46	-70	11	41.7	19.261	0.053	-0.056	0.088	...	...
D50NE-537	4	59	50.95	-70	09	46.3	19.262	0.056	0.156	0.091	...	...
D50SE-503	5	00	28.19	-70	12	03.6	19.263	0.078	0.474	0.238	...	...
D50SW-460	4	59	09.18	-70	11	20.0	19.263	0.062	0.360	0.150	...	...
D50NW-549	4	59	37.69	-70	07	59.8	19.265	0.049	0.038	0.103	...	...
D50SW-470	4	59	21.82	-70	12	08.6	19.265	0.052	-0.192	0.097	...	...
D50NW-552	4	59	19.31	-70	10	07.4	19.266	0.051	0.053	0.098	...	...
D50SE-505	5	00	37.86	-70	12	44.6	19.266	0.050	0.458	0.119	...	...
D50NW-525	4	59	23.19	-70	08	49.7	19.269	0.072	0.633	0.151	...	...
D50S-445	4	59	43.47	-70	11	46.2	19.269	0.073	1.202	0.260	...	...
D50NE-529	5	00	25.37	-70	08	42.5	19.270	0.062	0.692	0.132	...	...
D50SW-466	4	59	33.54	-70	12	07.5	19.270	0.073	0.071	0.122	...	...
D50NW-555	4	59	44.92	-70	08	18.8	19.271	0.042	-0.094	0.080	...	...
D50NE-548	5	00	23.11	-70	07	57.2	19.273	0.067	-0.075	0.093	...	...
D50SE-527	5	00	04.64	-70	12	13.5	19.273	0.057	0.041	0.134	...	...
D50SW-479	4	59	35.60	-70	11	55.2	19.273	0.067	-0.327	0.103	-0.311	0.208

D50SW-465	4	59	20.71	-70	10	56.8	19.275	0.074	0.213	0.133	...	...
D50S-490	4	59	52.30	-70	12	07.9	19.277	0.067	0.069	0.115	...	...
D50SE-519	5	00	20.42	-70	14	08.3	19.277	0.079	0.348	0.132	...	...
D50SW-467	4	59	11.99	-70	12	37.8	19.278	0.061	0.233	0.132	...	...
D50NW-562	4	59	34.56	-70	07	10.1	19.279	0.064	-0.144	0.105	...	...
D50SE-530	5	00	21.77	-70	12	35.3	19.279	0.057	0.041	0.095	...	...
D50SW-480	4	59	05.46	-70	12	47.9	19.279	0.062	-0.186	0.108	...	...
D50NE-546	4	59	59.08	-70	08	46.2	19.280	0.138	0.205	0.220	...	...
D50SW-472	4	59	16.79	-70	13	21.6	19.280	0.069	0.025	0.116	...	...
D50SW-481	4	59	20.24	-70	13	26.6	19.280	0.064	-0.173	0.107	...	...
D50SE-533	5	00	28.58	-70	12	21.1	19.281	0.066	0.045	0.102	...	...
D50SE-541	5	00	22.16	-70	11	04.6	19.281	0.084	-0.200	0.117	...	...
D50NE-547	5	00	21.07	-70	08	56.6	19.283	0.072	0.202	0.115	...	...
D50NW-559	4	59	43.75	-70	08	35.9	19.283	0.037	0.017	0.087	...	...
D50S-470	4	59	51.42	-70	12	16.5	19.285	0.069	0.902	0.178	...	...
D50SE-524	5	00	06.51	-70	13	37.7	19.285	0.050	0.396	0.132	...	...
D50NW-557	4	59	05.75	-70	10	05.3	19.287	0.060	0.259	0.153	...	...
D50SW-476	4	58	59.65	-70	12	46.6	19.288	0.177	0.134	0.349	...	...
D50NE-545	5	00	16.72	-70	07	38.4	19.291	0.064	0.495	0.160	...	...
D50SE-529	5	00	32.93	-70	11	57.6	19.291	0.054	0.413	0.106	...	...
D50NE-534	5	00	21.08	-70	07	32.5	19.293	0.070	0.919	0.166	...	...
D50SW-478	4	59	36.74	-70	14	17.2	19.293	0.102	0.193	0.220	-1.367	0.287
D50NE-535	5	00	21.94	-70	07	30.8	19.294	0.061	0.932	0.171	...	...
D50SE-526	5	00	05.00	-70	12	30.2	19.294	0.055	0.559	0.124	...	...
D50SW-485	4	59	27.85	-70	11	39.5	19.295	0.062	-0.105	0.116	...	...
D50NW-551	4	59	39.23	-70	10	21.6	19.296	0.049	0.754	0.141	...	...
D50S-492	4	59	50.76	-70	14	09.6	19.296	0.066	0.441	0.170	-0.674	0.298
D50NW-564	4	59	41.94	-70	09	29.6	19.297	0.046	0.143	0.107	...	...
D50NW-550	4	59	10.18	-70	07	05.6	19.299	0.048	0.831	0.177	...	...
D50SE-528	5	00	31.44	-70	10	47.5	19.303	0.056	0.708	0.132	...	...
D50SW-484	4	59	37.81	-70	13	41.0	19.304	0.070	0.130	0.125	...	...
D50NE-550	5	00	11.74	-70	08	09.8	19.305	0.038	0.674	0.141	...	...
D50SW-469	4	59	06.68	-70	13	54.9	19.305	0.060	0.734	0.188	...	...
D50SE-546	5	00	26.74	-70	11	54.7	19.307	0.057	0.282	0.133	...	...
D50NW-565	4	59	12.97	-70	09	14.6	19.308	0.042	0.402	0.088	...	...
D50SE-551	5	00	16.66	-70	10	60.0	19.308	0.127	0.129	0.164	...	...
D50SW-492	4	59	06.14	-70	12	45.1	19.308	0.064	-0.256	0.107	...	...
D50NE-543	5	00	21.18	-70	07	47.5	19.310	0.069	0.951	0.215	...	...
D50NW-580	4	59	24.60	-70	08	34.0	19.311	0.062	-0.130	0.097	-0.535	0.229
D50SE-547	5	00	44.25	-70	13	34.6	19.311	0.118	0.367	0.192	...	...
D50SE-550	5	00	16.08	-70	12	35.0	19.311	0.094	0.277	0.142	...	...
D50NE-569	5	00	03.50	-70	09	38.1	19.312	0.086	0.038	0.151	...	...
D50S-523	4	59	45.78	-70	11	17.4	19.314	0.058	-0.226	0.087	...	...
D50NE-551	5	00	14.03	-70	09	42.6	19.315	0.075	0.727	0.187	...	...
D50SE-543	5	00	11.42	-70	12	12.1	19.316	0.056	0.620	0.144	...	...
D50NE-553	5	00	03.30	-70	09	37.2	19.317	0.084	0.679	0.146	...	...
D50NW-581	4	59	05.02	-70	10	28.5	19.317	0.081	-0.013	0.141	...	...
D50NE-556	5	00	02.76	-70	10	40.1	19.318	0.077	0.650	0.164	...	...
D50NE-577	4	59	53.62	-70	07	50.3	19.318	0.084	-0.009	0.119	...	...
D50SE-538	5	00	13.29	-70	13	15.9	19.318	0.061	0.769	0.162	...	...
D50NW-563	4	59	18.11	-70	09	47.7	19.319	0.056	0.783	0.151	...	...
D50SE-544	5	00	38.51	-70	12	46.2	19.319	0.054	0.647	0.147	...	...
D50SW-497	4	59	22.89	-70	12	19.0	19.319	0.067	-0.240	0.097	...	...
D50NE-572	4	59	52.66	-70	08	26.4	19.321	0.061	0.182	0.103	...	...
D50NW-554	4	59	07.35	-70	10	08.7	19.321	0.062	1.159	0.263	...	...
D50S-510	4	59	43.63	-70	13	50.8	19.321	0.088	0.335	0.153	...	...
D50SW-496	4	59	02.53	-70	13	45.7	19.321	0.064	-0.179	0.099	...	...
D50NE-576	4	59	55.37	-70	09	14.6	19.322	0.118	0.118	0.187	...	...
D50NE-581	4	59	56.39	-70	08	31.1	19.322	0.060	-0.107	0.107	...	...
D50S-514	4	59	48.55	-70	14	16.7	19.325	0.086	0.346	0.160	...	...
D50SE-565	5	00	04.21	-70	13	19.5	19.325	0.057	-0.027	0.101	...	...
D50SE-572	5	00	07.51	-70	12	27.6	19.325	0.054	-0.187	0.090	...	...
D50SE-542	5	00	22.76	-70	11	18.3	19.326	0.057	0.856	0.162	...	...
D50NE-558	5	00	15.95	-70	07	38.7	19.327	0.057	0.769	0.154	...	...
D50NE-578	5	00	29.96	-70	08	54.1	19.327	0.082	0.192	0.132	...	...
D50NE-570	5	00	12.61	-70	09	13.0	19.331	0.065	0.476	0.141	...	...

D50NE-555	5	00	06.08	-70	10	40.6	19.332	0.068	0.991	0.180	...	...
D50SE-567	5	00	24.64	-70	14	19.4	19.332	0.082	0.069	0.130	...	...
D50SE-569	5	00	17.45	-70	11	47.9	19.332	0.062	0.040	0.114	...	...
D50SW-500	4	59	34.45	-70	13	28.5	19.332	0.068	-0.103	0.113	...	...
D50NW-573	4	59	11.09	-70	08	22.8	19.334	0.051	0.661	0.130	-1.552	0.241
D50NE-560	4	59	47.87	-70	09	36.1	19.337	0.055	0.886	0.173	...	...
D50NE-565	5	00	08.59	-70	09	37.2	19.337	0.068	0.699	0.146	...	...
D50SE-578	5	00	39.54	-70	13	35.1	19.337	0.083	-0.153	0.149	...	...
D50NE-586	5	00	26.16	-70	10	37.7	19.338	0.063	0.010	0.100	...	...
D50SE-579	5	00	25.42	-70	12	44.4	19.338	0.085	-0.143	0.134	...	...
D50SW-459	4	59	24.17	-70	13	45.8	19.338	0.103	2.132	0.655	...	...
D50NW-586	4	59	28.51	-70	08	44.8	19.339	0.059	0.331	0.126	...	...
D50NW-604	4	59	28.54	-70	07	51.2	19.339	0.067	-0.219	0.103	...	...
D50SE-570	5	00	41.69	-70	12	20.4	19.339	0.058	0.207	0.111	...	...
D50NE-574	4	59	55.63	-70	09	14.4	19.340	0.118	0.563	0.172	...	...
D50NE-584	5	00	04.87	-70	07	43.1	19.340	0.060	0.128	0.111	...	...
D50NW-592	4	59	43.25	-70	08	29.7	19.340	0.056	0.042	0.097	...	...
D50NW-610	4	59	21.08	-70	10	12.5	19.340	0.084	-0.317	0.114	...	...
D50NE-593	5	00	16.78	-70	08	21.5	19.341	0.052	0.007	0.103	...	...
D50SW-486	4	59	21.59	-70	12	16.9	19.342	0.060	0.794	0.202	...	...
D50NW-629	4	59	24.63	-70	07	40.5	19.343	0.216	-0.716	0.249	...	...
D50NE-597	4	59	55.82	-70	09	45.0	19.345	0.073	-0.161	0.101	...	...
D50SE-575	5	00	19.22	-70	12	43.4	19.346	0.057	0.235	0.110	...	...
D50SW-506	4	59	05.70	-70	12	59.9	19.348	0.075	0.050	0.132	...	...
D50SE-577	5	00	41.74	-70	13	44.5	19.349	0.061	0.147	0.126	...	...
D50SW-487	4	59	09.02	-70	14	14.3	19.349	0.060	0.907	0.203	...	...
D50S-532	4	59	39.67	-70	12	20.2	19.350	0.087	-0.198	0.130	...	...
D50NE-575	5	00	00.30	-70	10	010.0	19.351	0.076	0.813	0.170	...	...
D50SE-580	5	00	44.03	-70	13	50.5	19.351	0.067	-0.028	0.115	...	...
D50NW-591	4	59	20.49	-70	07	30.0	19.352	0.055	0.368	0.122	...	...
D50SE-564	5	00	27.32	-70	14	11.5	19.352	0.056	0.750	0.145	...	...
D50SW-502	4	59	02.52	-70	11	50.4	19.352	0.062	0.267	0.134	...	...
D50SE-585	5	00	21.75	-70	11	02.6	19.356	0.087	-0.012	0.137	...	...
D50SE-566	5	00	13.41	-70	14	09.2	19.357	0.067	0.700	0.151	...	...
D50SE-583	5	00	20.56	-70	12	00.4	19.358	0.066	0.065	0.104	...	...
D50SW-489	4	59	24.54	-70	11	25.0	19.360	0.071	1.152	0.271	...	...
D50SW-501	4	59	08.65	-70	11	56.9	19.360	0.076	0.511	0.171	...	...
D50NW-614	4	59	40.82	-70	09	51.0	19.361	0.065	0.044	0.116	...	...
D50NW-616	4	59	05.14	-70	09	18.8	19.362	0.068	0.024	0.110	...	...
D50SE-590	5	00	39.70	-70	13	46.9	19.362	0.064	-0.019	0.128	...	...
D50NW-620	4	59	41.60	-70	10	30.2	19.363	0.062	-0.047	0.116	...	...
D50SW-510	4	59	38.03	-70	11	35.0	19.364	0.113	0.187	0.176	...	...
D50NW-622	4	59	16.90	-70	09	00.8	19.365	0.126	-0.052	0.163	...	...
D50SE-573	5	00	43.74	-70	13	02.1	19.365	0.062	0.741	0.166	...	...
D50NE-591	5	00	05.73	-70	08	06.1	19.368	0.056	0.645	0.152	...	...
D50NE-600	5	00	29.84	-70	09	05.1	19.369	0.071	0.212	0.144	...	...
D50SW-504	4	59	06.60	-70	11	33.0	19.369	0.067	0.602	0.174	...	...
D50NW-617	4	59	21.77	-70	10	10.2	19.370	0.062	0.210	0.109	...	...
D50NE-592	5	00	11.50	-70	08	57.6	19.371	0.085	0.689	0.173	...	...
D50NW-603	4	59	14.32	-70	07	20.7	19.371	0.062	0.525	0.140	...	...
D50NW-626	4	59	40.85	-70	09	16.9	19.371	0.065	-0.054	0.121	...	...
D50NE-605	4	59	55.15	-70	09	46.5	19.373	0.061	-0.096	0.111	...	...
D50SW-525	4	58	59.43	-70	11	35.4	19.373	0.064	-0.133	0.114	...	...
D50SW-518	4	59	30.62	-70	12	36.6	19.374	0.076	0.171	0.149	...	...
D50NW-621	4	59	32.25	-70	09	30.0	19.375	0.067	0.182	0.119	...	...
D50NW-624	4	59	20.47	-70	07	04.0	19.375	0.083	0.128	0.126	...	...
D50SE-556	5	00	02.47	-70	14	18.0	19.375	0.077	1.507	0.318	...	...
D50SE-602	5	00	40.28	-70	12	42.9	19.375	0.055	-0.101	0.106	...	...
D50S-537	5	00	13.45	-70	14	37.2	19.377	0.064	0.178	0.140	...	...
D50SE-581	5	00	38.90	-70	13	36.0	19.377	0.059	0.523	0.139	...	...
D50SE-587	5	00	21.23	-70	11	09.5	19.377	0.055	0.446	0.131	...	...
D50SW-503	4	59	35.89	-70	11	06.7	19.377	0.068	0.788	0.205	...	...
D50NE-590	5	00	06.54	-70	07	28.3	19.379	0.070	0.905	0.195	...	...
D50SW-521	4	59	26.39	-70	11	14.4	19.380	0.071	0.194	0.137	...	...
D50NW-623	4	59	21.40	-70	09	18.0	19.381	0.052	0.278	0.118	...	...
D50SE-606	5	00	16.21	-70	11	59.0	19.382	0.058	-0.074	0.102	...	...

D50S-545	4	59	52.32	-70	13	26.4	19.383	0.118	-0.083	0.170	...	...
D50SE-584	5	00	36.05	-70	11	19.9	19.383	0.068	0.640	0.164	...	...
D50SE-589	5	00	42.54	-70	11	29.3	19.383	0.073	0.506	0.152	...	...
D50SE-599	5	00	40.20	-70	13	45.6	19.384	0.052	0.135	0.140	...	...
D50NE-599	5	00	01.75	-70	10	53.3	19.385	0.082	0.575	0.162	...	...
D50NW-632	4	59	19.42	-70	07	45.5	19.385	0.062	0.184	0.131	...	...
D50SW-513	4	59	10.69	-70	12	42.1	19.386	0.066	0.619	0.155	...	...
D50SE-601	5	00	30.26	-70	14	03.7	19.387	0.069	0.184	0.125	-0.329	0.293
D50SW-522	4	59	36.80	-70	10	57.7	19.387	0.077	0.323	0.161	...	...
D50SE-604	5	00	10.68	-70	13	07.8	19.388	0.063	0.140	0.131	-0.803	0.255
D50S-549	4	59	37.41	-70	14	24.3	19.390	0.054	-0.120	0.098	...	...
D50SW-515	4	59	36.28	-70	11	23.0	19.390	0.068	0.606	0.217	...	...
D50S-548	4	59	41.17	-70	13	33.5	19.391	0.078	-0.028	0.128	...	...
D50S-542	4	59	33.20	-70	14	32.3	19.393	0.074	0.208	0.135	...	...
D50SW-528	4	59	27.48	-70	10	59.8	19.396	0.070	0.244	0.163	...	...
D50SE-627	5	00	04.30	-70	14	08.1	19.397	0.054	-0.373	0.175	...	...
D50SE-612	5	00	31.57	-70	11	36.0	19.398	0.074	0.103	0.120	...	...
D50NW-640	4	59	28.65	-70	10	41.3	19.399	0.049	0.089	0.097	...	...
D50SE-616	5	00	04.48	-70	12	01.2	19.399	0.070	0.000	0.118	...	...
D50SW-523	4	59	37.04	-70	14	07.4	19.399	0.059	0.592	0.167	...	...
D50SE-622	5	00	38.07	-70	11	10.5	19.400	0.056	-0.137	0.101	...	...
D50SW-538	4	59	06.26	-70	13	57.5	19.400	0.066	-0.082	0.120	...	...
D50NE-610	4	59	52.89	-70	07	41.3	19.401	0.089	0.289	0.148	...	...
D50SE-615	5	00	06.74	-70	11	20.8	19.401	0.058	0.086	0.124	...	...
D50SE-619	5	00	37.89	-70	11	33.2	19.402	0.070	0.004	0.114	...	...
D50SW-543	4	59	05.06	-70	13	24.1	19.402	0.079	-0.278	0.119	...	...
D50SE-614	5	00	16.85	-70	11	29.7	19.403	0.061	0.144	0.121	...	...
D50NE-617	5	00	16.83	-70	07	49.1	19.405	0.074	0.070	0.114	...	...
D50NW-648	4	59	32.58	-70	09	19.5	19.405	0.063	-0.306	0.097	...	...
D50SE-624	5	00	28.68	-70	11	36.6	19.405	0.058	-0.130	0.100	...	...
D50SW-532	4	59	36.18	-70	13	57.1	19.406	0.070	0.340	0.178	...	...
D50SE-626	5	00	22.65	-70	12	31.2	19.408	0.073	-0.097	0.108	...	...
D50NE-641	5	00	19.06	-70	08	40.1	19.409	0.250	-0.579	0.534	...	...
D50SW-549	4	59	25.91	-70	11	54.4	19.410	0.096	-0.420	0.129	-0.503	0.197
D50NW-635	4	59	14.23	-70	07	13.4	19.411	0.060	0.586	0.155	...	...
D50SW-534	4	58	56.62	-70	14	15.6	19.411	0.084	0.384	0.176	...	...
D50NE-606	5	00	17.72	-70	07	56.2	19.412	0.065	0.661	0.153	...	...
D50NE-611	4	59	53.93	-70	08	56.8	19.412	0.089	0.447	0.154	...	...
D50NW-645	4	59	15.22	-70	07	25.0	19.413	0.059	0.004	0.103	...	...
D50S-558	4	59	54.79	-70	12	40.2	19.413	0.082	0.151	0.143	...	...
D50SW-545	4	59	22.86	-70	14	07.2	19.414	0.066	-0.140	0.110	...	...
D50NE-614	5	00	26.95	-70	07	58.1	19.415	0.090	0.402	0.163	...	...
D50SW-547	4	59	10.22	-70	13	16.8	19.415	0.071	-0.175	0.119	...	...
D50SE-633	5	00	11.07	-70	14	01.0	19.417	0.060	-0.158	0.099	...	...
D50SW-536	4	59	29.83	-70	14	14.2	19.417	0.070	0.388	0.159	...	...
D50SE-628	5	00	09.91	-70	12	31.0	19.420	0.058	0.064	0.106	...	...
D50NW-646	4	59	40.32	-70	09	48.7	19.421	0.087	0.121	0.142	...	...
D50S-546	5	00	12.02	-70	14	37.1	19.421	0.059	0.801	0.161	...	...
D50NE-628	5	00	14.42	-70	09	32.3	19.424	0.074	-0.041	0.111	...	...
D50S-565	4	59	45.39	-70	13	54.4	19.425	0.199	0.074	0.280	-1.611	0.414
D50SE-632	5	00	18.45	-70	12	05.9	19.425	0.059	0.076	0.111	...	...
D50NW-649	4	59	31.97	-70	10	24.8	19.427	0.068	0.136	0.114	...	...
D50S-571	4	59	39.67	-70	12	00.0	19.427	0.083	-0.034	0.141	...	...
D50SW-529	4	59	05.40	-70	10	46.4	19.427	0.074	0.954	0.230	...	...
D50NE-632	4	59	55.92	-70	10	51.2	19.428	0.063	0.007	0.112	...	...
D50NE-621	5	00	18.27	-70	08	58.0	19.429	0.073	0.503	0.141	...	...
D50SE-644	5	00	17.99	-70	11	14.7	19.429	0.062	-0.274	0.099	...	...
D50SW-544	4	59	28.99	-70	11	22.5	19.430	0.072	0.286	0.144	...	...
D50NE-635	5	00	04.12	-70	09	08.4	19.431	0.074	0.016	0.117	...	...
D50SW-548	4	59	06.76	-70	10	43.9	19.431	0.093	0.185	0.166	...	...
D50NE-618	5	00	27.88	-70	08	26.3	19.432	0.083	0.685	0.172	...	...
D50NW-652	4	59	32.69	-70	08	15.9	19.432	0.054	0.159	0.111	...	...
D50SW-555	4	59	07.94	-70	12	00.3	19.432	0.063	-0.095	0.108	...	...
D50SE-621	5	00	09.01	-70	13	26.2	19.433	0.063	0.680	0.139	...	...
D50NE-612	4	59	48.85	-70	09	38.8	19.434	0.067	0.923	0.208	...	...
D50SE-637	5	00	10.38	-70	13	06.2	19.435	0.069	0.114	0.135	...	...

D50NW-667	4	59	13.02	-70	10	03.2	19.437	0.065	-0.184	0.100	...	...
D50S-579	4	59	51.03	-70	14	43.6	19.437	0.090	-0.131	0.141	...	...
D50SE-641	5	00	15.05	-70	12	20.7	19.437	0.060	0.056	0.107	...	...
D50SE-642	5	00	43.91	-70	11	18.7	19.437	0.059	-0.035	0.099	...	...
D50SW-553	4	59	13.59	-70	12	54.6	19.437	0.085	0.063	0.143	...	...
D50NW-655	4	59	05.15	-70	10	16.7	19.438	0.058	0.216	0.120	...	...
D50NW-661	4	59	25.45	-70	07	48.8	19.438	0.057	-0.010	0.111	...	...
D50NW-665	4	59	37.69	-70	07	11.2	19.440	0.057	-0.050	0.109	-0.683	0.249
D50NE-625	5	00	04.82	-70	09	59.7	19.441	0.056	0.534	0.140	...	...
D50S-575	4	59	57.74	-70	12	05.8	19.441	0.090	0.075	0.144	...	...
D50SE-654	5	00	05.87	-70	12	35.3	19.441	0.071	-0.323	0.099	...	...
D50NE-631	4	59	58.67	-70	08	25.6	19.447	0.084	0.463	0.148	...	...
D50NE-653	5	00	04.95	-70	09	35.8	19.447	0.078	-0.109	0.123	...	...
D50SE-646	5	00	35.08	-70	11	53.9	19.448	0.062	0.077	0.122	...	...
D50SE-652	5	00	03.13	-70	11	24.1	19.448	0.080	-0.096	0.124	...	...
D50NW-653	4	59	23.57	-70	09	20.0	19.449	0.059	0.504	0.153	...	...
D50SW-558	4	59	29.21	-70	11	02.7	19.449	0.075	0.175	0.156	...	...
D50SE-648	5	00	35.63	-70	10	41.2	19.450	0.072	0.007	0.134	...	...
D50SE-645	5	00	44.85	-70	14	05.1	19.451	0.076	0.181	0.147	...	...
D50S-585	4	59	59.78	-70	14	30.0	19.452	0.073	0.014	0.141	...	...
D50NE-644	4	59	51.45	-70	07	29.5	19.456	0.126	0.416	0.421	...	...
D50NW-671	4	59	29.77	-70	07	28.3	19.456	0.079	0.124	0.125	...	...
D50SW-564	4	59	37.91	-70	10	50.1	19.458	0.068	0.155	0.147	...	...
D50NE-623	5	00	18.12	-70	07	55.2	19.459	0.067	1.061	0.198	...	...
D50S-592	4	59	53.19	-70	11	58.2	19.459	0.075	-0.224	0.136	...	...
D50SE-631	5	00	36.44	-70	13	58.2	19.459	0.061	0.902	0.182	...	...
D50NE-660	5	00	02.60	-70	08	56.4	19.460	0.083	-0.095	0.123	...	...
D50NW-668	4	59	15.34	-70	07	41.0	19.461	0.059	0.302	0.142	...	...
D50SE-647	5	00	30.44	-70	11	01.4	19.461	0.068	0.377	0.159	...	...
D50SE-659	5	00	35.94	-70	11	21.9	19.461	0.074	-0.093	0.119	...	...
D50NE-638	5	00	00.83	-70	10	14.5	19.463	0.116	0.696	0.191	...	...
D50NE-652	5	00	16.83	-70	10	17.0	19.463	0.063	0.258	0.141	...	...
D50NW-669	4	59	33.77	-70	10	29.6	19.463	0.070	0.338	0.152	...	...
D50SW-563	4	59	16.29	-70	14	06.9	19.464	0.066	0.341	0.152	...	...
D50SE-655	5	00	12.17	-70	13	42.8	19.466	0.081	0.203	0.148	...	...
D50NW-686	4	59	12.60	-70	07	13.4	19.467	0.064	-0.111	0.243	...	...
D50SE-649	5	00	26.33	-70	12	40.1	19.468	0.064	0.420	0.139	...	...
D50NE-658	5	00	12.21	-70	10	13.0	19.469	0.087	0.175	0.174	...	...
D50NE-656	5	00	12.07	-70	10	43.4	19.470	0.086	0.311	0.154	...	...
D50SW-577	4	59	12.92	-70	12	37.1	19.470	0.376	-0.091	0.436	...	...
D50NE-666	5	00	06.77	-70	08	14.4	19.472	0.099	-0.017	0.143	...	...
D50NW-687	4	59	10.93	-70	10	26.1	19.472	0.073	-0.054	0.187	...	...
D50SW-573	4	59	36.45	-70	11	34.5	19.473	0.077	0.064	0.142	...	...
D50NW-683	4	59	05.63	-70	07	10.5	19.474	0.063	0.224	0.130	...	...
D50NE-654	5	00	16.47	-70	07	33.7	19.475	0.078	0.499	0.175	...	...
D50NW-679	4	59	37.13	-70	07	06.7	19.475	0.063	0.321	0.135	...	...
D50SW-516	4	59	34.27	-70	12	24.9	19.476	0.074	2.590	0.880	...	...
D50NE-657	4	59	48.39	-70	10	14.4	19.478	0.092	0.436	0.159	...	...
D50NE-674	5	00	04.87	-70	09	13.5	19.478	0.061	-0.149	0.109	...	...
D50SW-572	4	59	01.10	-70	12	07.3	19.478	0.085	0.241	0.160	...	...
D50NE-665	5	00	21.99	-70	09	12.3	19.480	0.087	0.179	0.136	...	...
D50NE-671	5	00	14.42	-70	10	18.4	19.480	0.078	0.005	0.135	...	...
D50SE-663	5	00	35.53	-70	13	29.6	19.480	0.073	0.143	0.137	...	...
D50SW-578	4	59	29.95	-70	12	08.0	19.480	0.072	0.133	0.145	...	...
D50SW-580	4	59	30.86	-70	14	14.7	19.481	0.076	0.033	0.133	...	...
D50SE-656	5	00	41.72	-70	11	35.5	19.483	0.063	0.545	0.158	...	...
D50SW-582	4	59	01.55	-70	13	52.1	19.484	0.075	0.075	0.130	...	...
D50NW-693	4	59	44.63	-70	09	57.0	19.485	0.072	0.076	0.130	...	...
D50NW-692	4	59	19.26	-70	07	16.6	19.488	0.069	0.191	0.128	...	...
D50S-612	4	59	45.29	-70	12	31.3	19.491	0.074	-0.098	0.120	...	...
D50SW-592	4	58	56.84	-70	13	42.3	19.493	0.099	-0.085	0.158	...	...
D50SE-672	5	00	42.85	-70	13	59.8	19.497	0.075	-0.026	0.126	...	...
D50S-599	4	59	57.73	-70	11	24.2	19.498	0.081	0.464	0.172	...	...
D50SW-591	4	59	10.43	-70	13	33.0	19.499	0.084	0.151	0.143	...	...
D50NE-689	5	00	17.06	-70	10	34.1	19.500	0.093	-0.185	0.155	...	...
D50SE-669	5	00	35.88	-70	10	59.2	19.500	0.077	0.244	0.140	-0.622	0.381

D50SW-598	4	59	16.19	-70	13	19.4	19.500	0.081	-0.371	0.118	...	...
D50NE-684	5	00	18.33	-70	08	19.2	19.501	0.066	-0.006	0.107	...	...
D50NE-667	5	00	16.39	-70	09	06.5	19.502	0.082	0.662	0.205	...	...
D50SW-589	4	59	32.28	-70	14	11.2	19.502	0.065	0.235	0.129	...	...
D50NE-648	4	59	47.75	-70	09	08.5	19.503	0.070	1.332	0.268	...	...
D50NE-686	5	00	06.07	-70	08	13.4	19.504	0.068	0.009	0.106	...	...
D50S-618	4	59	47.07	-70	11	27.3	19.504	0.088	0.020	0.137	-0.955	0.329
D50S-625	4	59	59.26	-70	12	48.8	19.504	0.095	-0.164	0.149	...	...
D50SW-595	4	59	05.84	-70	13	22.0	19.504	0.111	0.080	0.178	...	...
D50NE-692	5	00	23.60	-70	09	08.1	19.505	0.095	-0.104	0.130	...	...
D50NW-699	4	59	12.73	-70	07	33.5	19.506	0.063	0.174	0.122	...	...
D50NE-650	5	00	06.71	-70	10	47.2	19.509	0.086	1.436	0.265	...	...
D50NE-691	4	59	50.37	-70	10	11.9	19.509	0.084	-0.012	0.136	...	...
D50NW-708	4	59	46.08	-70	08	16.2	19.510	0.055	-0.101	0.111	...	...
D50SE-671	5	00	27.89	-70	13	53.2	19.510	0.096	0.292	0.173	...	...
D50NE-688	5	00	13.69	-70	07	29.5	19.511	0.082	0.094	0.126	...	...
D50NE-698	4	59	56.73	-70	07	58.3	19.512	0.075	-0.212	0.123	...	...
D50SE-666	5	00	38.91	-70	14	010.0	19.512	0.132	0.683	0.260	...	...
D50SE-677	5	00	11.89	-70	11	04.3	19.512	0.089	0.055	0.136	...	...
D50SW-599	4	59	32.18	-70	11	08.8	19.512	0.079	-0.142	0.130	...	...
D50SW-584	4	59	04.12	-70	10	47.4	19.515	0.084	0.745	0.247	...	...
D50NE-694	4	59	48.34	-70	07	49.3	19.518	0.093	0.075	0.135	...	...
D50SE-689	5	00	08.41	-70	12	27.5	19.519	0.073	-0.215	0.109	...	...
D50SE-690	5	00	10.24	-70	10	59.4	19.519	0.070	-0.234	0.112	-0.924	0.300
D50SE-691	5	00	42.83	-70	13	40.5	19.519	0.132	-0.250	0.170	...	...
D50SW-540	4	59	23.33	-70	13	54.0	19.521	0.084	2.601	0.886	...	...
D50SW-601	4	59	35.54	-70	10	45.1	19.527	0.080	0.013	0.152	...	...
D50NE-687	5	00	03.96	-70	10	04.4	19.529	0.083	0.539	0.193	...	...
D50NW-715	4	59	27.56	-70	08	48.7	19.530	0.072	0.029	0.129	...	...
D50SE-699	5	00	28.27	-70	12	47.8	19.530	0.077	-0.257	0.119	...	...
D50NE-690	5	00	18.60	-70	07	57.6	19.531	0.089	0.539	0.141	...	...
D50SE-702	5	00	44.26	-70	13	44.5	19.534	0.102	-0.263	0.134	...	...
D50SE-709	5	00	37.97	-70	10	42.9	19.534	0.078	-0.460	0.123	...	...
D50NW-720	4	59	38.84	-70	10	28.0	19.536	0.060	-0.039	0.114	...	...
D50NW-716	4	59	39.80	-70	07	22.9	19.537	0.066	0.114	0.126	...	...
D50SE-705	5	00	29.55	-70	11	13.8	19.540	0.062	-0.194	0.101	...	...
D50SE-701	5	00	26.52	-70	13	03.4	19.541	0.092	-0.069	0.149	...	...
D50SE-693	5	00	03.21	-70	14	02.6	19.542	0.068	0.124	0.137	-0.154	0.363
D50NE-699	4	59	52.79	-70	10	08.4	19.543	0.085	0.447	0.199	...	...
D50NW-723	4	59	30.62	-70	10	24.5	19.543	0.073	0.107	0.175	...	...
D50NW-725	4	59	22.28	-70	07	49.4	19.545	0.062	-0.036	0.106	...	...
D50S-643	4	59	51.31	-70	13	34.7	19.545	0.086	0.090	0.147	...	...
D50SE-700	5	00	03.06	-70	13	40.4	19.547	0.064	0.135	0.140	...	...
D50NE-712	4	59	53.37	-70	09	13.9	19.549	0.083	-0.045	0.138	...	...
D50NW-721	4	59	07.03	-70	09	05.0	19.549	0.059	0.249	0.134	...	...
D50S-654	5	00	01.40	-70	13	53.7	19.549	0.108	-0.142	0.160	...	...
D50S-647	4	59	57.79	-70	11	48.1	19.550	0.082	0.149	0.158	...	...
D50SE-704	5	00	29.92	-70	10	58.0	19.551	0.080	0.063	0.149	...	...
D50S-653	4	59	38.05	-70	14	21.7	19.554	0.088	0.004	0.137	-0.465	0.296
D50NE-714	5	00	15.90	-70	10	26.9	19.556	0.079	0.066	0.148	...	...
D50S-649	4	59	58.36	-70	14	22.6	19.561	0.082	0.345	0.164	...	...
D50SW-610	4	59	36.46	-70	12	25.6	19.561	0.080	-0.073	0.140	...	...
D50S-657	4	59	52.07	-70	13	09.0	19.563	0.077	0.014	0.131	...	...
D50NE-721	4	59	46.94	-70	10	03.0	19.564	0.093	-0.141	0.143	...	...
D50SE-715	5	00	08.41	-70	13	41.6	19.566	0.056	-0.198	0.109	...	...
D50NW-740	4	59	30.97	-70	09	25.3	19.567	0.058	-0.203	0.108	...	...
D50SE-721	5	00	29.07	-70	13	32.6	19.567	0.107	-0.610	0.345	...	...
D50NE-717	5	00	29.30	-70	10	54.8	19.568	0.102	0.040	0.147	...	...
D50SE-697	5	00	31.10	-70	13	51.8	19.569	0.098	0.686	0.208	...	...
D50SE-712	5	00	32.14	-70	13	57.2	19.569	0.069	0.033	0.116	...	...
D50SE-713	5	00	12.23	-70	12	26.7	19.570	0.088	-0.071	0.148	...	...
D50NE-722	5	00	09.73	-70	10	44.2	19.571	0.074	-0.013	0.128	...	...
D50NW-736	4	59	25.34	-70	08	57.8	19.571	0.066	0.209	0.127	...	...
D50SE-707	5	00	43.55	-70	13	34.8	19.571	0.132	0.463	0.204	...	...
D50SW-618	4	59	32.21	-70	13	59.7	19.573	0.086	-0.149	0.148	...	...
D50SE-694	5	00	31.75	-70	10	42.3	19.574	0.068	0.843	0.243	...	...

D50SE-714	5	00	13.24	-70	13	40.3	19.574	0.070	0.018	0.119	...	...
D50NE-720	5	00	00.35	-70	08	07.9	19.575	0.101	0.142	0.153	...	...
D50NW-729	4	59	26.16	-70	07	19.3	19.576	0.089	0.570	0.216	...	...
D50NW-741	4	59	41.07	-70	09	21.4	19.576	0.074	0.008	0.146	-1.080	0.269
D50NE-726	5	00	01.30	-70	07	49.7	19.577	0.082	-0.145	0.156	...	...
D50NE-725	4	59	52.02	-70	09	31.4	19.578	0.116	-0.100	0.157	-0.544	0.418
D50NE-715	5	00	02.25	-70	08	22.8	19.579	0.106	0.553	0.198	...	...
D50NW-743	4	59	35.86	-70	08	26.7	19.583	0.058	-0.047	0.113	...	...
D50S-666	4	59	59.76	-70	12	02.6	19.585	0.103	-0.075	0.144	...	...
D50SE-722	5	00	20.36	-70	11	50.3	19.586	0.074	-0.195	0.112	...	...
D50NW-750	4	59	11.79	-70	09	22.2	19.588	0.058	-0.128	0.102	...	...
D50NE-732	5	00	02.01	-70	08	24.5	19.591	0.087	0.009	0.142	...	...
D50NE-719	5	00	20.74	-70	10	20.6	19.594	0.081	0.600	0.176	...	...
D50NW-746	4	59	18.33	-70	07	42.9	19.594	0.058	0.111	0.124	...	...
D50S-658	4	59	30.68	-70	14	20.0	19.595	0.095	0.716	0.222	...	...
D50S-673	5	00	00.44	-70	14	30.6	19.596	0.078	-0.050	0.149	-0.080	0.402
D50SW-620	4	59	02.79	-70	12	05.2	19.596	0.093	0.242	0.177	...	...
D50SE-720	5	00	12.35	-70	13	15.6	19.598	0.078	0.340	0.177	...	...
D50NE-695	5	00	29.85	-70	09	33.6	19.602	0.072	1.973	0.566	...	...
D50SW-634	4	59	12.43	-70	11	41.6	19.604	0.091	-0.103	0.167	-0.614	0.324
D50NE-731	4	59	53.75	-70	10	21.2	19.605	0.058	0.323	0.126	...	...
D50NE-737	5	00	27.22	-70	10	02.4	19.605	0.100	-0.008	0.139	...	...
D50NE-743	5	00	30.39	-70	10	14.9	19.606	0.083	-0.099	0.126	...	...
D50S-676	4	59	47.26	-70	13	11.2	19.607	0.107	0.040	0.181	...	...
D50SW-608	4	59	22.75	-70	12	10.7	19.608	0.098	1.296	0.387	...	...
D50S-677	4	59	46.53	-70	13	17.9	19.609	0.095	0.076	0.180	...	...
D50S-680	4	59	40.12	-70	13	23.0	19.609	0.100	-0.048	0.158	...	...
D50SE-717	5	00	36.60	-70	11	49.7	19.609	0.055	0.714	0.174	...	...
D50NE-739	5	00	27.91	-70	10	47.5	19.610	0.086	0.094	0.143	...	...
D50NW-756	4	59	34.66	-70	09	06.4	19.611	0.085	0.032	0.153	...	...
D50NE-750	4	59	59.69	-70	08	00.9	19.612	0.254	-0.187	0.296	...	...
D50NE-744	4	59	53.58	-70	09	24.0	19.614	0.099	0.077	0.164	...	...
D50SW-639	4	59	18.82	-70	11	27.5	19.614	0.076	-0.155	0.143	-1.003	0.232
D50SW-642	4	59	32.35	-70	13	09.1	19.614	0.065	-0.274	0.112	...	...
D50NE-741	5	00	25.08	-70	10	40.7	19.615	0.095	0.130	0.160	...	...
D50NE-728	5	00	07.07	-70	08	44.5	19.619	0.105	0.767	0.183	...	...
D50S-682	4	59	44.98	-70	13	39.9	19.619	0.148	0.168	0.228	...	...
D50SW-633	4	59	16.41	-70	13	24.8	19.619	0.090	0.249	0.164	...	...
D50SE-730	5	00	03.39	-70	11	12.7	19.620	0.071	-0.042	0.130	...	...
D50NW-760	4	59	20.48	-70	07	05.7	19.621	0.086	0.188	0.187	...	...
D50SE-723	5	00	21.38	-70	12	33.1	19.621	0.073	0.269	0.141	...	...
D50SE-737	5	00	15.14	-70	11	59.5	19.622	0.074	-0.170	0.118	...	...
D50SW-640	4	59	12.55	-70	13	53.6	19.622	0.088	-0.004	0.155	...	...
D50NW-763	4	59	14.41	-70	10	17.9	19.623	0.061	-0.053	0.125	...	...
D50S-671	4	59	44.41	-70	11	40.9	19.623	0.079	0.746	0.191	...	...
D50S-690	4	59	58.07	-70	12	49.3	19.623	0.098	-0.087	0.166	...	...
D50SE-733	5	00	22.58	-70	12	20.7	19.623	0.074	-0.056	0.151	...	...
D50NE-751	4	59	52.74	-70	09	05.8	19.625	0.083	-0.006	0.118	...	...
D50S-687	4	59	49.83	-70	14	27.5	19.626	0.087	0.155	0.182	-0.744	0.433
D50SE-729	5	00	19.79	-70	14	02.6	19.626	0.079	0.106	0.148	...	...
D50SW-648	4	59	31.77	-70	11	56.5	19.626	0.151	-0.237	0.264	...	...
D50SE-741	5	00	05.37	-70	12	03.8	19.627	0.247	-0.414	0.289	...	...
D50NW-769	4	59	17.19	-70	09	43.5	19.631	0.062	-0.073	0.121	...	...
D50NE-738	4	59	50.94	-70	09	40.2	19.633	0.073	0.638	0.183	...	...
D50SE-738	5	00	35.99	-70	13	17.6	19.635	0.087	-0.016	0.147	...	...
D50NW-764	4	59	46.39	-70	09	24.9	19.639	0.056	0.306	0.148	...	...
D50SE-731	5	00	42.61	-70	13	42.6	19.641	0.116	0.427	0.191	...	...
D50NW-770	4	59	38.66	-70	09	20.2	19.643	0.094	0.074	0.160	...	...
D50SE-736	5	00	22.32	-70	12	18.5	19.645	0.089	0.371	0.190	...	...
D50SE-739	5	00	07.24	-70	13	57.7	19.645	0.076	0.165	0.131	...	...
D50NE-757	5	00	18.02	-70	09	32.9	19.647	0.101	0.138	0.150	...	...
D50NE-754	4	59	55.69	-70	08	33.5	19.648	0.073	0.341	0.162	...	...
D50NE-758	4	59	54.09	-70	10	48.1	19.648	0.082	-0.034	0.131	...	...
D50NW-783	4	59	30.11	-70	09	05.4	19.648	0.082	-0.379	0.127	...	...
D50NW-773	4	59	33.74	-70	09	49.3	19.651	0.068	0.061	0.132	...	...
D50NW-776	4	59	11.70	-70	09	26.8	19.653	0.081	-0.042	0.131	...	...

D50SW-656	4	59	06.22	-70	13	40.7	19.657	0.090	-0.154	0.141	...	...
D50SE-749	5	00	05.52	-70	14	12.9	19.658	0.078	-0.194	0.122	...	...
D50NE-761	5	00	09.94	-70	07	49.9	19.659	0.083	0.048	0.165	...	...
D50NE-759	5	00	14.95	-70	09	51.1	19.662	0.109	0.200	0.254	...	...
D50NE-762	5	00	21.72	-70	08	19.7	19.662	0.099	0.089	0.153	...	...
D50NE-765	5	00	08.24	-70	09	57.5	19.667	0.112	0.085	0.171	...	...
D50SE-752	5	00	03.19	-70	11	27.4	19.668	0.082	-0.062	0.138	...	...
D50SE-757	5	00	07.35	-70	11	58.8	19.669	0.059	-0.138	0.112	...	...
D50S-704	4	59	33.07	-70	14	28.8	19.671	0.106	-0.018	0.162	...	...
D50SE-764	5	00	14.44	-70	14	04.5	19.671	0.079	-0.274	0.126	-0.726	0.228
D50SE-762	5	00	13.57	-70	11	34.8	19.672	0.078	-0.221	0.118	...	...
D50SE-760	5	00	27.49	-70	12	18.3	19.673	0.062	-0.111	0.116	...	...
D50SW-650	4	58	58.58	-70	12	43.7	19.673	0.087	0.604	0.252	...	...
D50SW-651	4	58	59.55	-70	12	48.4	19.673	0.207	0.544	0.621	...	...
D50SE-755	5	00	07.49	-70	11	36.9	19.674	0.073	0.019	0.134	...	...
D50SE-761	5	00	25.78	-70	14	01.6	19.675	0.075	-0.069	0.132	...	...
D50SE-751	5	00	41.58	-70	13	49.0	19.676	0.087	0.144	0.161	...	...
D50SE-767	5	00	39.15	-70	12	45.7	19.676	0.090	-0.208	0.134	...	...
D50SE-754	5	00	08.20	-70	11	30.3	19.677	0.073	0.142	0.152	...	...
D50SE-786	5	00	32.77	-70	11	03.1	19.677	0.263	-0.840	0.306	...	...
D50NW-792	4	59	08.29	-70	09	27.5	19.678	0.078	-0.191	0.137	...	...
D50SE-768	5	00	17.79	-70	11	34.4	19.678	0.080	-0.208	0.125	...	...
D50SW-629	4	59	05.60	-70	11	50.0	19.684	0.150	1.974	0.594	...	...
D50NE-763	5	00	16.31	-70	07	23.8	19.685	0.117	0.572	0.212	...	...
D50NW-807	4	59	19.68	-70	08	29.1	19.685	0.138	-0.634	0.169	...	...
D50NW-789	4	59	10.35	-70	10	11.6	19.686	0.088	0.086	0.171	-0.669	0.297
D50SE-772	5	00	38.63	-70	14	10.4	19.687	0.076	-0.131	0.146	...	...
D50SW-661	4	58	56.39	-70	14	08.9	19.687	0.078	0.254	0.179	...	...
D50SE-770	5	00	28.86	-70	11	05.1	19.689	0.095	-0.033	0.152	-0.278	0.401
D50SE-773	5	00	03.57	-70	11	22.7	19.693	0.106	-0.036	0.161	...	...
D50NE-756	4	59	47.91	-70	10	37.4	19.694	0.118	1.275	0.332	...	...
D50SE-771	5	00	42.51	-70	13	39.6	19.694	0.093	0.031	0.160	...	...
D50NW-795	4	59	10.82	-70	07	31.7	19.696	0.078	0.055	0.167	...	...
D50NW-802	4	59	20.90	-70	10	11.2	19.697	0.474	-0.229	0.575	...	...
D50NE-766	5	00	18.23	-70	10	04.4	19.699	0.088	0.755	0.280	...	...
D50SW-658	4	59	19.54	-70	11	39.1	19.699	0.081	0.774	0.249	...	...
D50SE-769	5	00	37.89	-70	13	54.9	19.702	0.074	0.266	0.149	...	...
D50NW-797	4	59	37.55	-70	08	08.5	19.704	0.076	0.043	0.149	...	...
D50SE-797	5	00	26.52	-70	13	12.1	19.704	0.092	-0.666	0.120	...	...
D50SE-780	5	00	12.68	-70	14	08.3	19.705	0.093	-0.046	0.144	...	...
D50SW-668	4	58	59.15	-70	13	33.1	19.705	0.106	-0.033	0.180	...	...
D50NE-776	5	00	04.95	-70	08	17.1	19.707	0.103	0.275	0.175	...	...
D50NE-783	5	00	19.02	-70	10	25.9	19.707	0.082	-0.114	0.133	...	...
D50NW-804	4	59	28.65	-70	09	00.7	19.711	0.058	0.035	0.119	...	...
D50NE-781	5	00	03.61	-70	09	58.6	19.714	0.098	0.082	0.183	...	...
D50SE-785	5	00	29.88	-70	14	11.6	19.716	0.076	0.059	0.155	...	...
D50SE-765	5	00	41.13	-70	13	44.9	19.717	0.091	0.769	0.318	...	...
D50NE-782	4	59	50.27	-70	08	15.4	19.718	0.136	0.189	0.194	...	...
D50NE-785	4	59	54.01	-70	08	24.0	19.718	0.098	-0.159	0.163	...	...
D50NE-787	5	00	18.43	-70	08	06.0	19.719	0.082	-0.188	0.116	...	...
D50NE-784	5	00	23.52	-70	10	37.5	19.720	0.069	-0.106	0.128	...	...
D50SW-667	4	59	04.82	-70	10	52.4	19.721	0.090	0.420	0.226	...	...
D50NE-780	5	00	07.93	-70	08	53.8	19.722	0.104	0.269	0.190	...	...
D50SE-794	5	00	36.53	-70	11	28.1	19.723	0.080	-0.087	0.146	...	...
D50NW-813	4	59	22.81	-70	08	09.3	19.725	0.074	0.108	0.143	...	...
D50SE-790	5	00	22.58	-70	11	45.9	19.725	0.074	0.144	0.161	...	...
D50NW-815	4	59	08.47	-70	09	50.9	19.726	0.075	-0.042	0.131	...	...
D50SE-776	5	00	21.45	-70	11	38.2	19.726	0.088	0.573	0.207	...	...
D50SW-673	4	59	35.25	-70	11	05.6	19.726	0.095	0.115	0.187	...	...
D50SW-680	4	58	56.74	-70	13	38.9	19.726	0.118	-0.425	0.167	...	...
D50SE-796	5	00	18.11	-70	13	29.7	19.728	0.121	-0.031	0.172	...	...
D50NE-789	5	00	02.05	-70	09	27.3	19.732	0.084	-0.023	0.172	...	...
D50NE-788	5	00	01.46	-70	07	26.0	19.734	0.091	0.059	0.175	...	...
D50NE-793	4	59	48.96	-70	10	01.6	19.736	0.097	-0.247	0.442	...	...
D50SE-803	5	00	16.15	-70	11	53.2	19.739	0.083	-0.078	0.161	...	...
D50SE-811	5	00	35.87	-70	11	35.5	19.743	0.080	-0.252	0.138	...	...

D50SW-678	4	59	10.43	-70	13	53.8	19.743	0.086	0.240	0.202	...	...
D50SW-671	4	59	17.30	-70	12	35.1	19.744	0.088	0.604	0.239	...	...
D50NW-816	4	59	08.38	-70	10	16.6	19.745	0.076	0.311	0.183	...	...
D50NW-823	4	59	41.04	-70	09	31.2	19.745	0.075	0.018	0.154	...	...
D50S-733	4	59	57.69	-70	14	01.2	19.745	0.136	-0.436	0.191	...	...
D50SE-813	5	00	04.55	-70	13	49.9	19.745	0.087	-0.273	0.139	...	...
D50SE-801	5	00	05.20	-70	13	31.5	19.750	0.089	0.262	0.170	...	...
D50SE-806	5	00	39.24	-70	11	30.9	19.751	0.067	0.060	0.141	...	...
D50SE-809	5	00	15.09	-70	11	02.5	19.752	0.087	0.062	0.161	...	...
D50SW-689	4	58	57.92	-70	10	51.7	19.752	0.094	-0.224	0.156	...	...
D50NE-796	5	00	11.56	-70	09	33.5	19.754	0.095	0.070	0.149	...	...
D50NW-842	4	59	10.88	-70	08	23.6	19.754	0.185	-0.664	0.230	...	...
D50SE-819	5	00	22.03	-70	11	56.1	19.758	0.092	-0.160	0.155	...	...
D50NE-794	5	00	06.98	-70	09	15.5	19.761	0.104	0.323	0.179	...	...
D50SE-810	5	00	12.98	-70	12	18.0	19.761	0.078	0.231	0.145	...	...
D50SE-816	5	00	26.43	-70	12	43.6	19.761	0.088	0.061	0.146	...	...
D50SW-692	4	59	17.28	-70	13	18.2	19.766	0.103	-0.229	0.159	...	...
D50NW-834	4	59	28.61	-70	10	08.1	19.767	0.061	0.018	0.136	...	...
D50NE-807	5	00	10.15	-70	10	24.0	19.768	0.097	-0.286	0.140	...	...
D50SE-827	5	00	14.15	-70	13	08.0	19.768	0.076	-0.090	0.131	...	...
D50S-737	4	59	49.79	-70	14	34.1	19.770	0.087	-0.095	0.164	...	...
D50SE-835	5	00	29.20	-70	12	58.2	19.770	0.116	-0.250	0.167	...	...
D50SE-820	5	00	21.30	-70	13	49.4	19.774	0.082	0.176	0.167	...	...
D50SW-693	4	59	20.59	-70	14	07.7	19.774	0.124	-0.138	0.186	...	...
D50NE-798	4	59	53.21	-70	07	34.6	19.775	0.108	0.509	0.216	...	...
D50SW-687	4	59	35.11	-70	12	26.0	19.776	0.097	0.522	0.297	...	...
D50SE-791	5	00	21.02	-70	14	20.2	19.777	0.126	1.240	0.417	...	...
D50SE-818	5	00	43.12	-70	13	32.2	19.777	0.090	0.381	0.188	...	...
D50SE-829	5	00	04.56	-70	12	42.7	19.779	0.081	0.063	0.135	...	...
D50SE-836	5	00	30.26	-70	12	54.0	19.783	0.075	-0.033	0.145	...	...
D50NE-799	5	00	03.57	-70	10	04.1	19.784	0.102	0.648	0.252	...	...
D50NE-809	5	00	00.68	-70	10	10.2	19.784	0.116	0.037	0.175	...	...
D50S-740	4	59	52.55	-70	14	23.7	19.784	0.116	-0.058	0.195	...	...
D50SW-697	4	59	01.66	-70	13	35.4	19.784	0.104	-0.126	0.180	...	...
D50SE-839	5	00	13.14	-70	14	01.7	19.785	0.077	-0.074	0.140	...	...
D50SE-848	5	00	43.70	-70	13	49.6	19.787	0.088	-0.329	0.146	...	...
D50NW-841	4	59	22.27	-70	09	02.7	19.789	0.060	0.167	0.139	...	...
D50SW-694	4	59	24.69	-70	12	35.6	19.791	0.103	0.240	0.207	...	...
D50NW-847	4	59	46.37	-70	09	38.2	19.792	0.099	-0.014	0.163	...	...
D50SE-854	5	00	28.88	-70	11	52.4	19.795	0.090	-0.283	0.135	...	...
D50NW-854	4	59	24.50	-70	08	44.3	19.797	0.071	-0.233	0.125	...	...
D50SW-685	4	59	24.30	-70	12	22.0	19.797	0.088	1.058	0.390	...	...
D50NE-812	5	00	06.04	-70	07	44.4	19.798	0.117	0.101	0.197	...	...
D50SE-838	5	00	43.96	-70	14	10.8	19.799	0.083	0.311	0.174	...	...
D50SE-849	5	00	39.28	-70	12	09.8	19.799	0.100	-0.068	0.166	...	...
D50SE-847	5	00	26.33	-70	11	43.9	19.800	0.234	-0.038	0.296	...	...
D50SW-695	4	59	22.36	-70	10	48.0	19.802	0.120	0.485	0.272	...	...
D50NE-804	4	59	54.59	-70	07	59.2	19.803	0.084	0.790	0.244	...	...
D50SE-852	5	00	45.25	-70	14	01.1	19.803	0.085	-0.033	0.140	...	...
D50NE-813	5	00	19.00	-70	07	24.3	19.804	0.118	0.213	0.191	...	...
D50NW-855	4	59	21.95	-70	10	38.2	19.804	0.076	-0.074	0.130	...	...
D50SW-710	4	59	20.43	-70	11	30.0	19.805	0.092	-0.720	0.129	...	...
D50SW-699	4	59	34.07	-70	12	13.0	19.808	0.096	0.350	0.237	...	...
D50SW-703	4	59	04.21	-70	14	07.2	19.808	0.101	-0.110	0.149	...	...
D50NW-861	4	59	26.18	-70	07	11.0	19.809	0.077	-0.324	0.134	...	...
D50SW-701	4	59	31.98	-70	14	17.7	19.812	0.158	0.279	0.270	...	...
D50SW-702	4	59	00.05	-70	11	15.9	19.812	0.091	0.170	0.203	...	...
D50SW-706	4	59	20.03	-70	11	59.0	19.813	0.106	-0.060	0.185	...	...
D50SE-861	5	00	16.92	-70	11	11.8	19.815	0.116	-0.002	0.259	...	...
D50NW-852	4	59	06.29	-70	10	42.7	19.821	0.097	0.447	0.271	...	...
D50SE-860	5	00	45.74	-70	13	28.0	19.821	0.092	0.172	0.170	...	...
D50SE-869	5	00	43.82	-70	12	06.5	19.824	0.078	-0.104	0.131	...	...
D50SE-859	5	00	13.64	-70	10	59.2	19.827	0.086	0.339	0.188	...	...
D50SW-708	4	59	35.91	-70	12	56.3	19.828	0.108	-0.079	0.192	...	...
D50SE-851	5	00	15.63	-70	11	20.5	19.833	0.087	0.684	0.254	...	...
D50NW-864	4	59	23.81	-70	08	33.7	19.835	0.096	0.169	0.159	...	...

D50NW-868	4	59	43.07	-70	08	22.0	19.836	0.090	-0.110	0.149	...	...
D50SE-833	5	00	29.67	-70	13	57.3	19.836	0.091	1.343	0.331	...	...
D50NE-818	4	59	58.47	-70	10	15.9	19.841	0.075	0.251	0.140	...	...
D50SE-872	5	00	41.04	-70	13	50.9	19.841	0.106	0.153	0.226	...	...
D50NE-821	5	00	12.28	-70	08	35.5	19.843	0.096	-0.269	0.145	...	...
D50SE-879	5	00	29.10	-70	13	29.4	19.844	0.087	-0.243	0.142	...	...
D50NW-857	4	59	09.08	-70	10	07.2	19.846	0.098	0.728	0.287	...	...
D50NW-867	4	59	08.25	-70	09	53.8	19.847	0.095	0.191	0.180	...	...
D50NE-820	5	00	30.24	-70	09	34.9	19.851	0.090	0.201	0.204	...	...
D50SW-718	4	59	31.34	-70	14	01.1	19.851	0.119	-0.073	0.232	...	...
D50SE-889	5	00	31.51	-70	12	08.8	19.858	0.091	-0.389	0.162	...	...
D50SE-882	5	00	27.87	-70	12	02.9	19.862	0.115	-0.064	0.278	...	...
D50SE-893	5	00	03.85	-70	13	05.8	19.862	0.115	-0.401	0.157	...	...
D50NW-892	4	59	25.43	-70	07	54.1	19.863	0.088	-0.427	0.140	...	...
D50NE-834	4	59	59.60	-70	08	33.1	19.866	0.134	-0.351	0.221	...	...
D50SE-887	5	00	40.77	-70	13	40.9	19.867	0.107	-0.048	0.187	...	...
D50NE-830	4	59	49.97	-70	08	12.2	19.868	0.111	-0.093	0.158	...	...
D50S-761	5	00	12.43	-70	14	33.0	19.868	0.116	0.205	0.188	...	...
D50NW-881	4	59	25.26	-70	07	46.0	19.869	0.086	0.063	0.157	...	...
D50SE-896	5	00	34.31	-70	13	27.7	19.869	0.075	-0.331	0.117	...	...
D50SE-890	5	00	04.72	-70	14	12.4	19.870	0.097	-0.121	0.155	...	...
D50NW-906	4	59	43.92	-70	09	21.3	19.871	0.628	-1.413	0.710	0.225	0.199
D50SE-892	5	00	18.98	-70	11	33.6	19.873	0.106	-0.057	0.163	...	...
D50NE-831	5	00	05.88	-70	09	29.8	19.877	0.103	0.012	0.167	...	...
D50NW-896	4	59	16.34	-70	10	01.8	19.877	0.088	-0.376	0.146	...	...
D50SE-904	5	00	20.64	-70	13	17.7	19.877	0.090	-0.490	0.140	...	...
D50NW-897	4	59	29.43	-70	09	27.7	19.878	0.079	-0.381	0.126	...	...
D50SW-717	4	59	08.95	-70	11	28.4	19.878	0.111	0.765	0.276	...	...
D50NE-827	5	00	12.55	-70	08	10.6	19.879	0.085	0.270	0.171	...	...
D50NE-833	5	00	24.47	-70	08	50.0	19.880	0.122	0.003	0.188	...	...
D50NE-832	4	59	51.90	-70	09	01.5	19.883	0.101	0.143	0.173	...	...
D50NW-901	4	59	26.69	-70	09	22.5	19.888	0.095	-0.217	0.146	...	...
D50NW-889	4	59	28.02	-70	09	43.2	19.896	0.117	0.391	0.304	...	...
D50SE-898	5	00	15.92	-70	13	17.5	19.899	0.172	0.277	0.251	...	...
D50SE-905	5	00	36.77	-70	12	59.1	19.903	0.106	0.056	0.178	...	...
D50NE-841	4	59	53.52	-70	08	15.7	19.904	0.105	0.001	0.175	...	...
D50NW-884	4	59	04.24	-70	08	40.5	19.905	0.158	0.745	0.279	...	...
D50S-777	4	59	48.72	-70	11	39.9	19.905	0.135	0.016	0.210	...	...
D50NE-839	5	00	08.75	-70	07	52.8	19.914	0.157	0.418	0.279	...	...
D50NE-843	5	00	10.09	-70	09	18.4	19.914	0.116	0.124	0.186	...	...
D50NW-902	4	59	44.60	-70	08	32.1	19.914	0.079	0.074	0.172	...	...
D50SW-733	4	59	30.26	-70	11	24.7	19.914	0.124	-0.009	0.223	...	...
D50SW-711	4	59	13.43	-70	14	18.1	19.917	0.212	1.871	1.474	...	...
D50NW-904	4	59	40.67	-70	08	35.1	19.922	0.084	-0.143	0.147	...	...
D50SE-920	5	00	44.77	-70	13	41.6	19.923	0.091	-0.149	0.148	...	...
D50SE-923	5	00	45.88	-70	14	17.1	19.928	0.114	-0.112	0.171	...	...
D50SE-931	5	00	45.84	-70	11	01.6	19.928	0.078	-0.370	0.130	...	...
D50SW-739	4	59	34.06	-70	13	45.0	19.929	0.116	-0.312	0.188	...	...
D50SW-738	4	59	01.21	-70	13	33.0	19.933	0.101	-0.075	0.173	...	...
D50SE-937	5	00	21.92	-70	11	53.8	19.936	0.150	-0.492	0.378	...	...
D50NE-855	4	59	47.57	-70	08	50.7	19.938	0.112	-0.367	0.156	...	...
D50NW-909	4	59	35.46	-70	10	38.5	19.939	0.109	-0.173	0.171	...	...
D50SE-932	5	00	06.07	-70	12	53.8	19.939	0.098	-0.171	0.162	...	...
D50NW-911	4	59	40.49	-70	09	21.7	19.949	0.105	-0.017	0.184	...	...
D50S-793	4	59	48.84	-70	14	30.4	19.949	0.113	-0.362	0.179	...	...
D50NW-915	4	59	39.51	-70	08	41.2	19.950	0.086	-0.122	0.162	...	...
D50SE-944	5	00	34.43	-70	10	43.7	19.958	0.105	-0.243	0.162	...	...
D50SE-946	5	00	27.70	-70	12	14.7	19.958	0.084	-0.265	0.143	...	...
D50NE-852	4	59	53.26	-70	10	00.1	19.961	0.125	0.396	0.324	...	...
D50NE-856	5	00	18.13	-70	07	22.6	19.965	0.118	0.106	0.219	...	...
D50NE-854	5	00	16.79	-70	10	07.2	19.966	0.083	0.317	0.178	...	...
D50NE-857	5	00	02.83	-70	08	16.8	19.968	0.136	-0.004	0.196	...	...
D50NW-925	4	59	35.62	-70	07	43.9	19.968	0.177	-0.337	0.399	...	...
D50SE-943	5	00	31.83	-70	10	50.2	19.973	0.127	0.124	0.214	...	...
D50NE-860	5	00	09.66	-70	10	19.3	19.976	0.153	0.043	0.233	...	...
D50SE-901	5	00	39.27	-70	14	20.9	19.977	0.152	1.899	0.890	...	...

D50SE-939	5	00	10.03	-70	11	19.8	19.977	0.193	0.385	0.323	...	...
D50NW-920	4	59	33.32	-70	08	01.9	19.981	0.096	0.315	0.215	...	...
D50SW-751	4	59	08.73	-70	12	25.8	19.985	0.135	-0.327	0.186	...	...
D50NE-863	4	59	51.89	-70	07	54.3	19.988	0.107	0.182	0.228	...	...
D50NW-934	4	59	32.41	-70	07	07.4	19.989	0.095	-0.348	0.179	...	...
D50NE-868	5	00	22.52	-70	07	11.5	19.992	0.126	-0.210	0.211	...	...
D50SE-957	5	00	29.02	-70	12	01.6	19.992	0.100	-0.096	0.171	...	...
D50SW-752	4	58	58.89	-70	11	55.6	19.996	0.113	-0.227	0.170	...	...
D50SE-962	5	00	19.72	-70	13	33.8	20.000	0.101	-0.254	0.159	...	...
D50NE-864	5	00	25.95	-70	09	46.5	20.001	0.100	0.349	0.207	...	...
D50NE-867	5	00	27.37	-70	07	38.7	20.006	0.151	0.267	0.249	...	...
D50SE-974	5	00	28.71	-70	12	44.5	20.018	0.119	-0.300	0.179	...	...
D50SW-764	4	59	05.10	-70	13	36.4	20.022	0.126	-0.871	0.167	...	...
D50SE-976	5	00	45.29	-70	12	09.8	20.025	0.095	-0.178	0.146	...	...
D50NE-876	5	00	07.13	-70	10	15.5	20.026	0.167	-0.258	0.207	...	...
D50SE-988	5	00	38.50	-70	11	51.0	20.035	0.156	-0.665	0.210	...	...
D50NE-871	4	59	52.83	-70	10	04.8	20.040	0.128	0.469	0.244	...	...
D50NW-949	4	59	05.45	-70	09	54.5	20.046	0.115	-0.250	0.179	...	...
D50SE-983	5	00	39.32	-70	13	12.7	20.047	0.110	-0.129	0.188	...	...
D50SW-762	4	59	02.19	-70	11	30.9	20.047	0.169	-0.132	0.243	...	...
D50SE-970	5	00	23.50	-70	12	14.2	20.048	0.097	0.431	0.262	...	...
D50SE-979	5	00	16.69	-70	11	13.5	20.048	0.135	0.054	0.386	...	...
D50SE-964	5	00	17.51	-70	14	15.0	20.055	0.098	0.920	0.372	...	...
D50SE-984	5	00	20.54	-70	12	46.4	20.058	0.117	0.131	0.216	...	...
D50S-819	4	59	50.98	-70	14	07.1	20.065	0.139	-0.036	0.267	...	...
D50NE-880	4	59	48.19	-70	10	06.9	20.067	0.148	-0.053	0.215	...	...
D50NE-882	5	00	11.92	-70	08	33.2	20.068	0.105	-0.134	0.175	...	...
D50SE-981	5	00	42.00	-70	13	50.5	20.072	0.126	0.557	0.298	...	...
D50SE-1037	5	00	10.40	-70	13	40.6	20.082	0.262	-2.009	0.299	1.189	0.273
D50SE-995	5	00	10.08	-70	13	43.3	20.083	0.113	-0.012	0.184	...	...
D50SE-999	5	00	28.40	-70	11	01.2	20.083	0.124	-0.176	0.191	...	...
D50NW-957	4	59	04.69	-70	10	19.1	20.089	0.126	0.186	0.224	...	...
D50SE-1001	5	00	17.75	-70	13	09.2	20.089	0.136	-0.144	0.194	...	...
D50SE-996	5	00	28.90	-70	11	02.7	20.094	0.147	0.220	0.254	...	...
D50NW-961	4	59	22.74	-70	10	34.0	20.097	0.097	0.230	0.208	...	...
D50NE-886	5	00	16.14	-70	09	14.9	20.098	0.137	0.051	0.229	...	...
D50SW-771	4	59	30.70	-70	11	39.3	20.098	0.234	-0.366	0.299	...	...
D50SW-770	4	59	21.53	-70	14	11.7	20.113	0.202	0.644	0.428	...	...
D50NE-890	4	59	49.46	-70	10	00.2	20.114	0.137	-0.104	0.208	...	...
D50SE-1022	5	00	40.71	-70	13	59.0	20.119	0.288	-0.593	0.344	...	...
D50NE-887	4	59	50.74	-70	10	49.0	20.128	0.153	0.325	0.269	...	...
D50SE-1017	5	00	22.44	-70	11	09.8	20.131	0.144	-0.134	0.237	...	...
D50NE-888	5	00	01.17	-70	07	48.1	20.132	0.130	0.365	0.360	...	...
D50SE-1021	5	00	07.15	-70	11	34.7	20.138	0.110	-0.121	0.189	...	...
D50NW-974	4	59	05.10	-70	10	06.9	20.147	0.120	-0.128	0.218	...	...
D50SE-1025	5	00	18.63	-70	14	21.0	20.149	0.153	-0.022	0.242	...	...
D50SE-1029	5	00	22.74	-70	12	01.6	20.158	0.125	-0.087	0.204	...	...
D50SW-778	4	59	00.28	-70	13	24.1	20.175	0.128	0.364	0.321	...	...
D50SE-1051	5	00	25.87	-70	11	35.8	20.199	0.134	-0.019	0.220	...	...
D50S-837	4	59	45.06	-70	14	18.5	20.202	0.191	-0.125	0.300	...	...
D50SE-1045	5	00	42.22	-70	14	20.0	20.204	0.135	0.408	0.307	...	...
D50NW-993	4	59	39.36	-70	09	55.6	20.215	0.137	-0.508	0.214	...	...
D50SE-1059	5	00	10.57	-70	12	30.9	20.225	0.128	-0.235	0.196	...	...
D50S-841	4	59	53.63	-70	11	16.7	20.231	0.180	-0.148	0.268	...	...
D50NE-905	4	59	57.81	-70	10	05.8	20.247	0.159	-0.191	0.210	-1.128	0.319
D50NW-998	4	59	11.97	-70	08	21.0	20.252	0.094	-0.001	0.206	...	...
D50NW-1002	4	59	39.40	-70	07	27.2	20.261	0.111	-0.074	0.233	...	...
D50SW-788	4	59	32.73	-70	11	53.0	20.274	0.157	-0.612	0.228	...	...
D50SE-1073	5	00	40.60	-70	13	51.2	20.295	0.167	0.285	0.371	...	...
D50S-850	4	59	41.44	-70	12	13.8	20.304	0.189	0.153	0.293	...	...
D50NE-909	4	59	55.89	-70	09	42.9	20.311	0.170	-0.143	0.227	...	...
D50NW-1012	4	59	45.80	-70	09	43.2	20.320	0.138	-0.010	0.248	...	...
D50SW-793	4	59	32.83	-70	11	46.6	20.337	0.202	-0.590	0.289	...	...
D50NW-1021	4	59	15.53	-70	09	54.3	20.338	0.134	-0.591	0.181	...	...
D50SE-1092	5	00	04.27	-70	13	11.1	20.350	0.146	0.205	0.334	...	...
D50SW-796	4	59	33.45	-70	11	46.1	20.405	0.173	-0.308	0.289	...	...

D50SW-795	4	59	01.67	-70	14	16.0	20.429	0.196	0.628	0.495	...	...
D50NE-917	4	59	50.40	-70	08	26.8	20.434	0.172	-0.245	0.254	...	...
D50S-859	4	59	40.97	-70	12	13.0	20.442	0.243	-0.243	0.353	...	...
D50NE-918	5	00	26.70	-70	09	55.9	20.446	0.208	-0.063	0.335	...	...
D50S-862	4	59	57.04	-70	13	04.6	20.474	0.263	-0.718	0.324	...	...
D50SE-1137	5	00	43.18	-70	13	02.2	20.497	0.164	-0.139	0.294	...	...
D50SW-800	4	59	19.93	-70	11	22.3	20.504	0.145	-1.332	0.184	...	...
D50NE-926	5	00	17.22	-70	10	11.0	20.519	0.193	-0.025	0.287	...	...
D50SE-1150	5	00	31.06	-70	12	30.4	20.531	0.178	-0.597	0.259	...	...
D50SE-1147	5	00	41.36	-70	13	46.8	20.539	0.195	-0.206	0.319	...	...
D50NE-925	4	59	57.00	-70	10	05.2	20.544	0.170	0.922	0.428	...	...
D50SE-1169	5	00	35.64	-70	11	13.7	20.605	0.182	-0.714	0.252	...	...
D50SE-1180	5	00	29.78	-70	14	03.8	20.790	0.270	1.745	1.323	...	...
D50NE-938	4	59	48.52	-70	10	22.2	20.827	0.366	0.107	0.497	...	...
D50NE-947	4	59	57.24	-70	10	12.0	21.164	0.346	-0.248	0.513	...	...

Table 4d

D106A-1	5	14	02.02	-67	27	06.9	11.389	0.001	0.108	0.001	-0.514	0.002
D106-1	5	13	53.13	-67	26	54.6	11.879	0.004	0.223	0.005	-0.523	0.005
D106-2	5	13	54.48	-67	27	27.0	12.649	0.003	-0.061	0.004	-0.880	0.004
D106-4	5	13	49.16	-67	26	47.5	13.395	0.003	0.135	0.005	-0.791	0.008
D106-5	5	13	41.97	-67	27	13.9	13.696	0.006	-0.090	0.007	-0.949	0.009
D106-7	5	13	56.25	-67	28	38.5	14.214	0.003	-0.163	0.005	-0.985	0.007
D106-8	5	13	43.28	-67	25	27.7	14.715	0.005	-0.180	0.007	-1.023	0.010
D106-9	5	14	07.25	-67	26	28.4	15.023	0.003	-0.087	0.006	-0.933	0.011
D106-10	5	13	50.96	-67	27	17.8	15.089	0.016	-0.108	0.030	-0.876	0.039
D106-11	5	14	03.60	-67	26	01.2	15.143	0.005	-0.022	0.008	-0.799	0.013
D106-12	5	13	44.47	-67	27	31.7	15.390	0.013	-0.111	0.022	-0.863	0.029
D106-13	5	14	03.15	-67	26	33.4	15.504	0.018	-0.041	0.029	-0.689	0.068
D106-14	5	13	54.22	-67	27	19.1	15.693	0.007	-0.121	0.010	-0.906	0.015
D106-15	5	14	06.63	-67	26	45.5	15.805	0.007	-0.078	0.011	-0.898	0.020
D106-16	5	13	42.71	-67	27	07.0	16.019	0.008	-0.075	0.012	-0.810	0.019
D106-17	5	13	53.19	-67	27	31.8	16.027	0.008	0.105	0.014	-0.747	0.026
D106-18	5	13	46.67	-67	26	32.0	16.057	0.008	0.103	0.014	-0.734	0.027
D106-19	5	13	50.16	-67	28	12.4	16.059	0.009	-0.077	0.013	-0.758	0.021
D106-20	5	14	04.09	-67	26	23.7	16.204	0.007	0.043	0.012	-0.790	0.021
D106-21	5	13	50.64	-67	27	21.9	16.208	0.018	-0.110	0.030	-0.812	0.038
D106-22	5	13	42.42	-67	25	28.0	16.237	0.009	-0.100	0.013	-0.796	0.024
D106-23	5	13	49.29	-67	26	51.5	16.326	0.014	-0.048	0.019	-0.780	0.026
D106-24	5	14	00.57	-67	28	15.5	16.377	0.007	-0.186	0.011	-0.946	0.020
D106-27	5	14	01.59	-67	27	15.7	16.539	0.013	-0.114	0.022	-0.778	0.030
D106-28	5	13	44.64	-67	27	32.2	16.548	0.021	-0.060	0.053	-0.705	0.067
D106-29	5	14	01.54	-67	29	01.1	16.561	0.010	-0.142	0.015	-0.885	0.021
D106-25	5	14	00.72	-67	29	08.2	16.610	0.008	1.825	0.032	...	...
D106-26	5	13	48.53	-67	28	31.3	16.613	0.008	1.723	0.046	...	...
D106-30	5	13	53.95	-67	26	24.5	16.617	0.011	0.084	0.018	-0.706	0.033
D106-31	5	14	01.83	-67	27	26.6	16.717	0.010	-0.115	0.015	-0.926	0.022
D106-33	5	14	09.68	-67	25	51.2	16.783	0.010	-0.146	0.016	-0.792	0.021
D106-1001	5	13	40.88	-67	26	01.3	16.837	0.017	-0.129	0.023	-0.833	0.033
D106-35	5	13	53.41	-67	27	10.8	16.851	0.017	-0.046	0.022	-0.657	0.028
D106-34	5	13	43.55	-67	28	27.3	16.868	0.011	0.472	0.019	0.117	0.060
D106-36	5	13	48.58	-67	27	35.3	16.876	0.018	-0.073	0.025	-0.906	0.030
D106-37	5	14	03.51	-67	25	32.2	16.887	0.011	-0.104	0.016	-0.792	0.036
D106-38	5	14	07.11	-67	27	32.8	16.934	0.011	0.738	0.027	0.321	0.070
D106-40	5	13	44.54	-67	26	57.6	16.987	0.010	1.136	0.039	...	...
D106-39	5	13	41.95	-67	26	57.0	17.006	0.017	1.700	0.084	...	...
D106-41	5	14	13.11	-67	28	03.1	17.017	0.013	1.448	0.032	...	...
D106-44	5	13	50.74	-67	27	17.9	17.033	0.038	-0.153	0.064	-1.011	0.086
D106-42	5	14	14.31	-67	26	19.6	17.061	0.011	0.811	0.028	0.525	0.140
D106-46	5	13	51.52	-67	27	21.6	17.078	0.032	-0.053	0.052	-0.538	0.099
D106-43	5	14	03.94	-67	28	53.6	17.092	0.012	1.436	0.039	...	...
D106-47	5	14	02.32	-67	27	01.4	17.093	0.079	-0.113	0.091	-0.367	0.041
D106-1003	5	13	47.26	-67	26	01.0	17.132	0.011	-0.055	0.018	-0.752	0.035
D106-50	5	13	48.30	-67	27	16.0	17.159	0.016	-0.158	0.024	-0.807	0.029
D106-45	5	13	52.49	-67	26	55.2	17.163	0.095	2.154	0.225	...	...
D106-51	5	13	38.26	-67	27	16.3	17.172	0.013	-0.046	0.022	-0.820	0.036
D106-48	5	14	11.50	-67	28	17.6	17.213	0.013	1.294	0.041	...	...
D106-49	5	13	50.21	-67	26	46.5	17.220	0.016	1.400	0.050	...	...
D106-1004	5	13	47.53	-67	25	50.5	17.243	0.016	-0.104	0.029	-0.869	0.044
D106-52	5	13	52.09	-67	27	18.2	17.296	0.041	0.156	0.075	-1.302	0.109
D106-55	5	14	14.16	-67	26	16.0	17.353	0.015	-0.097	0.023	-0.641	0.040
D106-53	5	13	57.61	-67	27	51.9	17.392	0.015	1.307	0.051	...	...
D106-54	5	13	36.30	-67	25	40.8	17.395	0.030	1.371	0.121	...	...
D106-56	5	14	09.35	-67	28	35.6	17.397	0.016	-0.135	0.025	-0.773	0.041
D106-57	5	13	54.33	-67	26	19.1	17.489	0.019	0.528	0.032	0.023	0.099
D106-59	5	13	37.33	-67	27	32.3	17.489	0.014	-0.031	0.025	-0.674	0.052
D106-58	5	13	51.68	-67	27	19.7	17.490	0.059	0.106	0.089	-0.699	0.111
D106-60	5	13	55.00	-67	26	50.7	17.492	0.021	0.042	0.034	-0.653	0.050
D106-1006	5	13	47.67	-67	25	40.8	17.527	0.015	-0.130	0.029	-0.773	0.053
D106-62	5	14	12.90	-67	25	43.5	17.550	0.024	0.182	0.035	-0.585	0.061
D106-63	5	13	52.42	-67	27	42.1	17.553	0.017	-0.122	0.027	-0.764	0.049

D106-61	5	13	48.24	-67	28	52.7	17.554	0.019	0.687	0.042	0.463	0.178
D106-64	5	13	51.92	-67	27	48.2	17.576	0.019	-0.036	0.032	-0.547	0.058
D106-66	5	14	09.97	-67	26	17.2	17.603	0.020	-0.107	0.031	-0.612	0.064
D106-65	5	14	03.14	-67	26	34.4	17.616	0.121	0.521	0.262	-1.494	0.286
D106-69	5	13	40.94	-67	27	18.3	17.642	0.019	-0.101	0.030	-0.676	0.044
D106-1007	5	13	46.38	-67	25	42.3	17.644	0.020	-0.106	0.033	-0.624	0.043
D106-68	5	13	51.00	-67	27	19.6	17.648	0.054	0.081	0.097	-0.972	0.134
D106-70	5	13	54.77	-67	27	19.2	17.661	0.018	-0.009	0.031	-0.772	0.061
D106-72	5	13	52.24	-67	27	04.3	17.674	0.017	-0.010	0.027	-0.696	0.051
D106-73	5	13	51.30	-67	27	19.9	17.676	0.048	-0.036	0.087	-0.730	0.135
D106-74	5	13	35.59	-67	27	47.5	17.746	0.019	1.386	0.076	...	...
D106-75	5	13	56.85	-67	25	24.0	17.747	0.022	0.215	0.081	...	...
D106-1008	5	13	47.40	-67	25	49.1	17.750	0.032	-0.113	0.050	-0.611	0.074
D106-76	5	13	52.86	-67	27	31.8	17.781	0.023	-0.060	0.037	-0.684	0.086
D106-78	5	13	47.66	-67	27	55.0	17.810	0.022	-0.041	0.032	-0.637	0.069
D106-80	5	13	51.75	-67	27	17.0	17.812	0.079	-0.300	0.130	-0.883	0.156
D106-79	5	13	56.88	-67	28	47.1	17.860	0.021	0.940	0.045	...	...
D106-77	5	14	09.54	-67	27	10.2	17.869	0.022	1.347	0.079	...	...
D106-1009	5	13	46.01	-67	26	13.0	17.870	0.051	-0.157	0.061	-0.558	0.062
D106-82	5	13	51.78	-67	27	21.3	17.877	0.107	0.445	0.201	-1.144	0.232
D106-81	5	13	53.75	-67	26	55.0	17.889	0.214	1.159	0.286	...	...
D106-83	5	14	14.70	-67	28	54.1	17.923	0.032	1.460	0.131	...	...
D106-87	5	13	51.32	-67	26	58.8	17.973	0.019	-0.002	0.035	-0.765	0.058
D106-89	5	13	57.29	-67	25	41.6	17.981	0.018	0.039	0.034	-0.535	0.087
D106-90	5	13	53.85	-67	28	35.9	17.988	0.022	-0.083	0.038	-0.684	0.076
D106-86	5	13	58.40	-67	26	56.1	18.011	0.022	1.243	0.077	...	...
D106-93	5	13	51.77	-67	25	29.3	18.047	0.019	-0.104	0.038	-0.441	0.063
D106-91	5	14	03.37	-67	28	42.6	18.074	0.026	1.265	0.074	...	...
D106-95	5	14	00.95	-67	27	12.7	18.096	0.053	0.018	0.092	-0.645	0.115
D106-97	5	14	06.92	-67	28	15.3	18.108	0.032	0.133	0.050	0.180	0.198
D106-98	5	13	35.69	-67	28	02.1	18.141	0.075	0.858	0.106	...	...
D106-96	5	14	14.28	-67	28	58.6	18.144	0.024	1.026	0.063	...	...
D106-94	5	14	13.23	-67	28	32.7	18.156	0.024	1.418	0.115	...	...
D106-99	5	14	06.56	-67	26	25.4	18.157	0.022	1.167	0.062	...	...
D106-103	5	14	11.38	-67	26	50.1	18.182	0.031	-0.009	0.047	-0.519	0.094
D106-100	5	14	11.23	-67	26	10.3	18.188	0.023	1.506	0.217	...	...
D106-102	5	14	04.50	-67	26	07.0	18.191	0.041	0.891	0.108	...	...
D106-101	5	13	48.35	-67	26	43.9	18.196	0.035	1.198	0.097	...	...
D106-104	5	14	10.72	-67	28	19.5	18.212	0.028	0.118	0.044	-0.431	0.098
D106-105	5	13	50.79	-67	27	00.0	18.221	0.030	-0.074	0.046	-0.656	0.070
D106-107	5	14	04.92	-67	25	29.8	18.272	0.030	0.045	0.052	-0.711	0.088
D106-106	5	13	56.95	-67	28	14.2	18.287	0.029	1.065	0.080	...	...
D106-109	5	13	57.63	-67	26	32.7	18.315	0.037	0.308	0.069	-0.613	0.118
D106-108	5	13	35.56	-67	26	50.0	18.346	0.028	1.159	0.099	...	...
D106-113	5	13	48.80	-67	28	23.6	18.346	0.028	0.011	0.053	-0.561	0.109
D106-114	5	13	50.24	-67	27	29.1	18.347	0.033	0.003	0.052	-0.596	0.087
D106-112	5	13	54.33	-67	27	33.3	18.349	0.152	0.101	0.182	-0.318	0.190
D106-110	5	14	11.81	-67	26	45.0	18.351	0.029	0.657	0.065	...	...
D106-117	5	14	09.58	-67	27	13.4	18.382	0.038	0.007	0.066	-0.445	0.114
D106-111	5	14	07.90	-67	28	44.3	18.398	0.033	1.287	0.100	...	...
D106-115	5	13	52.46	-67	26	01.0	18.405	0.037	1.308	0.099	...	...
D106-116	5	14	06.90	-67	27	19.7	18.408	0.036	1.063	0.113	...	...
D106-118	5	13	46.41	-67	27	30.1	18.422	0.039	0.037	0.062	-0.523	0.104
D106-120	5	13	59.61	-67	27	51.2	18.458	0.033	0.504	0.066	...	...
D106-125	5	14	06.84	-67	27	16.4	18.469	0.039	0.106	0.070	-0.253	0.138
D106-124	5	13	53.83	-67	26	57.5	18.479	0.193	0.344	0.229	-0.695	0.160
D106-119	5	14	06.22	-67	27	02.7	18.480	0.028	1.067	0.096	...	...
D106-127	5	14	01.29	-67	27	12.9	18.489	0.075	0.295	0.132	...	...
D106-129	5	13	55.43	-67	26	02.5	18.493	0.031	0.012	0.050	-0.562	0.109
D106-123	5	14	03.33	-67	26	37.9	18.509	0.040	1.146	0.137	...	...
D106-122	5	13	35.72	-67	27	03.7	18.515	0.035	1.323	0.112	...	...
D106-126	5	13	43.80	-67	27	12.1	18.522	0.036	1.078	0.103	...	...
D106-128	5	13	58.88	-67	28	13.6	18.526	0.037	0.795	0.085	...	...
D106-130	5	13	55.21	-67	28	37.0	18.549	0.030	1.244	0.111	...	...
D106A-48	5	13	53.78	-67	26	57.7	18.549	0.121	0.267	0.154	-0.686	0.158
D106-132	5	14	08.90	-67	25	51.3	18.560	0.036	0.944	0.154	...	...

D106-131	5	14	14.22	-67	28	53.9	18.566	0.045	1.576	0.166	...	...
D106-133	5	13	55.81	-67	26	04.8	18.587	0.029	1.079	0.093	...	...
D106-138	5	13	35.16	-67	28	16.5	18.589	0.045	-0.059	0.094	-0.270	0.206
D106-136	5	13	49.13	-67	27	28.3	18.606	0.192	0.616	0.259	-0.678	0.262
D106-141	5	13	42.52	-67	27	30.5	18.647	0.054	-0.097	0.080	-0.298	0.170
D106-137	5	14	07.07	-67	26	54.2	18.651	0.029	1.375	0.121	...	...
D106-139	5	13	58.91	-67	26	02.5	18.674	0.047	1.370	0.150	...	...
D106-140	5	14	08.73	-67	25	48.5	18.686	0.033	1.130	0.115	...	...
D106-142	5	14	05.74	-67	27	41.9	18.687	0.037	0.422	0.065	-0.197	0.208
D106-143	5	13	52.42	-67	26	49.6	18.701	0.144	0.460	0.207	...	...
D106-147	5	14	07.40	-67	25	42.3	18.726	0.045	0.157	0.079	...	...
D106-145	5	14	10.44	-67	27	15.2	18.730	0.076	0.970	0.149	...	...
D106-150	5	13	39.28	-67	27	00.6	18.731	0.038	0.101	0.068	-0.392	0.158
D106-148	5	13	40.01	-67	28	54.0	18.738	0.047	0.386	0.086	...	...
D106-152	5	13	55.94	-67	28	19.7	18.752	0.044	0.098	0.075	-0.233	0.261
D106-146	5	14	05.08	-67	27	49.5	18.758	0.038	1.532	0.150	...	...
D106-149	5	14	06.44	-67	26	00.9	18.764	0.046	0.939	0.133	...	...
D106-156	5	13	53.12	-67	26	48.2	18.767	0.178	-0.155	0.212	...	...
D106-154	5	13	49.64	-67	27	18.5	18.770	0.039	0.016	0.077	-0.532	0.154
D106-1025	5	13	43.77	-67	25	38.9	18.780	0.042	-0.044	0.078	-0.476	0.132
D106-153	5	14	13.61	-67	26	24.4	18.784	0.046	0.501	0.101	...	...
D106-151	5	14	10.90	-67	25	33.9	18.789	0.040	1.381	0.160	...	...
D106-157	5	14	01.54	-67	25	50.3	18.790	0.041	0.157	0.085	-0.436	0.173
D106-165	5	13	55.73	-67	26	02.3	18.824	0.039	0.020	0.075	-0.395	0.191
D106-161	5	13	41.90	-67	27	22.2	18.835	0.038	0.372	0.085	...	...
D106-158	5	13	48.55	-67	28	07.1	18.843	0.064	0.828	0.133	...	...
D106-160	5	13	52.88	-67	26	39.2	18.853	0.040	0.990	0.132	...	...
D106-164	5	13	40.79	-67	28	42.6	18.856	0.035	0.770	0.089	...	...
D106-169	5	14	03.14	-67	25	39.7	18.861	0.040	-0.009	0.075	0.050	0.241
D106-172	5	13	38.61	-67	27	28.3	18.863	0.052	-0.081	0.078	-0.277	0.170
D106-166	5	13	54.60	-67	27	46.9	18.867	0.054	0.637	0.114	...	...
D106-167	5	13	56.84	-67	28	51.5	18.883	0.047	0.826	0.107	...	...
D106-173	5	13	37.51	-67	28	12.8	18.904	0.040	0.825	0.110	...	...
D106-170	5	13	58.30	-67	28	43.5	18.916	0.053	1.199	0.151	...	...
D106-168	5	13	44.41	-67	26	44.4	18.929	0.049	1.595	0.229	...	...
D106-174	5	13	51.97	-67	28	27.4	18.929	0.048	1.014	0.120	...	...
D106-171	5	13	51.30	-67	28	23.7	18.940	0.056	1.699	0.252	...	...
D106-176	5	14	00.97	-67	26	56.6	18.946	0.051	0.656	0.134	...	...
D106-182	5	13	56.67	-67	26	42.2	18.948	0.055	0.063	0.116	-0.404	0.208
D106-175	5	14	00.36	-67	25	57.8	18.949	0.050	0.741	0.131	...	...
D106-180	5	14	08.99	-67	27	50.6	18.949	0.048	0.212	0.083	...	...
D106-178	5	14	03.13	-67	27	17.3	18.956	0.049	0.755	0.157	...	...
D106-177	5	13	59.48	-67	26	04.2	18.970	0.040	1.090	0.154	...	...
D106-185	5	13	42.32	-67	27	31.8	18.972	0.072	-0.063	0.107	-0.452	0.171
D106-181	5	14	00.72	-67	26	14.4	18.976	0.051	0.785	0.101	...	...
D106-179	5	14	04.72	-67	26	06.2	18.977	0.081	0.880	0.215	...	...
D106-183	5	13	59.74	-67	25	28.1	18.992	0.048	0.724	0.106	...	...
D106-184	5	14	01.99	-67	27	21.4	18.997	0.050	0.794	0.145	...	...
D106-191	5	13	54.50	-67	28	55.8	19.006	0.047	0.155	0.083	...	...
D106-192	5	13	56.87	-67	26	12.7	19.008	0.049	0.081	0.092	-0.303	0.176
D106-186	5	14	01.55	-67	28	15.0	19.014	0.058	0.917	0.152	...	...
D106-190	5	13	50.25	-67	27	36.7	19.016	0.049	0.564	0.118	...	...
D106-188	5	13	47.96	-67	27	06.3	19.030	0.046	1.190	0.215	...	...
D106-195	5	14	02.54	-67	26	32.8	19.049	0.051	0.736	0.140	...	...
D106-198	5	14	08.90	-67	25	39.0	19.058	0.056	0.781	0.152	...	...
D106-197	5	13	50.65	-67	25	50.8	19.064	0.050	0.969	0.178	...	...
D106-193	5	14	10.77	-67	27	17.5	19.065	0.077	1.130	0.221	...	...
D106-204	5	13	36.63	-67	29	04.8	19.080	0.047	-0.082	0.073	-0.541	0.157
D106-199	5	14	12.82	-67	27	19.4	19.083	0.052	0.782	0.154	...	...
D106-200	5	14	07.38	-67	28	44.8	19.097	0.048	1.065	0.157	...	...
D106-210	5	14	09.71	-67	28	25.7	19.098	0.063	-0.197	0.095	-0.466	0.142
D106-206	5	14	04.70	-67	25	56.9	19.129	0.061	0.801	0.135	...	...
D106-205	5	13	44.13	-67	25	26.0	19.134	0.055	1.054	0.165	...	...
D106-211	5	13	39.48	-67	27	57.7	19.137	0.073	0.197	0.136	...	...
D106-215	5	13	52.52	-67	28	14.4	19.152	0.060	0.025	0.101	...	...
D106-213	5	13	56.97	-67	28	20.8	19.156	0.072	0.289	0.128	...	...

D106-217	5	13	42.34	-67	26	60.0	19.157	0.064	0.020	0.107	...	...
D106-216	5	14	05.10	-67	27	13.7	19.162	0.063	0.142	0.101	...	...
D106-222	5	13	48.77	-67	27	21.7	19.190	0.067	0.038	0.111	-0.792	0.184
D106-224	5	13	49.88	-67	26	29.4	19.197	0.067	0.036	0.099	...	...
D106-1051	5	13	43.08	-67	26	06.0	19.207	0.079	0.033	0.148	-0.149	0.310
D106-220	5	13	36.19	-67	25	39.8	19.216	0.063	0.881	0.199	...	...
D106-226	5	14	06.08	-67	26	31.5	19.233	0.060	0.816	0.162	...	...
D106-234	5	13	57.60	-67	28	55.5	19.233	0.061	0.119	0.104	-0.741	0.190
D106-238	5	14	08.97	-67	28	17.1	19.252	0.066	0.266	0.119	...	...
D106-244	5	13	43.99	-67	27	09.9	19.265	0.065	0.100	0.106	...	...
D106-245	5	14	09.58	-67	25	54.6	19.268	0.054	0.030	0.102	...	...
D106-240	5	14	11.63	-67	28	37.7	19.273	0.059	0.567	0.138	...	...
D106-252	5	14	13.17	-67	26	02.9	19.292	0.074	-0.012	0.114	...	...
D106-243	5	14	03.58	-67	27	58.9	19.295	0.063	0.871	0.148	...	...
D106-251	5	14	11.93	-67	26	00.3	19.300	0.072	0.337	0.152	...	...
D106-254	5	14	05.55	-67	28	23.1	19.310	0.074	0.132	0.122	...	...
D106-256	5	13	41.22	-67	27	15.3	19.331	0.261	0.261	0.317	...	...
D106-261	5	13	50.63	-67	28	21.2	19.357	0.067	0.308	0.117	...	...
D106-270	5	13	48.30	-67	27	04.7	19.414	0.085	0.040	0.152	...	...
D106-269	5	13	45.44	-67	27	48.9	19.418	0.076	0.258	0.165	...	...
D106-273	5	13	54.06	-67	27	02.0	19.443	0.088	0.061	0.166	...	...
D106-276	5	14	12.81	-67	26	14.7	19.444	0.074	-0.145	0.120	...	...
D106-277	5	13	56.98	-67	26	34.2	19.455	0.084	0.076	0.124	...	...
D106-274	5	13	41.62	-67	27	35.0	19.457	0.080	0.196	0.133	-0.830	0.262
D106-278	5	13	53.60	-67	27	42.4	19.462	0.078	-0.106	0.120	-0.541	0.230
D106-281	5	13	49.81	-67	27	36.9	19.475	0.073	0.030	0.142	...	...
D106-284	5	14	06.79	-67	27	55.5	19.490	0.072	-0.095	0.112	...	...
D106-283	5	13	55.78	-67	27	06.8	19.495	0.089	0.384	0.185	...	...
D106-288	5	14	02.96	-67	27	36.8	19.503	0.084	-0.050	0.131	...	...
D106-290	5	13	55.19	-67	27	44.9	19.512	0.067	-0.068	0.120	...	...
D106-287	5	14	09.58	-67	28	34.1	19.531	0.074	0.628	0.190	...	...
D106-291	5	14	09.94	-67	28	14.2	19.532	0.072	0.407	0.150	...	...
D106-293	5	14	12.16	-67	26	40.0	19.537	0.080	0.203	0.142	...	...
D106-298	5	14	01.29	-67	25	32.3	19.546	0.088	-0.101	0.131	...	...
D106-296	5	13	35.31	-67	27	49.3	19.551	0.079	0.389	0.177	...	...
D106-300	5	14	01.44	-67	27	27.4	19.561	0.079	0.094	0.147	...	...
D106-294	5	13	46.83	-67	26	30.4	19.568	0.095	0.934	0.249	...	...
D106-302	5	13	58.24	-67	27	17.4	19.589	0.087	0.389	0.152	...	...
D106-301	5	13	58.18	-67	27	19.6	19.590	0.085	0.718	0.191	...	...
D106-304	5	13	47.32	-67	26	35.2	19.593	0.088	0.083	0.150	...	...
D106-309	5	14	06.31	-67	27	44.5	19.610	0.078	0.126	0.153	...	...
D106-311	5	14	11.79	-67	26	52.2	19.629	0.100	-0.026	0.153	...	...
D106-310	5	13	56.57	-67	26	47.2	19.639	0.104	0.224	0.165	...	...
D106-314	5	13	55.00	-67	26	05.8	19.677	0.106	0.237	0.175	...	...
D106-318	5	13	49.85	-67	28	30.3	19.712	0.101	0.188	0.173	...	...
D106-327	5	13	55.77	-67	27	35.4	19.726	0.073	-0.179	0.120	...	...
D106-323	5	14	05.24	-67	25	33.9	19.727	0.102	0.053	0.184	...	...
D106-326	5	13	44.32	-67	26	42.6	19.730	0.097	-0.081	0.143	...	...
D106-328	5	13	55.80	-67	27	01.7	19.731	0.101	-0.101	0.191	...	...
D106-320	5	13	57.13	-67	27	53.1	19.732	0.092	0.518	0.214	...	...
D106-337	5	13	54.25	-67	26	57.1	19.754	0.329	-0.242	0.392	...	...
D106-331	5	13	52.03	-67	28	14.8	19.767	0.097	0.496	0.204	...	...
D106-343	5	13	56.30	-67	28	30.1	19.792	0.111	-0.005	0.170	...	...
D106-342	5	14	06.31	-67	27	46.6	19.797	0.093	0.270	0.193	...	...
D106-346	5	13	38.86	-67	27	15.1	19.810	0.121	0.023	0.189	...	...
D106-352	5	14	08.44	-67	26	16.6	19.823	0.122	-0.085	0.183	...	...
D106-350	5	14	12.47	-67	26	49.5	19.824	0.101	0.074	0.160	...	...
D106-353	5	14	06.72	-67	26	01.6	19.830	0.117	-0.038	0.193	...	...
D106-351	5	13	53.54	-67	27	50.8	19.837	0.097	0.253	0.181	...	...
D106-359	5	14	03.18	-67	26	30.9	19.843	0.112	-0.663	0.394	...	...
D106-349	5	13	50.50	-67	28	14.5	19.847	0.114	0.623	0.233	...	...
D106-361	5	13	41.70	-67	26	56.9	19.874	0.137	-0.725	0.222	...	...
D106-357	5	14	02.82	-67	25	57.1	19.882	0.096	0.479	0.237	...	...
D106-360	5	14	03.97	-67	27	52.1	19.892	0.122	0.060	0.188	...	...
D106-366	5	13	48.24	-67	26	52.4	19.969	0.121	-0.128	0.188	...	...
D106-367	5	14	10.16	-67	27	09.5	20.006	0.092	0.039	0.196	...	...

D106-368	5	13	57.20	-67	28	12.1	20.013	0.123	0.046	0.208	...	...
D106-374	5	13	49.27	-67	26	39.5	20.024	0.198	-0.184	0.269	...	...
D106-373	5	13	52.34	-67	27	51.1	20.033	0.136	0.177	0.271	...	...
D106-372	5	14	03.01	-67	25	59.0	20.044	0.107	0.465	0.283	...	...
D106-377	5	13	54.04	-67	27	50.6	20.045	0.117	-0.034	0.196	...	...
D106-388	5	13	48.06	-67	26	49.6	20.155	0.176	-0.026	0.260	...	...
D106-386	5	13	41.70	-67	27	23.6	20.156	0.132	0.139	0.259	...	...
D106-393	5	14	01.16	-67	29	00.8	20.248	0.151	0.373	0.364	...	...
D106-396	5	13	57.97	-67	26	32.0	20.272	0.193	-0.284	0.264	...	...
D106-405	5	13	52.16	-67	27	40.0	20.355	0.169	-0.004	0.287	...	...
D106-414	5	14	09.16	-67	25	51.8	20.493	0.209	-0.085	0.439	...	...
D106-420	5	13	48.54	-67	27	14.3	21.011	0.351	-0.091	0.581	...	...

Table 4e

L54SA-1b	5	26	04.31	-67	29	58.7	11.418	...	-0.118	...	-1.014	...
L54SA-2	5	26	15.51	-67	30	01.8	11.963	0.005	-0.158	0.012	-1.048	0.015
L54S-2	5	26	20.91	-67	29	57.7	12.674	0.007	-0.165	0.012	-1.021	0.013
L51N-1	5	25	15.84	-67	28	06.5	13.019	0.006	-0.199	0.008	-1.006	0.008
L54S-1a	5	25	56.57	-67	30	30.1	13.111	...	-0.187	...	-1.021	...
L54S-4	5	26	24.27	-67	30	17.4	13.130	0.007	-0.215	0.014	-1.010	0.015
L54S-5	5	26	15.80	-67	29	44.3	13.159	0.005	-0.173	0.008	-1.054	0.009
L54S-3a	5	26	08.95	-67	29	47.5	13.311	...	-0.218	...	-1.008	...
L54S-3b	5	26	08.95	-67	29	47.5	13.511	...	-0.218	...	-1.008	...
L54S-1b	5	25	56.57	-67	30	30.1	13.611	...	-0.187	...	-1.021	...
L54N-2	5	26	08.19	-67	28	28.3	13.739	0.011	-0.190	0.015	-0.979	0.014
L54N-3	5	26	23.75	-67	29	07.1	13.841	0.004	-0.139	0.007	-0.928	0.009
L54N-4	5	26	05.47	-67	29	07.7	13.909	0.004	-0.196	0.007	-1.037	0.012
L54S-8	5	26	32.16	-67	29	51.3	13.966	0.010	-0.178	0.019	-0.872	0.021
L51N-3	5	25	31.03	-67	28	38.9	13.992	0.005	-0.223	0.006	-0.999	0.007
L54S-9	5	26	20.78	-67	29	52.1	14.066	0.007	-0.197	0.011	-0.882	0.013
L54N-6	5	26	28.13	-67	27	23.1	14.310	0.005	-0.189	0.009	-0.992	0.012
L54S-10	5	26	03.31	-67	32	10.4	14.355	0.005	0.045	0.009	-1.097	0.012
L54N-7	5	26	18.51	-67	26	45.6	14.369	0.003	-0.063	0.010	-0.963	0.015
L51S-2	5	25	28.42	-67	29	13.3	14.418	0.004	-0.221	0.005	-1.043	0.007
L54SA-4	5	26	15.85	-67	29	49.9	14.472	0.008	-0.217	0.013	-0.941	0.014
L54N-8	5	26	02.92	-67	29	33.1	14.622	0.005	-0.197	0.009	...	...
L54S-12	5	26	04.42	-67	29	35.6	14.624	0.006	-0.196	0.010	-0.962	0.012
L54S-13	5	26	19.98	-67	30	01.7	14.640	0.006	-0.191	0.010	-0.896	0.013
L54S-14	5	26	16.85	-67	29	38.0	14.641	0.007	-0.197	0.012	-0.976	0.013
L54S-15	5	26	24.13	-67	30	33.6	14.645	0.006	-0.222	0.013	-1.007	0.015
L54S-16	5	26	02.91	-67	29	33.2	14.646	0.005	-0.237	0.008	-0.979	0.011
L54N-9	5	26	04.43	-67	29	35.6	14.656	0.005	-0.170	0.008	...	...
L54S-17	5	26	18.58	-67	31	20.2	14.667	0.004	0.220	0.006	0.190	0.012
L51S-3	5	25	27.36	-67	29	010.0	14.675	0.003	-0.239	0.005	-1.019	0.007
L51S-4	5	25	35.31	-67	28	56.7	14.688	0.005	-0.222	0.008	-0.960	0.010
L54S-18	5	26	14.43	-67	29	34.6	14.692	0.006	-0.229	0.013	-0.998	0.015
L54N-10	5	26	14.43	-67	29	34.6	14.716	0.004	-0.195	0.008	...	...
L54S-19	5	26	06.45	-67	29	50.7	14.820	0.012	-0.114	0.035	-1.004	0.047
L54N-11	5	26	02.90	-67	26	27.2	14.847	0.005	0.304	0.010	0.238	0.017
L51S-5	5	25	30.74	-67	29	26.1	14.948	0.003	-0.225	0.005	-0.953	0.007
L51N-9	5	25	31.86	-67	26	51.7	14.999	0.006	-0.219	0.008	-0.909	0.010
L51N-10	5	25	32.50	-67	28	37.5	15.041	0.006	-0.211	0.008	-0.967	0.010
L54S-20	5	26	08.51	-67	30	25.6	15.078	0.005	-0.199	0.008	-1.010	0.012
L54SA-5	5	26	15.14	-67	30	06.2	15.087	0.007	-0.210	0.022	-0.815	0.028
L51S-7	5	25	14.19	-67	29	07.0	15.101	0.006	-0.203	0.007	-0.946	0.006
L54SA-1a	5	26	04.31	-67	29	58.7	15.118	...	-0.118	...	-1.014	...
L51N-12	5	25	28.17	-67	27	59.0	15.121	0.004	-0.218	0.006	-0.943	0.008
L54S-22	5	26	04.20	-67	29	25.5	15.188	0.008	-0.156	0.011	-0.972	0.013
L54N-13	5	26	04.21	-67	29	25.4	15.234	0.007	-0.181	0.011	...	...
L54S-24	5	26	21.81	-67	29	24.2	15.264	0.008	-0.211	0.017	-0.993	0.022
L54N-14	5	25	56.15	-67	28	10.5	15.279	0.006	-0.204	0.011	-0.990	0.017
L54S-25	5	26	17.93	-67	30	42.5	15.288	0.006	-0.190	0.008	-0.885	0.012
L54SA-6	5	26	15.33	-67	29	58.5	15.307	0.016	-0.241	0.047	-0.783	0.058
L54N-15	5	26	21.81	-67	29	24.2	15.310	0.005	-0.199	0.009	...	...
L54N-16	5	26	14.25	-67	28	43.6	15.313	0.005	-0.196	0.012	-0.975	0.019
L51S-8	5	25	25.44	-67	29	18.0	15.314	0.006	-0.213	0.008	-0.935	0.010
L51N-14	5	25	31.64	-67	28	45.0	15.404	0.009	-0.236	0.011	-0.993	0.012
L54S-26	5	26	12.42	-67	30	45.1	15.408	0.005	-0.197	0.008	-0.991	0.011
L54S-27	5	26	21.98	-67	30	36.8	15.440	0.006	-0.180	0.014	-0.957	0.019
L54N-18	5	26	08.80	-67	26	34.8	15.461	0.006	0.052	0.011	-0.903	0.018
L51S-9	5	25	40.62	-67	30	40.9	15.473	0.008	-0.238	0.010	-0.919	0.011
L54SA-7	5	26	05.06	-67	29	58.5	15.499	0.019	-0.260	0.051	-0.735	0.062
L54N-19	5	26	14.30	-67	27	11.2	15.527	0.006	-0.169	0.010	-0.993	0.014
L54S-28	5	26	19.48	-67	31	03.4	15.549	0.007	-0.191	0.010	-0.986	0.012
L54S-30	5	26	18.02	-67	30	17.3	15.556	0.005	-0.219	0.009	-0.978	0.012
L54N-20	5	26	05.96	-67	29	08.2	15.573	0.008	-0.218	0.018	-0.972	0.024
L54S-31	5	26	08.50	-67	29	48.6	15.581	0.031	-0.588	0.065	-0.509	0.075
L51N-15	5	25	25.62	-67	28	52.8	15.588	0.005	1.717	0.011	1.651	0.172

L54N-21	5	25	53.87	-67	26	43.4	15.593	0.005	-0.152	0.009	-0.797	0.019
L54S-33	5	26	16.75	-67	32	20.8	15.683	0.008	0.711	0.016	0.282	0.037
L54S-32	5	26	08.45	-67	29	50.0	15.685	0.013	1.232	0.093	-2.713	0.122
L54N-22	5	26	05.15	-67	28	27.5	15.760	0.006	-0.127	0.013	-0.789	0.022
L54N-23	5	26	05.17	-67	28	30.5	15.760	0.006	-0.196	0.012	-0.879	0.020
L51S-10	5	25	23.10	-67	29	03.0	15.764	0.006	-0.204	0.009	-0.927	0.012
L54N-24	5	26	04.80	-67	29	16.9	15.770	0.008	-0.163	0.014	-0.900	0.020
L54S-35	5	26	08.01	-67	30	06.3	15.787	0.009	-0.183	0.012	-0.937	0.014
L54S-36	5	26	09.22	-67	31	11.1	15.789	0.005	-0.184	0.008	-0.967	0.013
L54S-37	5	26	34.12	-67	30	52.5	15.793	0.011	-0.129	0.017	-0.843	0.021
L54S-38	5	26	11.30	-67	29	56.5	15.810	0.010	-0.208	0.013	-0.941	0.017
L54N-25	5	26	24.95	-67	28	53.0	15.816	0.006	-0.002	0.012	-0.854	0.017
L51S-11	5	25	28.60	-67	29	17.8	15.825	0.009	-0.204	0.014	-0.920	0.018
L54S-39	5	26	06.66	-67	29	50.2	15.840	0.013	-0.310	0.020	-0.946	0.029
L51S-12	5	25	47.04	-67	29	43.6	15.845	0.007	-0.192	0.010	-0.733	0.012
L54N-26	5	26	01.78	-67	28	32.6	15.857	0.006	-0.141	0.024	-0.849	0.035
L54N-27	5	26	29.30	-67	27	09.9	15.921	0.005	-0.149	0.011	-0.946	0.019
L51S-13	5	25	13.00	-67	29	17.7	15.934	0.007	-0.161	0.016	-0.926	0.020
L54S-40	5	26	04.60	-67	29	40.7	15.936	0.010	-0.163	0.015	-0.848	0.016
L54SA-8	5	26	13.56	-67	29	55.0	15.959	0.008	-0.161	0.011	-0.843	0.020
L51S-14	5	25	21.44	-67	31	26.6	15.960	0.007	-0.201	0.010	-0.882	0.012
L54N-28	5	26	11.63	-67	27	54.5	16.028	0.008	-0.144	0.013	-0.879	0.020
L51S-15	5	25	23.82	-67	29	25.5	16.047	0.009	0.125	0.014	-0.737	0.019
L54N-29	5	26	10.03	-67	28	09.3	16.074	0.007	-0.183	0.012	-0.898	0.018
L51S-17	5	25	40.81	-67	29	27.2	16.086	0.009	-0.178	0.014	-0.801	0.017
L54N-30	5	26	08.06	-67	28	38.9	16.086	0.007	-0.162	0.013	-0.929	0.022
L54S-42	5	26	26.04	-67	29	44.1	16.105	0.012	-0.156	0.017	-0.842	0.017
L54S-43	5	26	03.76	-67	30	07.8	16.121	0.008	-0.121	0.012	-0.976	0.022
L54S-44	5	26	09.09	-67	29	46.0	16.143	0.147	-0.182	0.277	-1.426	0.355
L54S-45	5	26	18.12	-67	30	05.7	16.157	0.011	-0.205	0.016	-0.926	0.019
L54S-47	5	25	57.75	-67	29	52.1	16.169	0.008	-0.186	0.016	-0.895	0.021
L51S-16	5	25	31.84	-67	31	14.0	16.179	0.007	2.578	0.037	...	...
L51S-18	5	25	29.93	-67	30	39.5	16.182	0.008	1.798	0.023	...	...
L51S-19	5	25	13.80	-67	30	08.0	16.192	0.009	0.565	0.020	0.089	0.036
L54N-31	5	26	04.60	-67	29	18.9	16.195	0.011	-0.192	0.016	-0.874	0.021
L51N-21	5	25	31.95	-67	28	44.8	16.198	0.011	-0.203	0.026	-0.815	0.037
L54S-48	5	25	58.06	-67	29	42.1	16.227	0.010	-0.170	0.014	-0.889	0.016
L54S-49	5	26	21.11	-67	30	12.6	16.244	0.007	-0.219	0.016	-0.934	0.022
L54S-50	5	26	19.90	-67	30	23.9	16.250	0.008	-0.195	0.015	-0.902	0.020
L54S-51	5	26	02.12	-67	31	01.5	16.258	0.007	-0.070	0.013	-0.585	0.023
L54Sa-1010	5	26	15.73	-67	29	53.1	16.282	0.020	-0.093	0.040	-0.776	0.048
L51N-23	5	25	21.97	-67	28	49.9	16.287	0.007	-0.190	0.011	-0.811	0.018
L54S-52	5	26	16.33	-67	29	37.4	16.299	0.011	-0.173	0.019	-0.908	0.024
L51N-22	5	25	13.06	-67	25	51.9	16.343	0.008	1.704	0.020	...	...
L54Sa-1011	5	26	14.43	-67	29	57.7	16.349	0.017	0.023	0.041	-0.889	0.054
L54S-54	5	26	23.27	-67	30	00.7	16.359	0.011	-0.197	0.018	-0.736	0.021
L54N-32	5	26	23.35	-67	26	26.8	16.375	0.008	-0.139	0.014	-0.931	0.025
L54S-56	5	26	01.46	-67	31	17.4	16.384	0.011	-0.140	0.017	-0.793	0.020
L54N-33	5	25	55.86	-67	27	44.4	16.390	0.009	-0.164	0.014	-0.939	0.020
L54S-59	5	26	28.54	-67	29	57.2	16.445	0.014	-0.144	0.021	-0.733	0.026
L54S-60	5	25	56.34	-67	30	06.2	16.452	0.010	-0.193	0.017	-0.877	0.024
L51S-20	5	25	41.39	-67	30	15.0	16.463	0.010	-0.202	0.014	-0.831	0.018
L51N-24	5	25	40.71	-67	26	27.7	16.467	0.012	1.741	0.027	...	...
L54Sa-1012	5	26	05.06	-67	30	03.0	16.483	0.034	-0.288	0.066	-0.666	0.087
L54S-57	5	26	21.47	-67	32	45.8	16.492	0.007	1.695	0.028	...	...
L54S-61	5	26	08.78	-67	30	29.1	16.493	0.010	-0.163	0.017	-0.919	0.024
L54S-62	5	25	55.08	-67	30	45.6	16.497	0.009	-0.288	0.016	-0.624	0.024
L54Sa-1013	5	26	03.74	-67	29	56.8	16.507	0.043	-0.125	0.099	-1.166	0.159
L54S-58	5	26	26.29	-67	32	44.5	16.514	0.009	1.699	0.031	...	...
L51S-21	5	25	18.78	-67	29	18.8	16.531	0.010	-0.166	0.015	-0.862	0.015
L54S-64	5	26	12.77	-67	29	59.0	16.544	0.009	-0.180	0.015	-0.860	0.024
L51S-22	5	25	25.24	-67	29	23.3	16.571	0.013	0.075	0.019	-0.594	0.022
L54Sa-1014	5	26	14.84	-67	29	59.1	16.588	0.024	-0.212	0.078	-0.642	0.099
L54N-36	5	26	11.32	-67	29	03.2	16.599	0.010	-0.105	0.018	-0.836	0.028
L54N-35	5	26	01.60	-67	29	12.8	16.612	0.106	0.241	0.210	-1.095	0.329
L54S-71	5	26	14.71	-67	29	53.2	16.638	0.015	-0.116	0.036	-0.992	0.045

L54Sa-1017	5	26	04.88	-67	29	56.8	16.640	0.041	-1.018	0.107	-0.254	0.207
L54S-72	5	26	19.36	-67	30	28.3	16.642	0.011	-0.155	0.018	-0.822	0.026
L54Sa-1016	5	26	15.01	-67	29	56.6	16.655	0.026	0.162	0.087	-0.838	0.143
L51N-27	5	25	20.86	-67	27	26.1	16.655	0.009	1.371	0.023	...	...
L54S-74	5	26	16.52	-67	29	47.3	16.661	0.023	-0.236	0.037	-0.753	0.044
L54S-68	5	26	32.25	-67	29	06.6	16.662	0.012	1.713	0.043	...	...
L54S-69	5	26	33.62	-67	29	44.5	16.662	0.012	1.670	0.038	...	...
L54S-73	5	26	05.68	-67	29	28.0	16.664	0.012	-0.112	0.021	-0.908	0.031
L54S-75	5	26	21.44	-67	29	30.2	16.677	0.009	-0.157	0.027	-0.889	0.036
L54S-76	5	26	08.66	-67	29	46.7	16.677	0.175	-0.916	0.217	0.598	0.170
L54S-70	5	25	56.60	-67	30	14.3	16.679	0.009	1.540	0.034	...	...
L54N-37	5	26	21.44	-67	29	30.3	16.704	0.010	-0.113	0.018	...	...
L54N-39	5	25	54.90	-67	27	27.8	16.715	0.009	-0.167	0.015	-0.815	0.025
L54N-40	5	26	13.31	-67	27	25.7	16.719	0.010	-0.090	0.019	-0.535	0.034
L54Sa-1019	5	26	15.53	-67	29	56.2	16.722	0.038	0.013	0.123	-0.845	0.188
L54N-41	5	26	05.69	-67	29	28.0	16.725	0.011	-0.114	0.022	...	...
L51N-29	5	25	20.28	-67	27	46.5	16.731	0.009	-0.163	0.013	-0.708	0.021
L51S-24	5	25	36.71	-67	29	19.0	16.738	0.043	-0.060	0.061	-0.220	0.090
L54N-38	5	26	19.50	-67	26	56.8	16.745	0.010	0.827	0.026	0.319	0.078
L51S-25	5	25	26.15	-67	29	49.3	16.746	0.009	-0.174	0.014	-0.854	0.021
L54S-82	5	26	06.68	-67	29	31.3	16.748	0.010	-0.152	0.015	-0.833	0.028
L54N-42	5	26	06.69	-67	29	31.3	16.771	0.008	-0.134	0.016	...	...
L51S-26	5	25	26.05	-67	29	39.7	16.784	0.011	-0.149	0.017	-0.738	0.020
L54S-83	5	26	08.40	-67	30	15.8	16.784	0.013	-0.157	0.021	-0.764	0.030
L54N-43	5	26	12.08	-67	29	14.9	16.787	0.011	-0.156	0.018	-0.802	0.026
L54S-77	5	26	28.39	-67	31	00.9	16.789	0.009	1.602	0.036	...	...
L54N-44	5	26	13.74	-67	28	49.1	16.794	0.010	-0.143	0.016	-0.863	0.030
L54S-78	5	25	56.99	-67	29	38.8	16.800	0.010	1.405	0.047	...	...
L54S-85	5	26	02.01	-67	30	28.7	16.805	0.012	-0.109	0.019	-0.836	0.025
L51S-23	5	25	38.42	-67	30	07.0	16.806	0.011	1.654	0.035	...	...
L54S-81	5	26	08.49	-67	30	09.1	16.817	0.009	1.670	0.049	...	...
L54S-79	5	25	57.90	-67	30	44.9	16.824	0.009	1.877	0.027	...	...
L51N-30	5	25	14.30	-67	28	12.2	16.826	0.012	-0.158	0.018	-0.760	0.025
L54N-45	5	26	01.91	-67	28	31.7	16.829	0.030	-0.085	0.043	-0.847	0.058
L51S-27	5	25	26.14	-67	29	25.7	16.860	0.011	1.392	0.031	...	...
L54S-86	5	26	16.67	-67	29	27.2	16.862	0.015	-0.134	0.023	-0.828	0.032
L54S-87	5	26	00.38	-67	29	57.7	16.864	0.011	-0.145	0.019	-0.756	0.037
L54S-88	5	26	05.30	-67	29	49.0	16.866	0.011	-0.136	0.020	-0.883	0.028
L54N-46	5	26	16.67	-67	29	27.2	16.878	0.012	-0.113	0.019	...	...
L54S-90	5	26	00.58	-67	29	51.0	16.895	0.010	-0.197	0.019	-0.813	0.031
L51S-31	5	25	46.52	-67	30	58.1	16.900	0.010	-0.208	0.014	-0.787	0.023
L54N-47	5	26	08.89	-67	28	22.3	16.903	0.010	-0.164	0.018	-0.852	0.027
L51S-29	5	25	28.38	-67	31	58.4	16.906	0.009	0.637	0.022	0.159	0.051
L54S-93	5	26	15.07	-67	30	49.0	16.930	0.010	-0.082	0.018	-0.582	0.028
L51S-30	5	25	19.00	-67	30	13.4	16.935	0.012	1.304	0.031	...	...
L54S-94	5	26	18.90	-67	31	02.9	16.941	0.013	-0.048	0.022	-0.678	0.030
L51S-28	5	25	15.17	-67	28	57.9	16.947	0.011	1.668	0.045	...	...
L51N-32	5	25	45.90	-67	26	41.5	16.947	0.012	1.464	0.030	...	...
L54S-96	5	26	23.12	-67	30	27.9	16.953	0.009	-0.172	0.021	-0.817	0.030
L54S-97	5	26	12.12	-67	29	38.6	16.972	0.011	-0.130	0.019	-0.725	0.032
L51S-32	5	25	18.45	-67	29	05.9	16.973	0.012	0.970	0.025	0.778	0.118
L51S-34	5	25	51.75	-67	32	33.3	16.978	0.011	-0.025	0.024	...	...
L54S-92	5	26	05.42	-67	31	42.5	16.987	0.013	1.327	0.047	...	...
L51N-36	5	25	24.41	-67	28	53.9	16.994	0.011	-0.166	0.018	-0.712	0.030
L51S-35	5	25	22.44	-67	29	48.3	17.001	0.099	-0.344	0.126	-0.614	0.141
L54N-48	5	26	11.18	-67	28	39.0	17.013	0.013	1.917	0.047	...	...
L54N-50	5	26	15.94	-67	27	28.8	17.016	0.010	0.574	0.021	-0.124	0.065
L51S-33	5	25	25.25	-67	30	06.0	17.026	0.011	1.341	0.031	...	...
L51N-39	5	25	25.81	-67	27	04.0	17.032	0.009	-0.205	0.016	-0.802	0.029
L51N-35	5	25	23.95	-67	27	01.6	17.041	0.011	1.299	0.028	...	...
L54N-49	5	26	02.65	-67	29	25.3	17.042	0.012	1.572	0.043	...	...
L51S-37	5	25	36.74	-67	30	20.4	17.066	0.015	1.006	0.028	0.537	0.111
L54N-53	5	26	05.41	-67	29	12.4	17.067	0.125	-0.420	0.163	-0.652	0.182
L51N-37	5	25	14.59	-67	27	39.6	17.071	0.012	1.313	0.030	...	...
L54S-99	5	26	32.88	-67	29	15.5	17.076	0.018	-0.110	0.026	...	...
L51N-38	5	25	42.75	-67	28	53.4	17.080	0.009	1.356	0.031	...	...

L54N-51	5	26	18.77	-67	27	54.7	17.090	0.011	1.566	0.036	...	...
L51S-36	5	25	36.11	-67	29	32.8	17.092	0.011	1.760	0.039	...	...
L51S-38	5	25	33.21	-67	31	15.3	17.092	0.011	1.234	0.027	...	...
L54S-98	5	26	21.46	-67	31	47.5	17.101	0.011	1.083	0.037	...	...
L54N-52	5	26	18.42	-67	28	16.3	17.105	0.013	1.612	0.049	...	...
L51S-39	5	25	46.38	-67	31	09.2	17.106	0.007	-0.166	0.014	-0.840	0.021
L54S-102	5	26	22.52	-67	30	41.7	17.108	0.012	-0.192	0.024	-0.786	0.031
L54N-55	5	26	25.03	-67	28	58.9	17.117	0.011	-0.098	0.023	-0.613	0.041
L54S-103	5	26	06.25	-67	29	41.1	17.120	0.018	-0.103	0.029	-0.755	0.041
L54S-104	5	26	21.16	-67	30	25.5	17.122	0.011	-0.148	0.022	-0.533	0.043
L54S-100	5	25	56.45	-67	30	03.9	17.131	0.013	0.654	0.033	0.218	0.113
L54S-105	5	26	01.24	-67	30	04.3	17.132	0.013	-0.017	0.024	-0.597	0.036
L54N-54	5	25	53.57	-67	26	41.3	17.148	0.012	0.999	0.033	0.940	0.182
L54S-106	5	26	04.21	-67	31	23.2	17.155	0.010	-0.125	0.017	-0.799	0.030
L51N-41	5	25	34.87	-67	26	56.0	17.158	0.014	1.446	0.035	...	...
L51N-44	5	25	41.14	-67	26	53.0	17.163	0.010	-0.170	0.019	-0.709	0.037
L54N-57	5	26	06.21	-67	29	19.8	17.163	0.011	-0.166	0.021	-0.815	0.028
L54S-107	5	26	19.93	-67	30	18.9	17.175	0.015	-0.100	0.025	-0.653	0.042
L51N-42	5	25	30.44	-67	26	04.3	17.179	0.011	1.470	0.034	...	...
L54S-109	5	25	55.84	-67	30	19.6	17.181	0.016	-0.168	0.025	-0.734	0.042
L54N-56	5	26	22.03	-67	28	19.7	17.191	0.014	1.318	0.035	...	...
L51N-43	5	25	40.61	-67	26	53.0	17.216	0.011	1.464	0.032	...	...
L54S-112	5	26	09.75	-67	30	01.1	17.232	0.014	-0.173	0.029	-0.774	0.043
L51N-45	5	25	25.98	-67	26	06.8	17.241	0.011	1.097	0.028	...	...
L51S-43	5	25	22.72	-67	29	53.3	17.258	0.014	-0.145	0.022	-0.746	0.039
L54S-108	5	26	29.61	-67	29	47.7	17.259	0.015	1.832	0.067	...	...
L51S-44	5	25	24.93	-67	29	48.0	17.263	0.016	-0.181	0.023	-0.839	0.027
L51S-40	5	25	35.77	-67	31	09.9	17.270	0.013	1.595	0.040	...	...
L54N-59	5	26	23.06	-67	26	47.9	17.271	0.012	-0.181	0.022	-0.723	0.040
L54N-61	5	26	01.48	-67	29	13.1	17.274	0.202	-0.621	0.279	-0.398	0.410
L54S-117	5	26	10.23	-67	30	10.5	17.285	0.012	-0.146	0.026	-0.740	0.043
L51S-45	5	25	32.54	-67	30	45.7	17.289	0.014	0.346	0.024	0.245	0.064
L54S-110	5	25	59.23	-67	32	00.2	17.290	0.012	1.462	0.039	...	...
L54N-58	5	26	04.10	-67	29	34.5	17.290	0.017	1.359	0.057	...	...
L51N-46	5	25	17.31	-67	28	52.2	17.291	0.012	-0.176	0.021	-0.783	0.033
L54S-111	5	26	22.24	-67	31	34.7	17.294	0.013	1.544	0.043	...	...
L51S-41	5	25	46.78	-67	30	37.5	17.298	0.012	1.676	0.056	...	...
L54S-118	5	26	21.14	-67	32	34.0	17.299	0.014	0.024	0.027	-0.621	0.047
L54S-113	5	26	08.66	-67	30	55.7	17.317	0.012	1.641	0.060	...	...
L51S-42	5	25	18.07	-67	31	12.6	17.321	0.015	1.346	0.039	...	...
L54S-115	5	26	33.19	-67	31	36.2	17.322	0.013	1.370	0.052	...	...
L54S-119	5	26	27.40	-67	32	35.8	17.324	0.017	0.064	0.028	-0.416	0.050
L51S-46	5	25	51.53	-67	29	04.4	17.341	0.014	0.544	0.030	-0.277	0.093
L54S-116	5	26	07.02	-67	29	39.1	17.348	0.017	1.500	0.060	...	...
L51S-49	5	25	21.45	-67	29	50.5	17.358	0.014	-0.136	0.021	-0.588	0.033
L51S-47	5	25	38.18	-67	29	47.9	17.360	0.015	0.977	0.029	...	...
L54N-60	5	26	07.35	-67	26	43.4	17.372	0.015	1.889	0.082	...	...
L54S-121	5	26	18.66	-67	30	28.2	17.375	0.017	-0.115	0.024	-0.683	0.041
L54N-63	5	26	09.32	-67	28	32.8	17.379	0.017	0.701	0.034	-0.045	0.090
L54N-62	5	26	09.77	-67	28	50.9	17.392	0.018	1.410	0.049	...	...
L51N-49	5	25	13.80	-67	26	18.0	17.395	0.014	-0.168	0.023	-0.726	0.038
L51N-50	5	25	34.97	-67	28	06.1	17.398	0.011	-0.162	0.016	-0.756	0.034
L54S-120	5	26	24.14	-67	32	13.3	17.402	0.012	1.231	0.041	...	...
L51N-47	5	25	28.83	-67	28	19.8	17.408	0.011	1.323	0.054	...	...
L51S-50	5	25	30.28	-67	29	00.2	17.413	0.017	-0.155	0.022	-0.653	0.033
L54S-123	5	26	14.46	-67	30	07.1	17.413	0.016	-0.241	0.039	-0.803	0.065
L54N-64	5	26	16.35	-67	28	40.8	17.420	0.019	1.399	0.050	0.062	0.163
L51S-48	5	25	12.21	-67	30	59.7	17.430	0.021	1.535	0.067	...	...
L54S-125	5	25	58.04	-67	31	37.3	17.430	0.016	-0.164	0.028	-0.676	0.040
L54S-128	5	26	06.61	-67	29	51.7	17.433	0.041	-0.209	0.183	-0.800	0.233
L54S-129	5	26	08.97	-67	29	59.3	17.439	0.017	-0.123	0.027	-0.733	0.039
L51S-51	5	25	36.89	-67	31	20.5	17.445	0.020	-0.208	0.028	-0.833	0.037
L54S-133	5	26	09.01	-67	29	52.2	17.448	0.083	-0.756	0.115	0.017	0.122
L54S-130	5	26	08.14	-67	29	56.1	17.453	0.022	-0.057	0.058	-0.752	0.074
L51N-48	5	25	45.94	-67	25	46.4	17.455	0.020	1.269	0.054	...	...
L54N-66	5	26	08.56	-67	27	55.8	17.456	0.015	1.233	0.039	...	...

L54S-131	5	26	13.73	-67	29	43.3	17.459	0.018	-0.145	0.034	-0.606	0.051
L54S-127	5	26	09.15	-67	29	53.3	17.461	0.055	0.442	0.096	-1.397	0.116
L54S-132	5	26	10.07	-67	29	42.9	17.462	0.022	-0.140	0.034	-0.426	0.055
L54N-65	5	26	30.03	-67	26	12.9	17.470	0.015	1.777	0.048	...	...
L54N-68	5	26	30.36	-67	27	41.2	17.474	0.016	0.864	0.032	0.463	0.133
L54N-67	5	25	59.83	-67	25	52.8	17.477	0.013	1.248	0.034	...	...
L51N-53	5	25	22.97	-67	28	12.0	17.485	0.017	-0.054	0.027	-0.541	0.054
L51S-51	5	25	34.20	-67	27	36.6	17.501	0.016	1.254	0.034	...	...
L54S-137	5	26	26.86	-67	29	58.4	17.502	0.013	-0.024	0.028	...	...
L54S-124	5	26	28.43	-67	31	43.9	17.509	0.013	1.683	0.052	...	...
L54N-69	5	26	12.58	-67	28	05.1	17.516	0.013	1.300	0.049	...	...
L54S-52	5	25	30.94	-67	31	22.4	17.529	0.015	1.204	0.040	...	...
L54S-134	5	25	59.54	-67	32	43.5	17.531	0.015	1.040	0.039	...	...
L54N-70	5	26	20.74	-67	26	43.6	17.546	0.013	1.440	0.060	...	...
L51N-55	5	25	45.80	-67	28	01.8	17.547	0.014	0.986	0.036	...	...
L54S-136	5	26	17.15	-67	30	26.2	17.548	0.014	1.146	0.050	...	...
L54S-138	5	26	05.66	-67	32	04.0	17.554	0.009	-0.011	0.026	-0.647	0.044
L51N-54	5	25	22.75	-67	28	11.0	17.557	0.017	1.516	0.052	...	...
L51S-54	5	25	20.02	-67	31	37.8	17.559	0.010	1.278	0.042	...	...
L51S-53	5	25	15.73	-67	32	25.0	17.564	0.013	1.414	0.049	...	...
L54N-73	5	26	08.32	-67	28	01.4	17.564	0.018	-0.064	0.033	-0.548	0.045
L51S-56	5	25	37.45	-67	29	02.3	17.568	0.015	-0.125	0.024	-0.575	0.039
L54N-71	5	26	03.10	-67	26	42.7	17.572	0.015	1.260	0.059	...	...
L51S-57	5	25	41.62	-67	30	01.8	17.573	0.020	-0.138	0.029	-0.581	0.050
L54S-140	5	26	09.76	-67	32	12.2	17.583	0.013	-0.110	0.024	-0.486	0.047
L54S-142	5	26	20.69	-67	29	40.1	17.584	0.018	-0.283	0.033	-0.522	0.046
L51S-58	5	25	16.49	-67	31	55.7	17.587	0.017	-0.056	0.028	-0.376	0.045
L54N-72	5	25	56.09	-67	27	11.9	17.593	0.014	1.101	0.036	...	...
L54S-143	5	26	02.73	-67	29	57.5	17.602	0.022	-0.188	0.054	-0.807	0.129
L54N-74	5	25	57.33	-67	27	47.4	17.602	0.018	0.744	0.041	0.186	0.133
L51N-56	5	25	50.27	-67	27	12.2	17.608	0.017	1.309	0.040	...	...
L54N-78	5	25	57.13	-67	26	42.7	17.612	0.015	-0.035	0.032	-0.594	0.045
L54S-147	5	26	11.09	-67	32	37.9	17.615	0.016	-0.190	0.029	-0.720	0.054
L54S-146	5	26	20.93	-67	29	49.6	17.617	0.035	-0.124	0.060	-0.842	0.086
L54S-148	5	26	31.18	-67	29	31.2	17.617	0.018	-0.205	0.027	-0.551	0.045
L51N-57	5	25	41.54	-67	27	33.2	17.619	0.013	0.572	0.023	-0.046	0.099
L51S-55	5	25	38.70	-67	29	59.3	17.621	0.017	1.197	0.036	...	...
L51N-59	5	25	42.13	-67	26	58.9	17.623	0.014	-0.190	0.024	-0.760	0.037
L51N-60	5	25	46.75	-67	27	06.9	17.627	0.012	-0.147	0.020	-0.738	0.042
L51S-59	5	25	37.54	-67	30	54.6	17.641	0.018	0.806	0.046	0.145	0.115
L54N-75	5	26	23.67	-67	29	30.3	17.642	0.019	1.631	0.066	...	...
L54N-76	5	25	53.38	-67	26	12.1	17.651	0.017	1.311	0.051	...	...
L54N-77	5	25	53.42	-67	26	06.3	17.655	0.016	1.135	0.051	...	...
L54N-79	5	26	05.54	-67	29	12.4	17.655	0.019	0.671	0.053	-1.147	0.102
L54N-81	5	26	31.18	-67	29	31.3	17.660	0.016	-0.104	0.029	...	...
L54S-144	5	26	03.08	-67	31	39.0	17.662	0.023	1.051	0.041	...	...
L54S-153	5	26	03.83	-67	32	35.4	17.670	0.018	-0.080	0.027	-0.916	0.050
L54N-83	5	26	12.71	-67	28	13.6	17.670	0.019	-0.096	0.031	-0.693	0.061
L54S-151	5	26	09.92	-67	29	55.1	17.671	0.025	0.181	0.049	-0.193	0.087
L51S-63	5	25	26.53	-67	29	51.3	17.674	0.015	-0.121	0.026	-0.589	0.047
L54S-149	5	26	22.22	-67	32	00.7	17.694	0.014	1.211	0.049	...	...
L54S-154	5	26	01.39	-67	30	12.2	17.694	0.053	-0.172	0.068	-0.540	0.074
L54S-150	5	26	24.43	-67	30	39.8	17.700	0.017	1.159	0.051	...	...
L54N-80	5	26	22.32	-67	27	47.2	17.700	0.017	1.068	0.049	...	...
L54S-155	5	26	02.58	-67	29	38.1	17.701	0.023	-0.079	0.037	-0.230	0.070
L54S-152	5	26	29.28	-67	30	15.8	17.707	0.021	0.818	0.045	...	...
L54S-156	5	26	01.83	-67	29	41.3	17.707	0.023	-0.063	0.035	-0.843	0.047
L51S-62	5	25	47.92	-67	32	23.9	17.710	0.018	1.267	0.050	...	...
L54N-85	5	26	01.66	-67	28	58.2	17.710	0.017	-0.060	0.031	-0.725	0.049
L54S-157	5	25	58.23	-67	31	27.5	17.714	0.018	-0.130	0.033	-0.761	0.052
L54N-82	5	25	53.32	-67	26	48.2	17.723	0.023	1.249	0.059	...	...
L51S-64	5	25	28.39	-67	30	59.8	17.728	0.019	-0.026	0.028	-0.431	0.051
L54N-87	5	26	24.91	-67	26	00.3	17.738	0.015	-0.107	0.036	-0.806	0.053
L54N-86	5	26	08.22	-67	28	29.3	17.750	0.113	0.271	0.376	-1.380	0.470
L54N-84	5	26	12.47	-67	28	36.1	17.761	0.021	1.289	0.058	...	...
L51S-66	5	25	46.44	-67	31	00.8	17.765	0.021	-0.126	0.029	-0.402	0.053

L54N-88	5	26	04.11	-67	26	41.0	17.767	0.020	-0.015	0.035	-0.771	0.045
L54N-89	5	26	20.16	-67	29	07.1	17.768	0.024	-0.098	0.037	-0.565	0.063
L51N-61	5	25	12.65	-67	26	47.8	17.772	0.011	0.843	0.049	...	...
L54S-159	5	26	08.95	-67	29	43.2	17.776	0.080	0.129	0.272	-1.564	0.357
L51S-65	5	25	37.71	-67	32	16.4	17.777	0.015	1.065	0.048	...	...
L54S-160	5	26	12.00	-67	30	10.2	17.782	0.017	-0.100	0.031	-0.764	0.053
L51N-65	5	25	31.91	-67	28	49.9	17.783	0.021	-0.173	0.030	-0.974	0.061
L51N-64	5	25	41.38	-67	27	21.0	17.785	0.018	-0.122	0.026	-0.705	0.050
L54N-90	5	26	06.75	-67	29	23.4	17.789	0.027	-0.034	0.042	-0.188	0.244
L54S-162	5	26	08.03	-67	29	57.6	17.795	0.026	-0.004	0.042	-0.713	0.102
L51N-62	5	25	22.73	-67	27	33.0	17.810	0.019	0.599	0.035	0.153	0.136
L54S-165	5	26	05.83	-67	30	11.3	17.811	0.016	-0.123	0.034	-0.465	0.060
L54S-166	5	26	16.34	-67	30	32.3	17.822	0.026	-0.074	0.035	-0.794	0.054
L54S-161	5	26	01.72	-67	30	37.1	17.825	0.017	0.875	0.056	...	...
L51S-67	5	25	40.25	-67	29	18.0	17.830	0.021	0.006	0.029	-0.362	0.055
L54S-167	5	26	10.36	-67	29	59.5	17.846	0.025	0.096	0.050	-0.214	0.106
L54S-168	5	26	10.80	-67	30	10.9	17.849	0.021	-0.159	0.035	-0.612	0.060
L54N-91	5	26	00.33	-67	27	44.0	17.851	0.020	1.357	0.058	...	...
L54N-93	5	25	57.26	-67	29	07.8	17.852	0.022	-0.131	0.032	-0.628	0.044
L54S-170	5	26	21.84	-67	29	55.4	17.854	0.062	-0.482	0.086	-0.396	0.092
L51N-67	5	25	47.36	-67	26	59.7	17.856	0.016	-0.208	0.026	-0.519	0.057
L51N-68	5	25	12.38	-67	28	18.0	17.863	0.012	-0.137	0.025	-0.597	0.051
L51N-69	5	25	14.25	-67	26	23.1	17.867	0.017	-0.163	0.027	-0.689	0.056
L51S-68	5	25	22.76	-67	29	56.2	17.875	0.020	1.021	0.048	...	...
L51S-69	5	25	22.50	-67	29	47.6	17.884	0.215	0.721	0.249	-1.500	0.371
L54N-94	5	26	15.42	-67	28	05.9	17.885	0.021	-0.044	0.037	-0.621	0.064
L54N-92	5	26	20.36	-67	27	24.2	17.891	0.016	0.889	0.045	...	...
L54S-172	5	26	02.17	-67	29	49.1	17.895	0.026	0.005	0.043	-0.552	0.069
L51S-70	5	25	35.68	-67	32	31.9	17.899	0.023	0.003	0.037	-0.311	0.071
L54S-174	5	26	07.01	-67	29	24.2	17.903	0.033	-0.212	0.068	-0.450	0.092
L51N-66	5	25	18.11	-67	27	01.7	17.903	0.018	1.218	0.051	...	...
L54S-173	5	26	12.49	-67	30	17.8	17.906	0.026	-0.155	0.040	-0.829	0.064
L51S-72	5	25	30.83	-67	29	52.2	17.915	0.018	-0.110	0.029	-0.645	0.053
L51N-71	5	25	32.50	-67	28	46.7	17.919	0.022	-0.097	0.055	-0.681	0.078
L51N-72	5	25	28.87	-67	28	45.5	17.928	0.026	-0.147	0.034	-0.607	0.060
L54S-180	5	26	16.11	-67	29	57.6	17.929	0.097	-0.791	0.160	...	...
L54S-169	5	26	27.57	-67	32	39.8	17.934	0.020	1.488	0.075	...	...
L51S-75	5	25	36.74	-67	29	20.0	17.938	0.040	-0.027	0.102	-0.919	0.300
L51S-76	5	25	33.26	-67	29	28.1	17.942	0.028	-0.051	0.039	-0.538	0.051
L54N-97	5	26	07.01	-67	29	24.2	17.943	0.027	0.037	0.049	...	...
L54S-179	5	26	26.43	-67	30	05.6	17.945	0.023	-0.157	0.047	-0.439	0.073
L54N-98	5	26	07.79	-67	28	01.6	17.947	0.022	-0.079	0.041	-0.680	0.060
L54N-95	5	25	56.24	-67	28	16.7	17.950	0.025	1.072	0.055	...	...
L51S-71	5	25	37.31	-67	29	44.5	17.954	0.020	1.079	0.061	...	...
L54S-177	5	26	08.07	-67	31	04.7	17.972	0.025	1.115	0.075	...	...
L54S-175	5	26	32.08	-67	29	31.1	17.973	0.022	1.184	0.060	...	...
L54S-182	5	26	10.93	-67	29	55.1	17.973	0.023	-0.087	0.045	-0.682	0.068
L51S-73	5	25	13.06	-67	30	37.5	17.974	0.014	1.014	0.077	...	...
L54S-176	5	26	06.34	-67	31	19.6	17.981	0.013	1.328	0.086	...	...
L54N-100	5	25	52.54	-67	29	26.0	17.985	0.020	-0.043	0.036	...	...
L54S-183	5	26	05.38	-67	29	24.0	17.990	0.040	0.021	0.060	-0.512	0.083
L54S-185	5	26	11.53	-67	30	15.6	17.991	0.022	-0.196	0.036	-0.580	0.059
L51S-74	5	25	47.00	-67	30	42.7	17.992	0.018	1.280	0.069	...	...
L54N-101	5	25	57.70	-67	28	55.0	17.999	0.025	0.042	0.044	-0.647	0.068
L51N-73	5	25	41.28	-67	28	10.8	18.000	0.020	1.092	0.041	...	...
L51S-77	5	25	16.63	-67	31	36.8	18.006	0.025	1.146	0.058	...	...
L51S-78	5	25	40.77	-67	30	24.9	18.006	0.023	1.128	0.058	...	...
L54N-96	5	26	23.78	-67	28	37.5	18.008	0.022	1.760	0.112	...	...
L54S-188	5	26	27.41	-67	29	35.6	18.016	0.019	0.059	0.038	-0.499	0.068
L54N-99	5	26	28.47	-67	26	43.7	18.020	0.028	1.135	0.067	...	...
L51S-79	5	25	28.34	-67	31	52.2	18.021	0.023	1.029	0.043	...	...
L51N-76	5	25	30.96	-67	28	41.9	18.021	0.025	-0.151	0.051	-0.804	0.090
L51S-80	5	25	21.94	-67	29	23.2	18.033	0.020	1.307	0.067	...	...
L51S-85	5	25	26.99	-67	29	33.8	18.044	0.024	-0.129	0.034	-0.606	0.062
L54S-190	5	25	59.88	-67	29	43.1	18.045	0.016	0.018	0.042	-0.483	0.074
L54N-102	5	26	29.87	-67	28	25.4	18.047	0.019	1.072	0.067	...	...

L54S-184	5	26	27.81	-67	30	54.7	18.058	0.018	1.445	0.079	...	...
L51N-77	5	25	32.04	-67	28	46.3	18.060	0.039	0.093	0.131	-0.424	0.203
L51S-81	5	25	23.05	-67	31	45.6	18.061	0.020	1.243	0.049	...	...
L54N-105	5	26	27.41	-67	29	35.6	18.062	0.030	0.048	0.046	...	...
L54S-192	5	26	08.10	-67	31	26.0	18.067	0.026	0.034	0.048	-0.558	0.075
L54S-194	5	26	20.17	-67	29	42.7	18.067	0.027	-0.132	0.047	-0.376	0.076
L51S-82	5	25	29.33	-67	31	30.9	18.070	0.026	1.107	0.055	...	...
L54S-193	5	26	18.75	-67	30	41.4	18.071	0.021	0.069	0.044	-0.557	0.074
L51N-82	5	25	24.15	-67	27	04.6	18.072	0.017	-0.138	0.032	-0.684	0.051
L54N-106	5	26	05.39	-67	29	23.8	18.075	0.032	-0.027	0.051	...	...
L51S-86	5	25	23.99	-67	31	37.7	18.077	0.020	-0.033	0.031	-0.478	0.072
L51S-83	5	25	47.99	-67	31	59.5	18.081	0.023	1.039	0.088	...	...
L51N-79	5	25	38.31	-67	27	16.0	18.086	0.022	0.541	0.081	-0.722	0.132
L54N-103	5	26	02.74	-67	26	55.2	18.092	0.022	1.227	0.075	...	...
L51S-84	5	25	24.56	-67	31	57.8	18.096	0.015	1.100	0.045	...	...
L54S-197	5	26	07.30	-67	29	29.1	18.097	0.028	0.068	0.050	-0.454	0.109
L54N-108	5	26	30.47	-67	26	56.3	18.099	0.023	0.036	0.044	-0.580	0.078
L54N-107	5	26	23.40	-67	29	21.0	18.102	0.027	0.150	0.048	-0.241	0.099
L51N-78	5	25	47.49	-67	28	34.5	18.103	0.027	0.991	0.054	...	...
L54N-109	5	26	07.31	-67	29	29.1	18.103	0.025	0.130	0.053	...	...
L54N-110	5	26	25.34	-67	27	09.1	18.105	0.037	-0.076	0.061	-0.435	0.092
L54S-191	5	26	32.47	-67	30	35.2	18.106	0.030	1.195	0.080	...	...
L51N-80	5	25	13.80	-67	28	06.3	18.111	0.023	0.853	0.048	...	...
L51N-83	5	25	34.27	-67	26	17.9	18.111	0.026	0.753	0.049	...	...
L51S-89	5	25	47.01	-67	31	25.1	18.113	0.027	-0.010	0.039	-0.509	0.070
L54S-195	5	26	12.09	-67	31	53.1	18.113	0.019	0.868	0.054	...	...
L51S-90	5	25	51.18	-67	31	55.6	18.114	0.028	-0.121	0.037	-0.566	0.062
L54N-104	5	26	21.78	-67	29	10.4	18.119	0.025	1.748	0.135	...	...
L51S-91	5	25	20.49	-67	29	37.8	18.122	0.023	0.006	0.039	-0.718	0.060
L51N-81	5	25	22.41	-67	27	28.7	18.127	0.018	1.207	0.063	...	...
L54N-113	5	25	56.14	-67	27	54.8	18.134	0.025	-0.071	0.040	-0.545	0.067
L54N-114	5	26	08.46	-67	27	38.1	18.135	0.023	-0.060	0.041	-0.673	0.050
L51S-92	5	25	22.91	-67	29	39.4	18.137	0.024	0.060	0.039	-0.638	0.062
L51N-92	5	25	29.18	-67	28	33.0	18.137	0.049	-0.262	0.060	-0.615	0.060
L54S-201	5	25	59.99	-67	30	54.6	18.138	0.015	-0.062	0.034	-0.646	0.080
L54S-203	5	25	55.61	-67	30	10.3	18.139	0.021	-0.168	0.036	-0.569	0.064
L54S-198	5	26	19.92	-67	32	18.9	18.146	0.028	0.927	0.072	...	...
L54N-116	5	26	17.03	-67	29	33.5	18.146	0.037	0.048	0.057	...	...
L51N-86	5	25	41.18	-67	26	54.7	18.147	0.016	0.811	0.059	...	...
L51S-87	5	25	41.99	-67	29	10.2	18.148	0.028	1.097	0.067	...	...
L51N-87	5	25	19.71	-67	27	38.4	18.148	0.024	0.753	0.053	...	...
L51S-88	5	25	25.72	-67	29	00.3	18.155	0.025	1.075	0.064	...	...
L51N-85	5	25	35.64	-67	28	07.7	18.158	0.022	1.281	0.060	...	...
L51N-88	5	25	45.28	-67	28	20.9	18.171	0.019	1.189	0.058	...	...
L54N-112	5	26	02.01	-67	26	53.7	18.172	0.022	0.933	0.065	...	...
L51N-90	5	25	31.05	-67	26	57.6	18.176	0.020	0.817	0.045	...	...
L54N-115	5	26	28.25	-67	28	05.1	18.184	0.039	1.059	0.083	...	...
L54N-111	5	26	16.28	-67	29	25.3	18.192	0.028	1.555	0.102	...	...
L54S-205	5	26	20.71	-67	32	36.2	18.193	0.024	0.721	0.066	...	...
L51S-93	5	25	25.36	-67	29	55.2	18.194	0.024	1.183	0.074	...	...
L54S-207	5	26	10.12	-67	30	01.3	18.195	0.035	-0.099	0.053	...	...
L51S-97	5	25	27.05	-67	29	45.7	18.196	0.024	-0.205	0.033	-0.640	0.061
L54N-119	5	26	14.27	-67	29	09.8	18.203	0.027	-0.128	0.045	-0.776	0.055
L54N-120	5	26	07.37	-67	29	36.2	18.207	0.029	-0.198	0.055	...	...
L54S-206	5	26	06.35	-67	32	40.2	18.212	0.021	0.951	0.067	...	...
L51N-94	5	25	25.01	-67	25	49.9	18.216	0.023	0.001	0.037	-0.283	0.106
L51N-95	5	25	32.15	-67	28	49.9	18.221	0.029	0.010	0.060	...	...
L54N-121	5	26	19.15	-67	25	54.6	18.223	0.028	0.061	0.046	-0.482	0.081
L54N-117	5	26	30.22	-67	26	08.6	18.226	0.023	1.067	0.072	...	...
L51S-94	5	25	20.93	-67	32	39.3	18.229	0.022	1.228	0.084	...	...
L51S-95	5	25	35.79	-67	29	36.3	18.243	0.019	1.212	0.070	...	...
L51S-96	5	25	28.70	-67	30	18.0	18.245	0.022	0.936	0.059	...	...
L51N-93	5	25	33.32	-67	28	10.3	18.245	0.015	0.944	0.050	...	...
L54N-118	5	26	06.53	-67	26	50.3	18.250	0.026	1.298	0.062	...	...
L54S-211	5	26	16.70	-67	29	59.7	18.251	0.038	-0.436	0.105	-0.780	0.198
L54S-209	5	25	55.47	-67	31	37.7	18.252	0.018	0.899	0.074	...	...

L51N-98	5	25	38.47	-67	27	05.6	18.257	0.020	-0.116	0.033	-0.517	0.076
L54S-210	5	26	25.75	-67	30	24.3	18.258	0.026	-0.056	0.045	-0.526	0.076
L54N-122	5	25	57.34	-67	26	58.0	18.274	0.027	0.795	0.071	...	...
L51N-96	5	25	32.13	-67	26	59.9	18.287	0.018	1.164	0.064	...	...
L54S-215	5	26	10.10	-67	30	07.0	18.299	0.026	-0.127	0.063	-0.578	0.104
L51N-97	5	25	19.59	-67	26	36.8	18.299	0.021	1.008	0.075	...	...
L54S-216	5	26	16.53	-67	30	20.4	18.300	0.034	-0.141	0.051	...	...
L54N-123	5	26	28.74	-67	28	11.7	18.303	0.028	1.316	0.079	...	...
L54N-126	5	25	58.19	-67	28	39.9	18.309	0.027	0.345	0.047	0.143	0.121
L54S-219	5	26	05.97	-67	29	42.1	18.316	0.037	-0.167	0.090	-0.139	0.154
L54N-129	5	26	13.61	-67	26	53.6	18.318	0.025	0.148	0.045	-0.550	0.093
L51N-100	5	25	41.51	-67	28	36.3	18.322	0.025	1.093	0.065	...	...
L54S-214	5	26	05.57	-67	31	56.0	18.324	0.034	0.923	0.088	...	...
L54N-124	5	25	59.65	-67	26	39.5	18.324	0.026	1.049	0.074	...	...
L54N-131	5	26	07.10	-67	28	54.4	18.324	0.025	-0.023	0.045	-0.563	0.088
L54S-217	5	25	55.93	-67	29	38.9	18.326	0.033	0.328	0.066	...	...
L54N-130	5	26	20.92	-67	29	18.4	18.326	0.024	0.043	0.038	-0.458	0.055
L51S-101	5	25	40.43	-67	29	52.2	18.328	0.027	-0.078	0.047	-0.333	0.089
L51N-101	5	25	38.25	-67	25	51.1	18.331	0.053	1.112	0.079	...	...
L51S-102	5	25	20.72	-67	29	24.4	18.336	0.020	0.076	0.041	-0.427	0.088
L51N-104	5	25	37.15	-67	27	41.6	18.347	0.023	-0.033	0.040	-0.704	0.077
L51S-100	5	25	45.45	-67	32	03.7	18.349	0.034	0.847	0.069	...	...
L54N-125	5	26	02.00	-67	27	01.1	18.349	0.031	1.308	0.110	...	...
L54N-134	5	26	14.62	-67	28	24.4	18.350	0.032	-0.038	0.053	-0.718	0.081
L54S-224	5	26	05.81	-67	29	59.4	18.351	0.064	-0.267	0.102	-0.528	0.159
L51S-98	5	25	28.26	-67	28	57.6	18.352	0.033	1.120	0.090	...	...
L51S-103	5	25	36.48	-67	29	19.3	18.353	0.052	-0.096	0.071	-0.864	0.088
L54S-223	5	26	00.28	-67	29	49.7	18.353	0.029	-0.120	0.046	-0.448	0.087
L54N-128	5	25	58.40	-67	27	48.2	18.354	0.027	1.031	0.059	...	...
L51S-99	5	25	44.98	-67	31	03.5	18.356	0.028	1.139	0.074	...	...
L54N-127	5	26	17.20	-67	26	05.0	18.358	0.036	1.450	0.110	...	...
L54S-225	5	26	09.70	-67	30	21.1	18.360	0.030	-0.091	0.046	-0.274	0.082
L54S-218	5	26	29.82	-67	31	04.5	18.361	0.026	1.093	0.086	...	...
L54N-132	5	26	02.65	-67	28	57.1	18.364	0.024	0.735	0.059	...	...
L54N-135	5	26	23.67	-67	29	15.5	18.364	0.030	-0.033	0.047	-0.835	0.072
L54S-226	5	25	59.77	-67	30	49.1	18.366	0.026	-0.052	0.045	-0.460	0.134
L54S-228	5	25	56.17	-67	30	10.8	18.372	0.028	-0.084	0.046	-0.093	0.117
L51N-103	5	25	13.27	-67	28	21.6	18.374	0.052	0.782	0.086	...	...
L51N-102	5	25	17.75	-67	25	47.1	18.386	0.015	1.078	0.044	...	...
L51S-106	5	25	46.34	-67	30	55.9	18.387	0.026	-0.016	0.040	-0.391	0.089
L54S-230	5	26	17.11	-67	31	00.6	18.387	0.028	-0.126	0.060	-0.585	0.097
L51N-110	5	25	18.38	-67	26	23.8	18.388	0.032	-0.120	0.047	-0.545	0.077
L54N-133	5	26	31.19	-67	27	52.4	18.388	0.022	1.013	0.076	...	...
L54S-231	5	26	02.00	-67	31	24.9	18.397	0.022	0.019	0.046	-0.330	0.130
L54S-235	5	26	10.16	-67	30	08.6	18.398	0.026	-0.060	0.048	-0.505	0.104
L51N-105	5	25	21.85	-67	25	56.6	18.404	0.020	1.128	0.070	...	...
L51N-112	5	25	49.13	-67	28	14.6	18.410	0.024	-0.096	0.038	-0.282	0.096
L54S-227	5	26	11.35	-67	31	44.2	18.412	0.024	0.994	0.088	...	...
L51S-105	5	25	24.50	-67	30	06.9	18.416	0.023	0.911	0.064	...	...
L51N-113	5	25	23.15	-67	26	49.4	18.416	0.022	-0.059	0.040	-0.336	0.084
L51N-114	5	25	21.55	-67	26	43.7	18.425	0.020	-0.022	0.037	0.067	0.120
L54S-241	5	26	30.59	-67	32	32.1	18.427	0.030	-0.088	0.046	-0.105	0.125
L51S-104	5	25	21.60	-67	29	42.8	18.428	0.043	1.208	0.148	...	...
L54N-139	5	26	05.76	-67	28	50.2	18.428	0.041	-0.085	0.066	-0.666	0.084
L51N-108	5	25	50.62	-67	28	10.4	18.432	0.030	0.960	0.062	...	...
L51N-106	5	25	11.81	-67	28	50.6	18.433	0.018	1.144	0.062	...	...
L51S-109	5	25	25.76	-67	32	20.8	18.434	0.034	-0.014	0.052	-0.621	0.092
L54S-242	5	26	11.59	-67	29	54.1	18.435	0.032	-0.004	0.053	-0.686	0.112
L54N-137	5	26	29.30	-67	26	53.7	18.437	0.034	1.338	0.110	...	...
L54S-248	5	26	08.95	-67	29	55.0	18.439	0.112	-0.909	0.141	0.005	0.156
L54S-244	5	26	23.78	-67	29	40.8	18.442	0.034	-0.093	0.060	-0.554	0.095
L54S-232	5	25	59.83	-67	32	37.1	18.444	0.030	1.110	0.102	...	...
L51N-107	5	25	41.41	-67	27	12.6	18.448	0.023	1.350	0.074	...	...
L54S-249	5	26	16.32	-67	29	55.0	18.450	0.068	-0.769	0.136	-0.538	0.241
L51N-111	5	25	30.77	-67	27	22.0	18.452	0.028	1.182	0.065	...	...
L54N-136	5	26	21.80	-67	27	39.3	18.454	0.030	1.763	0.136	...	...

L51N-109	5	25	21.45	-67	27	39.8	18.457	0.021	1.497	0.093	...	...
L51S-107	5	25	45.98	-67	28	59.2	18.461	0.030	1.196	0.080	...	...
L54N-143	5	26	20.12	-67	26	17.4	18.465	0.032	0.082	0.052	-0.349	0.090
L51S-108	5	25	35.28	-67	31	05.7	18.466	0.030	0.797	0.069	...	...
L54N-146	5	26	05.72	-67	29	18.3	18.470	0.030	-0.273	0.048	-0.438	0.078
L54S-251	5	26	21.32	-67	30	01.8	18.471	0.148	-0.600	0.213	...	...
L54N-144	5	26	07.95	-67	27	33.7	18.472	0.028	-0.010	0.051	-0.392	0.105
L54S-246	5	26	24.32	-67	29	42.7	18.474	0.021	0.011	0.050	-0.357	0.125
L51S-112	5	25	33.42	-67	29	16.4	18.477	0.031	-0.078	0.047	-0.674	0.074
L51N-116	5	25	31.63	-67	26	11.3	18.479	0.025	0.820	0.062	...	...
L54N-142	5	25	56.99	-67	27	30.9	18.484	0.027	0.648	0.065	0.284	0.195
L51S-110	5	25	35.62	-67	31	57.4	18.487	0.027	1.147	0.087	...	...
L54S-250	5	26	28.95	-67	29	40.7	18.487	0.036	-0.083	0.061	...	...
L51N-117	5	25	47.81	-67	25	57.9	18.487	0.035	0.952	0.070	...	...
L54N-140	5	26	25.56	-67	29	24.1	18.493	0.044	1.177	0.142	...	...
L54N-141	5	26	28.43	-67	29	13.3	18.496	0.041	1.062	0.114	...	...
L54N-149	5	26	10.57	-67	28	55.7	18.498	0.035	-0.075	0.056	-0.558	0.083
L54N-145	5	26	30.26	-67	28	58.6	18.500	0.051	0.600	0.092	...	...
L51N-125	5	25	14.49	-67	26	27.2	18.505	0.022	-0.129	0.040	-0.469	0.115
L51N-118	5	25	12.82	-67	26	12.3	18.507	0.024	1.155	0.078	...	...
L51N-119	5	25	34.37	-67	27	33.5	18.507	0.020	1.056	0.084	...	...
L51N-120	5	25	18.07	-67	26	51.6	18.509	0.026	0.873	0.064	...	...
L51N-136	5	25	29.52	-67	28	53.6	18.511	0.102	-0.543	0.119	-0.332	0.082
L54N-153	5	26	29.86	-67	26	59.7	18.516	0.035	0.054	0.057	0.333	0.176
L51N-132	5	25	11.67	-67	29	30.0	18.524	0.025	-0.108	0.042	-0.705	0.079
L54S-253	5	26	34.18	-67	30	26.6	18.525	0.023	-0.071	0.054	...	...
L54N-155	5	26	03.27	-67	29	12.6	18.530	0.039	-0.158	0.055	-0.561	0.082
L51S-113	5	25	22.88	-67	31	25.2	18.532	0.029	0.924	0.072	...	...
L51N-123	5	25	22.10	-67	26	57.9	18.533	0.032	0.761	0.067	...	...
L51N-122	5	25	19.83	-67	28	03.1	18.534	0.028	0.975	0.055	...	...
L51S-116	5	25	46.31	-67	30	17.9	18.536	0.024	-0.125	0.043	-0.249	0.078
L54S-254	5	26	20.36	-67	30	33.7	18.536	0.030	-0.011	0.045	-0.674	0.112
L54N-148	5	26	02.25	-67	26	50.8	18.536	0.032	0.994	0.094	...	...
L51S-111	5	25	24.52	-67	30	50.6	18.537	0.030	1.340	0.090	...	...
L54N-151	5	26	30.71	-67	27	45.8	18.537	0.035	0.605	0.075	...	...
L51S-119	5	25	36.60	-67	29	52.3	18.539	0.030	-0.245	0.047	-0.519	0.066
L51S-118	5	25	25.88	-67	29	14.5	18.542	0.036	-0.090	0.061	-0.441	0.100
L51N-129	5	25	19.03	-67	26	13.2	18.544	0.028	0.631	0.060	...	...
L51N-138	5	25	42.02	-67	26	17.0	18.545	0.026	0.121	0.043	0.077	0.163
L54N-147	5	26	06.66	-67	27	15.1	18.546	0.031	1.327	0.116	...	...
L54S-255	5	26	13.67	-67	29	51.0	18.547	0.036	-0.067	0.074	...	...
L54S-258	5	26	22.68	-67	32	17.5	18.549	0.040	-0.174	0.062	-0.694	0.095
L51S-115	5	25	46.52	-67	31	36.1	18.550	0.036	0.335	0.057	-0.070	0.193
L51N-126	5	25	16.66	-67	27	31.7	18.551	0.025	0.892	0.077	...	...
L51N-128	5	25	23.25	-67	26	04.1	18.551	0.028	0.802	0.074	...	...
L54N-154	5	26	10.64	-67	28	47.7	18.553	0.036	0.671	0.080	...	...
L54N-152	5	26	28.01	-67	27	54.4	18.561	0.030	1.122	0.112	...	...
L54S-261	5	26	12.97	-67	30	04.8	18.563	0.025	-0.238	0.062	-0.353	0.110
L54N-150	5	26	07.03	-67	29	03.9	18.563	0.037	1.408	0.136	...	...
L54S-259	5	26	34.09	-67	32	19.0	18.564	0.028	0.088	0.066	...	...
L51N-130	5	25	19.10	-67	26	23.8	18.567	0.023	1.101	0.123	...	...
L51N-127	5	25	31.55	-67	26	55.6	18.570	0.036	1.304	0.105	...	...
L51N-131	5	25	29.59	-67	28	46.7	18.572	0.024	1.047	0.073	...	...
L51N-133	5	25	26.62	-67	26	07.7	18.577	0.023	1.100	0.074	...	...
L51N-137	5	25	13.96	-67	27	44.4	18.578	0.033	0.969	0.081	...	...
L54N-163	5	26	17.42	-67	29	34.1	18.580	0.057	0.011	0.083	...	...
L54N-164	5	26	15.95	-67	26	23.7	18.583	0.031	-0.124	0.059	-0.610	0.088
L54N-156	5	26	18.04	-67	29	18.0	18.584	0.029	1.045	0.087	...	...
L51S-122	5	25	15.94	-67	31	14.3	18.586	0.030	0.000	0.050	-0.211	0.110
L51S-114	5	25	49.96	-67	30	42.1	18.587	0.035	1.212	0.092	...	...
L51S-117	5	25	29.39	-67	30	39.4	18.588	0.035	1.067	0.092	...	...
L54N-158	5	25	57.72	-67	27	37.8	18.590	0.029	0.901	0.079	...	...
L54N-157	5	25	58.18	-67	29	13.3	18.597	0.033	1.116	0.106	...	...
L54N-167	5	26	16.26	-67	29	21.0	18.602	0.032	-0.060	0.055	-0.264	0.132
L51S-120	5	25	45.52	-67	32	25.1	18.603	0.030	0.777	0.076	...	...
L51N-145	5	25	26.04	-67	27	02.4	18.604	0.024	0.003	0.052	-0.477	0.127

L54N-162	5	25	57.23	-67	26	56.7	18.604	0.040	0.622	0.096	...	...
L51S-126	5	25	46.13	-67	30	43.9	18.605	0.031	0.025	0.047	-0.246	0.117
L54N-159	5	26	29.13	-67	29	32.9	18.605	0.033	0.763	0.102	...	...
L54N-166	5	26	20.98	-67	27	49.5	18.605	0.035	0.087	0.061	-0.517	0.101
L51N-147	5	25	31.10	-67	28	34.7	18.606	0.034	-0.176	0.065	-0.791	0.133
L51N-148	5	25	17.26	-67	28	39.3	18.607	0.111	-0.246	0.131	0.030	0.115
L54S-260	5	26	31.31	-67	31	18.7	18.612	0.026	1.015	0.121	...	...
L54N-160	5	25	52.61	-67	27	13.8	18.612	0.038	0.939	0.073	...	...
L51S-124	5	25	20.63	-67	28	57.2	18.613	0.039	0.579	0.076	...	...
L54N-161	5	26	28.23	-67	28	06.5	18.613	0.038	0.931	0.102	...	...
L51S-129	5	25	25.10	-67	29	15.8	18.614	0.036	-0.081	0.063	-0.541	0.092
L51S-125	5	25	22.27	-67	29	45.0	18.617	0.039	0.313	0.078	-0.681	0.132
L54S-267	5	26	00.51	-67	31	51.9	18.620	0.027	0.038	0.056	...	...
L51S-121	5	25	49.05	-67	31	47.4	18.622	0.035	0.967	0.102	...	...
L51N-151	5	25	38.60	-67	28	21.7	18.625	0.023	-0.156	0.038	-0.494	0.102
L54S-270	5	26	04.21	-67	29	45.2	18.626	0.052	-0.298	0.077	...	...
L51S-131	5	25	18.59	-67	31	26.4	18.627	0.032	0.009	0.055	-0.073	0.151
L51N-149	5	25	32.18	-67	26	53.1	18.628	0.032	0.219	0.075	...	...
L51N-143	5	25	43.04	-67	26	29.5	18.629	0.022	0.865	0.085	...	...
L51S-133	5	25	50.30	-67	31	12.6	18.633	0.040	-0.127	0.057	-0.538	0.092
L51S-123	5	25	34.75	-67	29	19.6	18.636	0.035	1.140	0.083	...	...
L54S-264	5	25	59.84	-67	31	01.3	18.639	0.034	0.956	0.103	...	...
L51N-142	5	25	32.76	-67	26	11.7	18.642	0.031	1.217	0.103	...	...
L51S-127	5	25	22.23	-67	30	19.9	18.643	0.059	0.653	0.096	...	...
L54S-269	5	26	26.72	-67	32	19.4	18.648	0.033	0.467	0.081	...	...
L54S-265	5	26	30.31	-67	31	08.7	18.649	0.031	1.092	0.115	...	...
L51N-152	5	25	44.47	-67	28	24.8	18.650	0.046	0.248	0.072	...	...
L54N-169	5	25	52.43	-67	28	04.0	18.650	0.030	0.929	0.084	...	...
L54N-168	5	26	02.96	-67	26	10.7	18.653	0.035	1.031	0.093	...	...
L51S-128	5	25	44.34	-67	31	37.5	18.654	0.023	0.883	0.073	...	...
L51S-130	5	25	44.65	-67	31	52.4	18.654	0.036	0.744	0.078	...	...
L54N-174	5	26	02.23	-67	27	28.2	18.660	0.040	0.476	0.085	...	...
L54N-171	5	26	31.13	-67	27	35.6	18.661	0.045	0.922	0.111	...	...
L51S-132	5	25	43.95	-67	31	12.5	18.665	0.031	0.710	0.070	...	...
L54S-273	5	25	55.89	-67	32	21.9	18.665	0.035	0.041	0.066	...	...
L51N-150	5	25	33.72	-67	28	10.9	18.666	0.020	1.011	0.066	...	...
L54N-170	5	25	54.97	-67	26	59.0	18.671	0.029	1.237	0.112	...	...
L51S-139	5	25	21.01	-67	29	12.4	18.673	0.038	0.067	0.059	-0.467	0.103
L51N-156	5	25	29.48	-67	28	30.6	18.673	0.029	-0.119	0.050	-0.389	0.115
L51S-135	5	25	28.67	-67	29	19.2	18.674	0.082	0.794	0.231	...	...
L54N-173	5	26	02.86	-67	28	45.9	18.674	0.036	1.098	0.104	...	...
L51N-155	5	25	50.97	-67	26	07.9	18.675	0.045	0.098	0.074	...	...
L51S-138	5	25	24.56	-67	32	22.2	18.678	0.037	0.547	0.063	...	...
L54N-176	5	26	13.95	-67	26	07.2	18.679	0.035	0.591	0.096	0.000	0.225
L54N-175	5	26	06.15	-67	26	12.1	18.682	0.033	0.699	0.077	...	...
L51N-153	5	25	50.27	-67	28	16.2	18.683	0.032	0.734	0.076	...	...
L51S-137	5	25	36.07	-67	32	39.5	18.692	0.043	0.871	0.103	...	...
L54S-278	5	26	07.66	-67	30	45.6	18.693	0.033	0.071	0.072	-0.747	0.136
L51N-157	5	25	30.91	-67	26	33.1	18.706	0.030	0.643	0.081	...	...
L54S-282	5	26	16.34	-67	32	09.3	18.709	0.036	-0.108	0.062	-0.594	0.113
L51S-140	5	25	47.75	-67	30	23.6	18.711	0.045	0.942	0.105	...	...
L54N-179	5	26	14.85	-67	27	10.7	18.715	0.036	0.064	0.071	-0.309	0.146
L51N-154	5	25	46.07	-67	26	06.7	18.716	0.021	1.204	0.088	...	...
L51S-143	5	25	34.74	-67	31	15.3	18.717	0.035	0.003	0.050	-0.048	0.143
L51S-146	5	25	41.04	-67	29	53.5	18.717	0.025	-0.086	0.050	-0.471	0.101
L54S-284	5	26	07.86	-67	32	33.1	18.726	0.048	0.161	0.075	...	...
L51S-147	5	25	31.00	-67	29	54.0	18.727	0.032	-0.056	0.053	-0.339	0.128
L54N-178	5	26	06.21	-67	27	10.3	18.727	0.040	1.040	0.109	...	...
L54S-280	5	26	31.63	-67	29	38.5	18.729	0.045	0.778	0.117	...	...
L51S-142	5	25	19.54	-67	29	51.1	18.739	0.034	0.607	0.070	...	...
L51N-158	5	25	26.38	-67	26	15.9	18.739	0.025	0.831	0.066	...	...
L54N-180	5	25	52.70	-67	28	01.8	18.740	0.031	0.411	0.067	...	...
L51N-161	5	25	46.37	-67	28	46.9	18.741	0.030	0.044	0.049	...	...
L51S-145	5	25	23.84	-67	30	43.8	18.747	0.034	0.629	0.072	...	...
L51N-163	5	25	26.00	-67	28	29.0	18.750	0.026	-0.079	0.041	-0.531	0.100
L51S-144	5	25	22.52	-67	30	11.0	18.753	0.029	0.815	0.093	...	...

L54S-290	5	25	57.28	-67	29	54.7	18.754	0.031	0.010	0.062	...	...
L51S-141	5	25	43.99	-67	30	25.2	18.756	0.037	1.056	0.115	...	...
L51N-159	5	25	32.97	-67	25	53.2	18.756	0.029	1.157	0.084	...	...
L51N-162	5	25	49.34	-67	27	57.4	18.757	0.026	0.202	0.052	...	...
L51N-165	5	25	14.33	-67	27	09.8	18.765	0.021	-0.037	0.050	-0.281	0.156
L54N-181	5	26	29.87	-67	29	19.2	18.765	0.032	0.722	0.085	...	...
L51N-167	5	25	35.11	-67	27	08.9	18.768	0.031	-0.145	0.046	-0.171	0.142
L51S-148	5	25	32.12	-67	30	10.7	18.769	0.027	0.881	0.100	...	...
L51N-166	5	25	43.41	-67	28	13.1	18.770	0.024	0.065	0.056	...	...
L51N-168	5	25	26.26	-67	26	48.8	18.773	0.041	-0.183	0.058	-0.634	0.119
L51N-160	5	25	50.39	-67	26	47.6	18.774	0.025	0.834	0.068	...	...
L54N-182	5	26	26.93	-67	28	17.0	18.784	0.032	0.910	0.092	...	...
L51S-150	5	25	49.74	-67	30	35.9	18.796	0.036	-0.034	0.056	-0.590	0.122
L54N-186	5	26	20.99	-67	27	27.9	18.798	0.042	0.522	0.078	...	...
L54N-183	5	26	08.38	-67	27	48.9	18.799	0.035	0.858	0.100	...	...
L54S-298	5	26	08.43	-67	29	40.5	18.802	0.034	-0.138	0.079	...	...
L54N-185	5	26	02.31	-67	29	23.5	18.805	0.042	0.770	0.120	...	...
L51N-170	5	25	14.07	-67	27	08.6	18.818	0.022	0.825	0.086	...	...
L51N-172	5	25	12.42	-67	27	27.9	18.821	0.028	0.683	0.066	...	...
L51S-156	5	25	22.87	-67	29	37.4	18.827	0.040	-0.109	0.062	-0.524	0.093
L54N-187	5	26	18.01	-67	26	56.8	18.828	0.032	0.802	0.097	...	...
L51S-149	5	25	15.10	-67	32	09.0	18.832	0.038	1.140	0.097	...	...
L51N-173	5	25	17.94	-67	28	04.3	18.836	0.038	1.006	0.083	...	...
L51N-171	5	25	13.58	-67	28	50.5	18.837	0.028	1.117	0.099	...	...
L51N-174	5	25	13.14	-67	28	12.4	18.839	0.041	0.815	0.112	...	...
L51S-151	5	25	36.24	-67	30	15.5	18.840	0.039	0.856	0.077	...	...
L51S-157	5	25	33.98	-67	29	46.5	18.843	0.032	0.104	0.058	...	...
L54S-301	5	25	56.78	-67	31	27.0	18.843	0.031	0.721	0.083	...	...
L51N-175	5	25	17.38	-67	26	60.0	18.844	0.038	0.823	0.083	...	...
L51N-180	5	25	18.65	-67	26	27.7	18.847	0.046	0.129	0.065	...	...
L54N-191	5	26	23.06	-67	28	41.2	18.848	0.040	0.589	0.104	...	...
L54N-188	5	26	15.99	-67	28	36.4	18.849	0.044	1.167	0.117	...	...
L51S-152	5	25	38.73	-67	32	15.3	18.850	0.032	1.020	0.103	...	...
L54N-189	5	26	09.66	-67	28	22.6	18.853	0.042	0.948	0.113	...	...
L54N-190	5	26	30.92	-67	28	11.6	18.853	0.036	0.929	0.101	...	...
L51S-160	5	25	49.35	-67	30	12.3	18.854	0.041	-0.027	0.069	-0.444	0.134
L51N-176	5	25	26.88	-67	27	03.9	18.856	0.037	0.815	0.098	...	...
L54S-306	5	26	24.50	-67	30	44.1	18.860	0.032	-0.076	0.062	...	...
L51S-153	5	25	24.93	-67	31	01.9	18.862	0.039	0.864	0.091	...	...
L51N-177	5	25	16.16	-67	28	33.5	18.862	0.040	0.752	0.112	...	...
L51N-181	5	25	30.24	-67	28	39.5	18.862	0.047	0.373	0.096	...	...
L51S-161	5	25	41.45	-67	31	07.5	18.865	0.032	0.161	0.057	0.045	0.171
L51S-167	5	25	29.27	-67	32	27.0	18.866	0.044	-0.076	0.066	-0.072	0.161
L51S-155	5	25	21.02	-67	32	23.2	18.867	0.039	0.842	0.075	...	...
L51S-165	5	25	48.47	-67	31	43.5	18.868	0.031	0.058	0.054	-0.121	0.169
L54N-193	5	26	00.71	-67	26	42.2	18.868	0.049	0.753	0.104	...	...
L54S-307	5	25	57.23	-67	30	55.6	18.877	0.034	0.288	0.081	...	...
L54N-198	5	26	29.05	-67	27	56.8	18.877	0.044	-0.124	0.073	-0.207	0.111
L51S-154	5	25	24.93	-67	30	53.7	18.878	0.036	1.182	0.112	...	...
L54N-194	5	26	10.86	-67	29	25.9	18.879	0.047	0.917	0.111	...	...
L51N-178	5	25	19.53	-67	26	25.7	18.884	0.030	1.197	0.125	...	...
L51S-158	5	25	35.16	-67	29	35.1	18.886	0.031	0.919	0.101	...	...
L51N-190	5	25	35.27	-67	26	20.8	18.888	0.029	-0.057	0.052	-0.120	0.161
L51S-171	5	25	34.02	-67	29	05.5	18.889	0.041	-0.114	0.063	-0.488	0.116
L51S-159	5	25	32.44	-67	29	03.9	18.891	0.039	0.909	0.122	...	...
L51S-162	5	25	37.49	-67	30	53.1	18.891	0.050	0.751	0.128	...	...
L51N-183	5	25	21.15	-67	26	31.3	18.895	0.022	0.860	0.060	...	...
L51N-184	5	25	29.21	-67	27	12.1	18.896	0.031	0.846	0.109	...	...
L51N-185	5	25	12.90	-67	27	26.8	18.896	0.034	0.819	0.084	...	...
L54S-314	5	26	29.45	-67	29	40.2	18.899	0.040	-0.103	0.073	...	...
L51S-163	5	25	21.85	-67	30	41.8	18.903	0.027	0.996	0.128	...	...
L51N-187	5	25	21.45	-67	27	26.0	18.903	0.033	0.784	0.076	...	...
L51S-164	5	25	16.00	-67	30	14.7	18.904	0.044	0.915	0.081	...	...
L51S-166	5	25	39.98	-67	30	10.8	18.907	0.040	0.917	0.091	...	...
L51S-173	5	25	40.92	-67	31	34.6	18.908	0.049	0.060	0.070	-0.391	0.104
L51N-189	5	25	12.42	-67	26	24.5	18.908	0.030	0.675	0.079	...	...

L51S-176	5	25	38.29	-67	29	40.8	18.910	0.043	-0.117	0.066	-0.241	0.134
L54N-195	5	26	18.00	-67	26	52.6	18.911	0.041	1.037	0.129	...	...
L54S-318	5	26	20.15	-67	29	46.8	18.914	0.050	-0.124	0.086	...	...
L51S-169	5	25	21.55	-67	29	24.4	18.916	0.039	0.752	0.115	...	...
L51N-188	5	25	40.66	-67	28	12.7	18.917	0.033	0.918	0.073	...	...
L51S-168	5	25	33.96	-67	32	31.9	18.918	0.046	0.909	0.096	...	...
L51N-192	5	25	31.36	-67	28	33.4	18.925	0.046	0.503	0.112	...	...
L51S-170	5	25	33.83	-67	31	49.6	18.927	0.048	0.985	0.100	...	...
L51S-191	5	25	13.27	-67	30	22.9	18.930	0.040	-1.098	0.187	...	...
L54N-204	5	26	06.07	-67	28	28.1	18.935	0.040	-0.103	0.070	-0.428	0.121
L51S-181	5	25	22.67	-67	29	44.7	18.942	0.053	0.005	0.084	-0.479	0.144
L51N-191	5	25	48.68	-67	28	18.3	18.945	0.026	0.978	0.123	...	...
L51S-174	5	25	45.26	-67	29	02.6	18.947	0.046	0.937	0.114	...	...
L51S-183	5	25	21.65	-67	31	29.7	18.948	0.052	0.160	0.077	-0.595	0.120
L51S-172	5	25	44.09	-67	30	12.5	18.950	0.048	1.111	0.110	...	...
L51S-175	5	25	20.76	-67	28	58.8	18.953	0.053	0.970	0.116	...	...
L51N-197	5	25	17.54	-67	28	08.4	18.955	0.034	0.724	0.096	...	...
L51N-200	5	25	38.89	-67	27	08.4	18.955	0.044	0.239	0.071	...	...
L54N-201	5	26	26.52	-67	28	20.3	18.956	0.051	0.762	0.118	-0.582	0.264
L51N-196	5	25	21.22	-67	27	41.2	18.957	0.028	0.825	0.089	...	...
L51N-199	5	25	30.07	-67	28	36.7	18.957	0.047	0.584	0.102	...	...
L51N-208	5	25	22.34	-67	28	42.7	18.957	0.038	0.061	0.073	...	...
L54N-200	5	26	09.14	-67	26	12.3	18.958	0.041	0.860	0.110	...	...
L51S-177	5	25	23.62	-67	31	58.5	18.962	0.032	0.946	0.082	...	...
L51N-198	5	25	48.27	-67	28	02.6	18.964	0.027	0.848	0.072	...	...
L54N-199	5	26	21.64	-67	28	40.6	18.964	0.046	1.055	0.135	...	...
L51S-187	5	25	39.36	-67	30	10.2	18.965	0.030	-0.016	0.058	-0.044	0.180
L51N-195	5	25	17.88	-67	28	12.6	18.971	0.024	1.149	0.123	...	...
L51S-179	5	25	29.21	-67	31	35.8	18.973	0.036	0.882	0.124	...	...
L51S-185	5	25	32.10	-67	29	37.8	18.973	0.049	0.618	0.103	...	...
L51S-182	5	25	28.63	-67	30	00.4	18.976	0.045	0.807	0.105	...	...
L54N-203	5	26	25.62	-67	29	19.8	18.978	0.041	0.952	0.128	...	...
L54N-214	5	26	27.32	-67	28	44.3	18.978	0.062	-0.085	0.099	-0.334	0.146
L54N-212	5	26	18.75	-67	27	12.9	18.979	0.047	0.286	0.095	...	...
L51S-178	5	25	13.44	-67	29	58.3	18.980	0.036	1.070	0.196	...	...
L51N-201	5	25	18.32	-67	28	21.8	18.981	0.032	0.818	0.084	...	...
L54N-209	5	26	15.07	-67	28	25.5	18.982	0.062	0.564	0.132	...	...
L51S-180	5	25	42.83	-67	31	51.4	18.983	0.038	1.070	0.103	...	...
L54S-335	5	26	30.87	-67	31	54.0	18.985	0.060	-0.002	0.097	...	...
L54N-215	5	26	13.96	-67	28	39.6	18.986	0.054	0.051	0.092	-0.753	0.130
L54N-221	5	26	21.57	-67	28	08.7	18.987	0.040	-0.242	0.072	-0.640	0.112
L54N-207	5	26	14.85	-67	28	33.9	18.988	0.047	0.790	0.114	...	...
L54N-206	5	26	21.97	-67	28	43.4	18.989	0.039	0.820	0.096	...	...
L54N-217	5	25	59.29	-67	26	30.9	18.989	0.053	-0.037	0.089	0.521	0.215
L51N-205	5	25	24.56	-67	26	50.0	18.992	0.034	0.948	0.099	...	...
L54S-339	5	26	26.78	-67	30	33.7	18.993	0.039	-0.116	0.063	...	...
L51N-216	5	25	37.71	-67	26	28.4	18.993	0.035	0.016	0.065	...	...
L51S-184	5	25	12.62	-67	30	55.2	18.994	0.037	1.103	0.156	...	...
L51S-197	5	25	23.82	-67	29	46.3	18.996	0.047	-0.064	0.074	-0.299	0.174
L51N-219	5	25	21.67	-67	28	48.4	18.996	0.042	0.006	0.078	...	...
L51N-202	5	25	19.38	-67	27	06.4	18.997	0.043	1.091	0.076	...	...
L51N-204	5	25	41.20	-67	27	55.9	18.997	0.033	1.052	0.138	...	...
L51S-196	5	25	16.75	-67	30	53.9	19.002	0.038	0.123	0.082	-0.403	0.154
L51N-209	5	25	11.65	-67	28	33.5	19.002	0.073	1.063	0.137	...	...
L51S-198	5	25	37.88	-67	30	15.5	19.003	0.033	-0.068	0.059	-0.235	0.144
L51S-202	5	25	31.12	-67	29	15.0	19.003	0.038	-0.141	0.065	-0.180	0.147
L51S-186	5	25	42.21	-67	29	29.8	19.005	0.040	1.067	0.256	...	...
L51N-211	5	25	33.89	-67	28	35.2	19.005	0.055	0.800	0.228	...	...
L51S-189	5	25	41.81	-67	31	09.1	19.007	0.049	0.840	0.100	...	...
L51S-188	5	25	50.11	-67	30	27.9	19.010	0.049	1.031	0.122	...	...
L54N-211	5	26	00.39	-67	28	26.2	19.011	0.038	1.080	0.129	...	...
L51S-190	5	25	27.73	-67	30	57.7	19.012	0.038	0.843	0.076	...	...
L54N-233	5	26	06.52	-67	29	24.9	19.013	0.045	-0.409	0.080	...	...
L54N-213	5	26	08.00	-67	26	01.4	19.014	0.039	0.866	0.109	...	...
L51N-213	5	25	13.40	-67	28	54.1	19.018	0.075	0.807	0.131	...	...
L54N-230	5	26	20.10	-67	26	010.0	19.019	0.055	-0.024	0.092	-0.518	0.166

L51S-195	5	25	39.05	-67	29	34.3	19.020	0.053	0.664	0.127	...	...
L51N-223	5	25	25.37	-67	26	11.4	19.020	0.034	0.022	0.066	-0.285	0.192
L51S-192	5	25	36.54	-67	30	52.8	19.021	0.050	0.975	0.120	...	...
L54N-219	5	26	05.32	-67	26	05.0	19.023	0.053	0.679	0.120	...	...
L54N-234	5	26	11.95	-67	27	53.6	19.023	0.057	-0.223	0.099	...	...
L51N-218	5	25	17.70	-67	25	51.1	19.024	0.030	0.669	0.094	...	...
L51S-194	5	25	48.20	-67	32	03.1	19.025	0.040	0.869	0.122	...	...
L51N-214	5	25	45.29	-67	28	34.1	19.025	0.039	0.878	0.129	...	...
L51N-215	5	25	27.30	-67	27	29.9	19.026	0.029	0.818	0.075	...	...
L54N-220	5	26	02.24	-67	28	16.6	19.026	0.054	0.664	0.108	...	...
L51S-193	5	25	48.89	-67	29	16.5	19.027	0.039	1.042	0.109	...	...
L54S-348	5	26	00.72	-67	29	38.1	19.027	0.061	-0.055	0.100	...	...
L54N-224	5	26	05.01	-67	27	32.0	19.032	0.053	0.567	0.112	...	...
L54N-218	5	26	13.34	-67	27	08.4	19.034	0.043	0.993	0.152	...	...
L51N-217	5	25	24.74	-67	27	18.5	19.035	0.035	0.928	0.106	...	...
L51S-231	5	25	30.49	-67	28	15.6	19.035	0.042	-0.055	0.066	...	...
L54S-362	5	26	28.65	-67	31	58.9	19.038	0.048	-0.443	0.070	...	...
L51N-230	5	25	43.51	-67	28	34.4	19.038	0.043	0.008	0.065	-0.516	0.137
L54S-353	5	26	24.54	-67	30	27.8	19.040	0.045	-0.037	0.087	...	...
L51S-201	5	25	38.16	-67	30	32.8	19.041	0.045	0.732	0.098	...	...
L54N-237	5	26	28.73	-67	29	13.8	19.043	0.068	0.053	0.109	-0.678	0.155
L51S-200	5	25	33.76	-67	29	15.0	19.044	0.052	0.796	0.108	...	...
L51S-211	5	25	24.27	-67	29	25.0	19.045	0.054	-0.046	0.086	-0.181	0.185
L51S-199	5	25	17.09	-67	31	45.5	19.046	0.037	0.893	0.112	...	...
L51S-204	5	25	15.57	-67	32	34.5	19.048	0.038	0.773	0.095	...	...
L51N-221	5	25	26.94	-67	28	19.4	19.051	0.024	0.784	0.077	...	...
L51S-203	5	25	37.16	-67	30	58.6	19.052	0.044	0.959	0.112	...	...
L54N-239	5	26	29.72	-67	27	12.6	19.056	0.047	0.047	0.083	-0.629	0.159
L51N-224	5	25	16.56	-67	28	16.2	19.059	0.048	0.895	0.092	...	...
L51S-205	5	25	47.14	-67	31	53.1	19.060	0.051	0.735	0.082	...	...
L51S-214	5	25	19.23	-67	31	51.8	19.060	0.051	0.129	0.077	...	...
L51N-229	5	25	28.58	-67	28	37.1	19.061	0.040	0.589	0.086	...	...
L51N-241	5	25	31.31	-67	28	36.3	19.062	0.059	-0.263	0.105	...	...
L54N-231	5	25	58.84	-67	26	02.7	19.064	0.038	0.788	0.115	...	...
L51S-209	5	25	42.67	-67	31	26.9	19.065	0.052	0.624	0.103	...	...
L51S-216	5	25	20.34	-67	29	08.8	19.065	0.049	0.185	0.082	...	...
L54N-228	5	26	18.47	-67	27	08.7	19.066	0.046	1.160	0.132	...	...
L51N-225	5	25	39.71	-67	28	21.9	19.067	0.030	0.955	0.095	...	...
L51N-226	5	25	20.41	-67	28	38.8	19.067	0.037	0.859	0.081	...	...
L51S-208	5	25	39.14	-67	29	09.7	19.070	0.040	0.752	0.125	...	...
L54S-367	5	26	31.10	-67	30	28.2	19.070	0.112	-0.181	0.133	...	...
L54S-356	5	26	09.31	-67	30	03.0	19.073	0.064	0.553	0.183	...	...
L54S-368	5	26	22.80	-67	30	35.4	19.073	0.048	-0.116	0.094	...	...
L51S-207	5	25	27.27	-67	31	22.0	19.079	0.047	1.063	0.115	...	...
L51S-221	5	25	30.07	-67	29	24.5	19.081	0.038	0.202	0.068	...	...
L51N-228	5	25	26.42	-67	26	01.3	19.081	0.033	1.095	0.109	...	...
L51N-246	5	25	23.04	-67	28	41.7	19.081	0.045	-0.093	0.065	-0.742	0.143
L51S-206	5	25	46.00	-67	29	53.5	19.083	0.041	1.168	0.126	...	...
L54N-238	5	26	00.42	-67	26	03.9	19.084	0.050	0.893	0.143	...	...
L51N-244	5	25	22.35	-67	27	00.6	19.085	0.037	-0.022	0.070	...	...
L51S-225	5	25	43.37	-67	30	09.4	19.087	0.033	-0.111	0.063	-0.249	0.147
L51N-236	5	25	21.52	-67	26	05.2	19.087	0.034	0.815	0.088	...	...
L54N-235	5	26	08.35	-67	29	21.6	19.087	0.053	1.199	0.152	...	...
L51S-215	5	25	34.15	-67	30	20.6	19.089	0.055	0.753	0.102	...	...
L51S-217	5	25	39.19	-67	30	48.1	19.090	0.041	0.725	0.094	...	...
L54S-373	5	25	59.39	-67	30	38.5	19.091	0.049	-0.020	0.075	...	...
L51S-210	5	25	18.20	-67	30	56.8	19.092	0.035	1.067	0.109	...	...
L54N-248	5	26	08.33	-67	29	30.2	19.092	0.068	0.304	0.129	...	...
L51S-229	5	25	46.59	-67	31	48.2	19.095	0.053	-0.051	0.087	-0.197	0.192
L51S-212	5	25	13.16	-67	31	33.4	19.096	0.056	1.019	0.143	...	...
L51S-227	5	25	32.80	-67	30	48.2	19.096	0.047	-0.011	0.073	0.102	0.224
L51N-237	5	25	43.73	-67	26	37.4	19.097	0.058	0.969	0.146	...	...
L51N-240	5	25	30.86	-67	26	20.5	19.098	0.030	0.877	0.121	...	...
L51N-239	5	25	24.53	-67	25	56.4	19.099	0.041	0.916	0.104	...	...
L54N-240	5	26	08.45	-67	26	03.4	19.099	0.048	0.980	0.129	...	...
L51S-218	5	25	23.88	-67	29	30.8	19.100	0.048	0.834	0.122	...	...

L54N-245	5	26	01.28	-67	27	29.4	19.100	0.039	0.632	0.101	...	...
L54S-376	5	26	23.31	-67	30	46.2	19.104	0.044	0.114	0.092	...	...
L51S-220	5	25	41.57	-67	30	38.2	19.105	0.038	0.773	0.096	...	...
L51S-222	5	25	15.33	-67	32	26.7	19.108	0.039	0.808	0.106	...	...
L54N-247	5	25	58.02	-67	28	49.9	19.108	0.062	0.672	0.112	...	...
L54N-246	5	26	21.64	-67	28	04.3	19.110	0.040	0.729	0.106	...	...
L51S-223	5	25	41.44	-67	29	40.2	19.112	0.042	0.763	0.111	...	...
L54N-255	5	26	20.79	-67	29	22.0	19.112	0.056	-0.052	0.093	...	...
L54N-259	5	25	57.21	-67	27	33.8	19.114	0.050	-0.288	0.079	-0.097	0.155
L51S-219	5	25	42.84	-67	28	56.4	19.116	0.058	1.056	0.143	...	...
L51N-242	5	25	13.69	-67	27	16.9	19.116	0.042	0.928	0.118	...	...
L51N-247	5	25	26.00	-67	26	51.2	19.118	0.049	0.725	0.092	...	...
L54N-251	5	26	25.26	-67	26	33.2	19.118	0.060	0.553	0.095	...	...
L54N-244	5	25	54.77	-67	28	09.9	19.119	0.045	1.088	0.158	...	...
L51N-264	5	25	20.17	-67	27	03.0	19.120	0.047	-0.227	0.070	-0.276	0.179
L54N-250	5	26	03.03	-67	25	50.2	19.124	0.046	0.798	0.098	...	...
L54S-386	5	26	20.41	-67	32	07.6	19.125	0.041	-0.204	0.069	...	...
L51N-250	5	25	30.79	-67	27	08.1	19.125	0.037	0.708	0.114	...	...
L51N-245	5	25	25.19	-67	27	26.7	19.127	0.045	0.958	0.111	...	...
L51N-248	5	25	34.30	-67	26	09.4	19.127	0.029	0.834	0.098	...	...
L54N-260	5	25	59.68	-67	26	25.7	19.128	0.060	-0.059	0.094	-0.327	0.186
L51S-231	5	25	33.87	-67	29	36.0	19.132	0.044	0.655	0.096	...	...
L51S-224	5	25	50.43	-67	30	55.3	19.134	0.051	1.248	0.132	...	...
L54N-249	5	26	27.49	-67	25	51.0	19.136	0.048	1.175	0.151	...	...
L51N-257	5	25	18.83	-67	27	35.6	19.137	0.040	0.574	0.106	...	...
L51N-265	5	25	13.81	-67	27	21.6	19.138	0.036	-0.050	0.058	...	...
L51N-253	5	25	20.01	-67	26	33.9	19.139	0.036	0.905	0.102	...	...
L51S-226	5	25	45.54	-67	30	17.7	19.140	0.057	1.102	0.143	...	...
L51S-233	5	25	42.38	-67	31	40.8	19.141	0.051	0.782	0.130	...	...
L54N-256	5	26	06.03	-67	28	50.7	19.141	0.074	0.591	0.167	...	...
L51S-237	5	25	38.44	-67	31	30.2	19.142	0.042	0.601	0.094	...	...
L54N-265	5	26	10.83	-67	29	04.6	19.142	0.046	-0.212	0.088	-0.034	0.177
L51S-232	5	25	47.82	-67	31	04.7	19.143	0.064	0.843	0.138	...	...
L51N-251	5	25	44.98	-67	28	23.7	19.144	0.035	1.075	0.103	...	...
L51N-261	5	25	17.74	-67	26	17.4	19.145	0.035	0.624	0.121	...	...
L51S-236	5	25	36.22	-67	30	06.1	19.146	0.040	0.841	0.112	...	...
L51S-244	5	25	32.58	-67	29	17.2	19.146	0.048	0.065	0.081	-0.632	0.144
L51N-260	5	25	50.38	-67	27	37.6	19.147	0.044	0.751	0.121	...	...
L51N-268	5	25	46.01	-67	28	39.2	19.147	0.044	0.058	0.069	...	...
L51S-241	5	25	24.82	-67	30	58.6	19.148	0.043	0.228	0.079	...	...
L51S-228	5	25	23.73	-67	31	49.8	19.150	0.056	1.235	0.273	...	...
L51S-248	5	25	14.84	-67	29	23.7	19.150	0.059	0.041	0.090	...	...
L51N-255	5	25	15.48	-67	27	12.5	19.150	0.038	0.984	0.115	...	...
L51N-258	5	25	46.83	-67	28	17.1	19.158	0.037	1.058	0.142	...	...
L51S-234	5	25	48.93	-67	31	48.7	19.160	0.070	1.173	0.190	...	...
L51N-275	5	25	37.94	-67	28	44.2	19.160	0.029	-0.042	0.047	-0.723	0.138
L54N-268	5	26	18.12	-67	28	57.8	19.162	0.054	0.167	0.096	-0.683	0.171
L51S-238	5	25	37.82	-67	29	28.4	19.168	0.053	0.921	0.110	...	...
L51N-263	5	25	30.25	-67	27	08.7	19.171	0.036	1.149	0.170	...	...
L51S-240	5	25	31.14	-67	29	19.1	19.172	0.042	0.843	0.102	...	...
L51S-253	5	25	45.62	-67	29	49.8	19.172	0.061	0.041	0.092	-0.031	0.194
L51S-239	5	25	19.10	-67	29	38.7	19.174	0.041	1.037	0.153	...	...
L51S-252	5	25	36.43	-67	32	00.5	19.174	0.042	0.170	0.083	...	...
L54N-261	5	26	27.16	-67	28	59.5	19.174	0.051	0.944	0.164	...	...
L51S-242	5	25	46.26	-67	29	19.8	19.175	0.046	0.758	0.131	...	...
L51S-246	5	25	30.33	-67	31	14.7	19.176	0.054	0.640	0.100	...	...
L54S-409	5	26	21.75	-67	29	46.7	19.179	0.045	-0.256	0.086	...	...
L51S-247	5	25	51.07	-67	31	23.0	19.183	0.053	0.818	0.101	...	...
L51N-286	5	25	44.81	-67	26	14.6	19.184	0.046	0.127	0.072	...	...
L51N-271	5	25	39.87	-67	26	43.9	19.187	0.056	0.901	0.126	...	...
L51S-245	5	25	40.65	-67	31	43.8	19.188	0.056	0.998	0.135	...	...
L51S-256	5	25	50.80	-67	31	53.7	19.188	0.056	0.214	0.086	...	...
L51N-270	5	25	34.61	-67	26	21.4	19.188	0.036	0.943	0.112	...	...
L51S-243	5	25	28.66	-67	31	57.1	19.190	0.047	1.110	0.166	...	...
L54N-276	5	26	30.56	-67	28	34.4	19.190	0.063	-0.041	0.104	...	...
L51S-249	5	25	20.76	-67	30	02.0	19.191	0.056	0.845	0.123	...	...

L51N-274	5	25	23.80	-67	26	47.9	19.192	0.044	0.941	0.120	...	...
L51N-278	5	25	37.24	-67	28	06.8	19.195	0.037	0.716	0.111	...	...
L51N-269	5	25	48.40	-67	26	32.4	19.196	0.041	1.167	0.128	...	...
L51N-285	5	25	48.60	-67	26	08.1	19.196	0.034	0.398	0.085	...	...
L51N-293	5	25	28.43	-67	28	52.8	19.196	0.041	-0.099	0.079	...	...
L54N-275	5	26	26.72	-67	27	42.1	19.199	0.050	0.214	0.092	-0.417	0.166
L51N-277	5	25	41.77	-67	27	05.8	19.201	0.038	0.919	0.127	...	...
L54N-277	5	26	09.73	-67	29	30.8	19.201	0.051	0.166	0.095	...	...
L51S-250	5	25	34.91	-67	29	58.4	19.202	0.038	0.980	0.123	...	...
L51N-297	5	25	21.60	-67	25	49.4	19.204	0.044	0.037	0.081	-0.590	0.152
L51S-251	5	25	37.46	-67	29	11.4	19.205	0.053	1.008	0.131	...	...
L51S-269	5	25	44.91	-67	29	13.1	19.207	0.048	-0.071	0.088	...	...
L51N-283	5	25	42.57	-67	27	14.1	19.207	0.039	0.725	0.099	...	...
L51N-279	5	25	18.88	-67	27	28.6	19.209	0.028	0.960	0.118	...	...
L51N-287	5	25	19.04	-67	26	29.3	19.209	0.032	0.683	0.087	...	...
L54N-279	5	26	00.82	-67	28	49.6	19.209	0.056	0.017	0.098	-0.188	0.146
L51S-254	5	25	29.38	-67	30	33.8	19.210	0.041	0.808	0.112	...	...
L51S-258	5	25	17.54	-67	30	33.8	19.214	0.072	0.783	0.133	...	...
L51N-282	5	25	19.42	-67	28	18.9	19.214	0.046	0.962	0.129	...	...
L51N-295	5	25	47.67	-67	25	50.0	19.215	0.065	0.319	0.101	...	...
L51N-291	5	25	45.05	-67	26	06.7	19.217	0.046	0.474	0.093	...	...
L51S-257	5	25	40.53	-67	32	38.1	19.218	0.066	0.896	0.145	...	...
L54S-427	5	26	32.99	-67	29	56.0	19.220	0.069	-0.173	0.130	...	...
L51S-255	5	25	24.27	-67	32	06.8	19.224	0.045	1.135	0.143	...	...
L51S-262	5	25	26.53	-67	29	04.2	19.225	0.047	0.707	0.106	...	...
L54N-274	5	26	22.34	-67	26	45.4	19.225	0.049	0.858	0.143	...	...
L51S-264	5	25	26.28	-67	28	55.6	19.226	0.053	0.641	0.118	...	...
L51S-266	5	25	44.53	-67	30	45.5	19.228	0.052	0.602	0.116	...	...
L51S-259	5	25	49.31	-67	29	01.8	19.229	0.050	1.036	0.122	...	...
L51N-288	5	25	33.12	-67	27	44.8	19.229	0.043	1.000	0.146	...	...
L51S-261	5	25	15.84	-67	31	47.8	19.233	0.043	0.944	0.166	...	...
L51S-275	5	25	14.84	-67	31	30.5	19.233	0.051	0.060	0.090	...	...
L51N-307	5	25	18.91	-67	28	16.8	19.233	0.051	0.084	0.081	-0.548	0.196
L51N-306	5	25	33.92	-67	28	47.6	19.234	0.049	0.112	0.077	...	...
L51S-263	5	25	33.37	-67	29	59.0	19.236	0.056	0.926	0.145	...	...
L51N-308	5	25	44.00	-67	25	56.4	19.238	0.037	0.125	0.074	...	...
L51N-292	5	25	44.52	-67	27	09.9	19.241	0.028	1.011	0.138	...	...
L54N-280	5	25	58.89	-67	26	23.7	19.241	0.057	0.671	0.130	...	...
L51S-281	5	25	19.10	-67	30	59.4	19.242	0.049	-0.123	0.082	-0.325	0.150
L51N-290	5	25	21.24	-67	27	29.3	19.242	0.039	1.100	0.104	...	...
L51S-265	5	25	28.23	-67	29	22.9	19.243	0.045	1.002	0.145	...	...
L51S-268	5	25	42.52	-67	29	36.3	19.243	0.070	0.908	0.192	...	...
L51N-303	5	25	40.20	-67	27	02.8	19.244	0.036	0.607	0.084	...	...
L51S-279	5	25	49.74	-67	29	14.2	19.245	0.048	-0.005	0.077	-0.646	0.162
L51S-282	5	25	32.32	-67	29	08.3	19.246	0.060	-0.051	0.092	-0.430	0.154
L51S-270	5	25	47.19	-67	31	49.6	19.247	0.056	0.833	0.126	...	...
L51S-271	5	25	43.80	-67	29	01.2	19.247	0.045	0.814	0.123	...	...
L51N-301	5	25	19.32	-67	26	05.7	19.248	0.035	0.789	0.118	...	...
L54S-435	5	26	04.53	-67	30	29.2	19.250	0.047	-0.058	0.089	...	...
L51N-317	5	25	40.12	-67	25	47.7	19.250	0.037	-0.051	0.067	...	...
L54S-432	5	26	05.35	-67	30	51.6	19.251	0.038	0.205	0.089	...	...
L54N-291	5	26	07.66	-67	29	15.8	19.251	0.056	-0.015	0.106	-0.395	0.185
L54N-290	5	26	06.12	-67	28	24.3	19.252	0.056	0.045	0.095	-0.544	0.180
L51N-305	5	25	47.00	-67	26	25.8	19.253	0.038	0.786	0.118	...	...
L51N-300	5	25	15.43	-67	26	59.2	19.256	0.046	0.969	0.130	...	...
L51N-316	5	25	27.57	-67	28	44.1	19.258	0.040	0.123	0.075	...	...
L51S-272	5	25	35.70	-67	30	33.4	19.261	0.050	1.101	0.127	...	...
L54N-297	5	25	55.11	-67	29	28.5	19.261	0.060	-0.107	0.089	...	...
L51S-285	5	25	18.79	-67	29	04.3	19.264	0.057	0.055	0.091	...	...
L51N-309	5	25	20.63	-67	28	50.0	19.267	0.048	0.787	0.097	...	...
L51S-273	5	25	50.01	-67	28	59.3	19.269	0.054	1.115	0.158	...	...
L51S-276	5	25	20.27	-67	32	01.3	19.269	0.052	0.842	0.109	...	...
L54N-289	5	25	56.74	-67	29	17.9	19.269	0.049	0.745	0.116	...	...
L51N-310	5	25	26.27	-67	26	07.7	19.273	0.030	0.797	0.118	...	...
L51S-289	5	25	22.54	-67	31	30.7	19.276	0.054	0.124	0.084	...	...
L54N-298	5	26	31.08	-67	29	32.9	19.276	0.047	0.001	0.106	...	...

L51N-311	5	25	44.68	-67	26	52.1	19.277	0.042	0.859	0.114	...	...
L51N-325	5	25	33.65	-67	28	35.8	19.277	0.071	-0.069	0.118	-0.692	0.208
L51S-293	5	25	28.72	-67	30	28.9	19.278	0.059	-0.058	0.090	-0.338	0.176
L54S-445	5	26	18.13	-67	29	46.4	19.278	0.045	0.021	0.094	...	...
L54N-300	5	26	09.04	-67	28	33.9	19.279	0.056	-0.088	0.098	-0.380	0.188
L54N-295	5	26	22.62	-67	29	21.7	19.280	0.054	0.387	0.102	...	...
L51N-320	5	25	12.23	-67	26	30.3	19.281	0.032	0.474	0.077	...	...
L51S-277	5	25	42.40	-67	30	18.7	19.282	0.055	0.904	0.152	...	...
L51S-288	5	25	46.24	-67	29	44.8	19.283	0.068	0.304	0.119	...	...
L51N-312	5	25	40.04	-67	28	02.3	19.284	0.047	0.870	0.117	...	...
L51N-313	5	25	46.43	-67	26	44.0	19.287	0.051	0.928	0.160	...	...
L51S-280	5	25	33.70	-67	30	37.1	19.288	0.052	0.958	0.141	...	...
L51S-287	5	25	14.98	-67	31	32.0	19.288	0.053	0.447	0.108	...	...
L54N-294	5	26	03.41	-67	26	45.1	19.291	0.055	0.658	0.155	...	...
L51S-278	5	25	46.02	-67	29	37.3	19.292	0.067	1.125	0.171	...	...
L51S-284	5	25	28.90	-67	30	50.3	19.292	0.050	0.759	0.099	...	...
L51S-300	5	25	35.61	-67	29	42.5	19.293	0.053	0.012	0.092	...	...
L51N-318	5	25	49.55	-67	27	59.5	19.293	0.038	0.828	0.119	...	...
L51S-299	5	25	44.86	-67	29	38.7	19.299	0.058	0.173	0.099	-0.747	0.156
L54N-301	5	26	02.18	-67	29	18.5	19.299	0.057	0.279	0.109	...	...
L51S-267	5	25	12.30	-67	29	06.4	19.300	0.065	2.244	0.506	...	...
L51S-302	5	25	24.64	-67	29	31.2	19.302	0.046	0.001	0.083	...	...
L51N-322	5	25	39.15	-67	26	09.4	19.303	0.055	0.829	0.144	...	...
L51N-323	5	25	36.01	-67	28	27.1	19.304	0.044	0.676	0.115	...	...
L51S-303	5	25	12.54	-67	29	12.9	19.306	0.075	0.049	0.153	-0.108	0.293
L54S-456	5	26	16.84	-67	31	50.1	19.306	0.070	0.109	0.109	...	...
L51S-286	5	25	18.56	-67	31	04.2	19.308	0.051	0.924	0.132	...	...
L54S-457	5	26	32.42	-67	29	36.9	19.308	0.062	0.072	0.104	...	...
L51S-307	5	25	20.53	-67	30	19.5	19.311	0.060	-0.052	0.098	...	...
L51S-295	5	25	14.41	-67	29	60.0	19.312	0.036	0.664	0.103	...	...
L51S-301	5	25	51.40	-67	32	18.6	19.313	0.049	0.355	0.104	...	...
L51S-291	5	25	32.44	-67	32	01.2	19.315	0.055	0.854	0.130	...	...
L54N-312	5	26	23.32	-67	28	54.8	19.315	0.094	-0.105	0.137	...	...
L51S-305	5	25	26.86	-67	29	19.0	19.318	0.075	0.199	0.110	...	...
L51N-340	5	25	22.38	-67	26	54.6	19.319	0.050	-0.089	0.076	...	...
L51S-296	5	25	32.85	-67	30	21.4	19.320	0.056	0.856	0.126	...	...
L54N-308	5	25	53.93	-67	26	57.8	19.320	0.062	0.174	0.107	-0.942	0.182
L51S-292	5	25	28.15	-67	30	17.4	19.323	0.062	1.014	0.130	...	...
L54N-315	5	26	21.22	-67	27	33.5	19.323	0.057	-0.190	0.093	...	...
L51N-343	5	25	26.06	-67	28	20.9	19.324	0.056	-0.185	0.084	...	...
L51S-290	5	25	19.95	-67	30	29.6	19.325	0.052	1.164	0.165	...	...
L51N-336	5	25	33.77	-67	28	04.8	19.327	0.049	0.283	0.116	...	...
L54N-303	5	25	56.70	-67	28	12.0	19.327	0.056	0.897	0.131	...	...
L51N-332	5	25	45.80	-67	28	30.4	19.330	0.049	0.817	0.127	...	...
L54N-310	5	26	12.95	-67	29	21.5	19.333	0.076	0.470	0.143	...	...
L51S-297	5	25	12.53	-67	31	53.6	19.334	0.061	1.104	0.225	...	...
L51S-298	5	25	26.50	-67	31	15.3	19.334	0.045	1.096	0.186	...	...
L51S-294	5	25	44.92	-67	31	32.9	19.335	0.056	1.236	0.169	...	...
L54N-299	5	26	25.28	-67	28	47.7	19.337	0.062	1.319	0.241	...	...
L54N-311	5	26	16.19	-67	27	30.4	19.337	0.053	0.499	0.128	...	...
L51S-311	5	25	23.63	-67	29	16.8	19.338	0.049	0.263	0.104	...	...
L51N-333	5	25	27.35	-67	26	18.1	19.339	0.041	0.887	0.151	...	...
L51S-304	5	25	40.86	-67	32	20.8	19.342	0.046	0.791	0.147	...	...
L51S-306	5	25	33.61	-67	30	22.5	19.344	0.068	0.765	0.123	...	...
L51S-319	5	25	43.27	-67	29	42.8	19.344	0.052	0.076	0.084	-0.545	0.192
L51S-309	5	25	42.22	-67	30	42.0	19.352	0.048	0.682	0.119	...	...
L51S-310	5	25	18.41	-67	29	48.8	19.354	0.060	0.659	0.156	...	...
L51S-308	5	25	49.45	-67	30	19.2	19.355	0.055	0.832	0.138	...	...
L51S-322	5	25	15.76	-67	29	57.4	19.357	0.064	0.152	0.102	...	...
L51S-313	5	25	26.25	-67	29	08.4	19.359	0.067	0.687	0.139	...	...
L51N-356	5	25	44.06	-67	26	23.6	19.359	0.038	-0.012	0.080	...	...
L54N-318	5	26	14.59	-67	28	53.3	19.359	0.061	0.309	0.139	-0.541	0.242
L51N-341	5	25	30.58	-67	26	35.1	19.363	0.035	0.902	0.112	...	...
L51S-314	5	25	21.41	-67	31	20.9	19.364	0.054	0.783	0.138	...	...
L51S-326	5	25	24.27	-67	32	20.1	19.365	0.060	0.220	0.100	...	...
L51N-345	5	25	21.40	-67	26	52.8	19.365	0.044	0.695	0.133	...	...

L54N-313	5	26	27.32	-67	26	21.0	19.365	0.049	0.995	0.194	...	...
L51N-358	5	25	31.76	-67	26	53.9	19.370	0.063	-0.002	0.126	...	...
L51S-328	5	25	48.57	-67	29	14.3	19.371	0.056	0.089	0.096	-0.667	0.173
L51S-315	5	25	25.92	-67	31	19.0	19.373	0.062	0.968	0.160	...	...
L51N-342	5	25	26.98	-67	28	38.6	19.373	0.068	1.134	0.178	...	...
L51S-317	5	25	46.36	-67	29	01.4	19.374	0.063	0.862	0.167	...	...
L51N-363	5	25	32.99	-67	26	09.6	19.375	0.067	-0.143	0.098	...	...
L51N-348	5	25	44.11	-67	27	51.5	19.377	0.046	0.796	0.153	...	...
L54N-325	5	26	10.58	-67	26	31.6	19.378	0.061	0.026	0.105	...	...
L51S-320	5	25	30.13	-67	29	37.7	19.379	0.065	0.702	0.141	...	...
L54N-326	5	26	27.57	-67	27	39.0	19.381	0.061	0.043	0.121	...	...
L51N-351	5	25	48.95	-67	28	13.3	19.382	0.050	0.819	0.153	...	...
L51S-359	5	25	38.61	-67	28	30.1	19.382	0.046	0.246	0.084	...	...
L54N-324	5	26	17.62	-67	27	12.0	19.382	0.079	0.190	0.122	...	...
L51N-368	5	25	38.54	-67	27	16.3	19.383	0.053	-0.304	0.141	...	...
L51S-321	5	25	36.04	-67	32	07.3	19.385	0.057	0.818	0.151	...	...
L51S-324	5	25	38.79	-67	31	04.5	19.385	0.060	0.756	0.152	...	...
L51N-353	5	25	41.58	-67	25	59.1	19.385	0.071	0.644	0.125	...	...
L54N-327	5	26	25.14	-67	27	42.4	19.387	0.073	0.148	0.120	...	...
L54N-321	5	25	56.35	-67	28	48.1	19.389	0.075	0.612	0.143	...	...
L51S-323	5	25	41.18	-67	32	08.7	19.391	0.053	0.920	0.150	...	...
L54N-331	5	25	57.91	-67	26	17.0	19.391	0.048	-0.064	0.092	...	...
L54N-335	5	26	29.59	-67	28	41.0	19.391	0.065	-0.283	0.134	-0.058	0.232
L51N-347	5	25	17.92	-67	28	23.5	19.392	0.044	1.185	0.185	...	...
L51S-331	5	25	29.86	-67	31	44.9	19.393	0.050	0.186	0.082	...	...
L51S-316	5	25	24.10	-67	32	13.7	19.394	0.044	1.385	0.207	...	...
L51N-366	5	25	43.94	-67	26	36.8	19.394	0.055	0.039	0.103	...	...
L51S-339	5	25	20.29	-67	29	29.2	19.395	0.061	-0.055	0.092	...	...
L51N-370	5	25	37.15	-67	26	19.6	19.395	0.051	-0.082	0.075	-0.709	0.163
L54N-328	5	26	05.15	-67	29	05.2	19.395	0.079	0.229	0.201	...	...
L51S-325	5	25	39.96	-67	32	05.0	19.396	0.050	1.006	0.143	...	...
L54S-492	5	26	30.77	-67	30	39.6	19.396	0.061	-0.173	0.116	...	...
L51S-345	5	25	38.15	-67	29	18.4	19.397	0.054	-0.136	0.085	...	...
L54N-323	5	26	19.61	-67	26	06.7	19.397	0.061	0.545	0.141	...	...
L51S-327	5	25	17.78	-67	31	08.3	19.400	0.065	0.918	0.151	...	...
L51N-355	5	25	44.62	-67	26	24.2	19.400	0.057	0.960	0.176	...	...
L51N-365	5	25	37.97	-67	27	32.1	19.400	0.049	0.193	0.082	...	...
L51S-334	5	25	14.72	-67	31	26.5	19.401	0.064	0.300	0.116	...	...
L51S-336	5	25	49.45	-67	31	17.7	19.405	0.063	0.241	0.127	...	...
L51N-357	5	25	14.82	-67	27	17.4	19.405	0.050	0.846	0.144	...	...
L51S-329	5	25	43.76	-67	31	40.5	19.411	0.058	0.987	0.150	...	...
L51N-361	5	25	27.78	-67	26	30.2	19.412	0.052	0.768	0.130	...	...
L51S-340	5	25	32.64	-67	31	03.5	19.416	0.052	0.437	0.121	...	...
L51S-344	5	25	44.72	-67	30	19.7	19.417	0.055	0.310	0.099	...	...
L51S-348	5	25	42.23	-67	30	01.7	19.417	0.051	0.053	0.101	-0.231	0.253
L51N-378	5	25	35.30	-67	27	04.5	19.418	0.059	0.078	0.094	...	...
L51S-350	5	25	44.81	-67	29	00.0	19.419	0.066	-0.123	0.098	...	...
L51S-341	5	25	29.31	-67	32	34.5	19.420	0.075	0.500	0.136	...	...
L51N-379	5	25	24.17	-67	26	55.4	19.422	0.068	-0.020	0.094	...	...
L51S-333	5	25	31.22	-67	32	36.1	19.424	0.057	0.891	0.123	...	...
L51S-337	5	25	31.67	-67	29	13.0	19.424	0.066	0.683	0.145	...	...
L51N-372	5	25	29.04	-67	26	07.2	19.425	0.059	0.593	0.146	...	...
L51S-338	5	25	51.32	-67	29	02.0	19.427	0.059	0.737	0.148	...	...
L51N-377	5	25	26.73	-67	27	42.2	19.427	0.052	0.360	0.105	...	...
L51N-386	5	25	24.70	-67	28	33.2	19.430	0.043	-0.065	0.070	...	...
L51S-332	5	25	48.75	-67	30	47.9	19.431	0.074	1.061	0.195	...	...
L51S-342	5	25	26.02	-67	31	59.2	19.431	0.045	0.716	0.112	...	...
L51S-343	5	25	14.05	-67	31	37.6	19.431	0.065	0.684	0.144	...	...
L51N-364	5	25	24.47	-67	27	06.0	19.432	0.054	1.011	0.170	...	...
L54N-341	5	26	14.34	-67	28	05.2	19.432	0.069	0.121	0.124	...	...
L51N-382	5	25	25.70	-67	27	50.9	19.433	0.050	0.211	0.088	...	...
L51S-335	5	25	39.97	-67	30	56.7	19.434	0.066	0.928	0.161	...	...
L51N-385	5	25	29.36	-67	27	51.6	19.436	0.054	0.115	0.096	...	...
L51S-330	5	25	25.84	-67	32	37.8	19.439	0.043	1.293	0.167	...	...
L51S-352	5	25	15.45	-67	32	23.5	19.440	0.054	0.282	0.111	...	...
L54N-339	5	26	10.12	-67	27	50.3	19.440	0.073	0.354	0.126	...	...

L51N-376	5	25	40.46	-67	28	37.6	19.441	0.082	0.709	0.145	...	...
L51N-369	5	25	43.46	-67	25	52.4	19.444	0.053	1.077	0.168	...	...
L51N-375	5	25	12.19	-67	28	32.7	19.444	0.042	0.898	0.125	...	...
L51N-395	5	25	30.73	-67	28	42.6	19.444	0.100	-0.239	0.170	...	...
L51S-357	5	25	17.18	-67	29	14.2	19.448	0.052	0.268	0.094	...	...
L51S-355	5	25	29.63	-67	32	16.9	19.449	0.078	0.297	0.112	...	...
L51S-358	5	25	30.53	-67	30	40.8	19.449	0.061	0.212	0.105	...	...
L51S-362	5	25	45.59	-67	30	27.2	19.451	0.059	-0.047	0.105	...	...
L54N-346	5	26	13.34	-67	28	07.5	19.453	0.063	-0.112	0.111	...	...
L51N-396	5	25	40.86	-67	27	010.0	19.455	0.043	-0.002	0.077	...	...
L51N-394	5	25	32.43	-67	28	52.3	19.456	0.037	0.032	0.084	...	...
L51S-369	5	25	25.60	-67	31	08.9	19.458	0.059	-0.110	0.095	-0.620	0.164
L51N-381	5	25	21.84	-67	27	30.9	19.458	0.045	0.827	0.142	...	...
L51S-349	5	25	34.52	-67	30	00.4	19.459	0.062	0.871	0.171	...	...
L51S-351	5	25	31.46	-67	30	37.6	19.465	0.051	0.908	0.159	...	...
L51S-360	5	25	27.45	-67	29	05.1	19.465	0.051	0.373	0.135	-0.822	0.211
L51N-388	5	25	33.38	-67	27	18.8	19.470	0.057	0.674	0.117	...	...
L54S-512	5	26	27.03	-67	32	04.3	19.475	0.070	0.049	0.136	...	...
L51N-404	5	25	13.55	-67	26	28.1	19.475	0.044	-0.135	0.069	-0.604	0.187
L51S-359	5	25	18.09	-67	29	14.7	19.478	0.062	0.819	0.169	...	...
L51N-399	5	25	47.02	-67	28	11.5	19.481	0.057	0.206	0.108	...	...
L51S-377	5	25	39.96	-67	30	59.9	19.484	0.054	-0.104	0.092	-0.795	0.172
L51S-364	5	25	50.31	-67	30	32.9	19.485	0.063	0.632	0.138	...	...
L51S-363	5	25	45.41	-67	30	53.7	19.488	0.061	0.721	0.179	...	...
L51S-368	5	25	37.01	-67	28	55.8	19.489	0.064	0.620	0.120	...	...
L51S-376	5	25	31.24	-67	31	07.0	19.491	0.056	0.137	0.098	0.272	0.507
L51S-365	5	25	42.34	-67	30	58.2	19.494	0.052	0.803	0.171	...	...
L54N-355	5	26	06.00	-67	29	21.9	19.494	0.073	-0.242	0.116	...	...
L51S-380	5	25	45.47	-67	31	41.4	19.495	0.055	0.023	0.094	...	...
L51N-410	5	25	27.44	-67	28	38.8	19.498	0.054	0.013	0.097	...	...
L51S-375	5	25	23.32	-67	29	05.2	19.500	0.071	0.425	0.146	-0.904	0.270
L51N-401	5	25	41.86	-67	28	42.4	19.502	0.041	0.610	0.116	...	...
L51N-406	5	25	26.85	-67	26	48.1	19.503	0.102	0.293	0.156	...	...
L54N-359	5	26	23.67	-67	26	29.1	19.503	0.068	-0.195	0.106	-0.024	0.222
L51S-371	5	25	29.60	-67	32	36.4	19.504	0.067	0.765	0.161	...	...
L54N-354	5	26	13.19	-67	26	33.4	19.504	0.121	0.028	0.154	...	...
L51S-372	5	25	43.32	-67	31	01.6	19.507	0.048	0.818	0.124	...	...
L51N-412	5	25	39.24	-67	27	47.2	19.509	0.068	0.029	0.102	...	...
L51S-370	5	25	26.45	-67	29	36.1	19.511	0.063	1.063	0.203	...	...
L51N-409	5	25	32.17	-67	27	26.2	19.511	0.067	0.376	0.106	...	...
L51S-374	5	25	14.14	-67	30	50.0	19.512	0.063	0.762	0.135	...	...
L51S-373	5	25	17.94	-67	29	06.5	19.513	0.064	0.932	0.180	...	...
L54N-353	5	26	09.00	-67	29	02.4	19.514	0.069	0.281	0.134	...	...
L51S-384	5	25	27.12	-67	29	06.3	19.517	0.041	0.251	0.123	...	...
L51N-413	5	25	47.74	-67	27	33.4	19.518	0.050	0.182	0.127	...	...
L54S-527	5	26	29.55	-67	32	31.8	19.523	0.058	0.168	0.136	...	...
L51N-407	5	25	13.98	-67	26	11.4	19.523	0.060	0.763	0.182	...	...
L54N-362	5	26	31.24	-67	28	01.7	19.524	0.068	0.074	0.130	...	...
L51N-418	5	25	27.50	-67	27	04.2	19.525	0.072	-0.224	0.105	...	...
L51S-386	5	25	12.40	-67	31	17.7	19.526	0.071	0.296	0.177	...	...
L54N-366	5	26	19.32	-67	28	07.3	19.527	0.073	0.033	0.111	...	...
L51S-396	5	25	28.20	-67	30	38.2	19.534	0.069	-0.225	0.099	-0.485	0.144
L51N-419	5	25	20.78	-67	26	06.1	19.534	0.045	-0.084	0.080	-0.344	0.259
L54N-370	5	26	05.77	-67	29	15.2	19.539	0.072	-0.078	0.121	...	...
L51S-383	5	25	20.34	-67	30	39.5	19.541	0.056	0.869	0.154	...	...
L51S-390	5	25	41.94	-67	29	42.5	19.542	0.053	0.565	0.132	...	...
L51S-385	5	25	24.76	-67	28	57.7	19.543	0.065	0.753	0.165	...	...
L51N-416	5	25	32.51	-67	28	45.2	19.543	0.068	0.279	0.330	...	...
L51S-393	5	25	14.71	-67	32	12.4	19.547	0.087	0.237	0.146	...	...
L51S-395	5	25	20.10	-67	29	05.3	19.548	0.074	0.121	0.114	...	...
L51S-389	5	25	49.23	-67	30	28.2	19.552	0.069	0.827	0.165	...	...
L51S-387	5	25	35.77	-67	30	18.9	19.553	0.064	0.916	0.160	...	...
L54N-372	5	26	11.01	-67	28	29.4	19.556	0.075	0.093	0.138	...	...
L51S-406	5	25	45.63	-67	32	34.3	19.557	0.112	-0.364	0.149	-0.024	0.231
L54S-541	5	26	29.95	-67	30	47.4	19.561	0.060	0.086	0.171	...	...
L51S-399	5	25	28.14	-67	28	59.2	19.563	0.095	0.151	0.158	...	...

L51S-400	5	25	26.27	-67	29	11.0	19.563	0.073	0.120	0.122	...	...
L51S-391	5	25	25.58	-67	32	19.1	19.564	0.070	1.012	0.225	...	...
L51S-402	5	25	38.38	-67	30	04.7	19.568	0.078	0.047	0.144	...	...
L54N-361	5	26	25.05	-67	26	09.1	19.568	0.065	1.122	0.219	...	...
L51S-388	5	25	23.63	-67	31	52.9	19.569	0.073	1.239	0.243	...	...
L51S-405	5	25	15.23	-67	30	28.6	19.570	0.068	0.013	0.114	...	...
L51S-404	5	25	19.45	-67	31	00.2	19.575	0.069	0.127	0.126	...	...
L51S-398	5	25	18.65	-67	30	22.6	19.577	0.075	0.546	0.131	...	...
L51N-429	5	25	38.01	-67	25	54.7	19.581	0.054	0.082	0.109	...	...
L51N-431	5	25	48.39	-67	26	27.6	19.584	0.059	0.018	0.088	...	...
L54N-380	5	26	24.77	-67	28	20.2	19.586	0.071	0.133	0.117	...	...
L51N-435	5	25	14.14	-67	28	09.7	19.595	0.095	0.171	0.145	...	...
L51S-401	5	25	32.46	-67	31	51.2	19.596	0.055	0.712	0.134	...	...
L51S-408	5	25	20.75	-67	29	49.1	19.597	0.058	0.275	0.125	...	...
L51S-412	5	25	12.88	-67	29	48.7	19.602	0.065	0.148	0.145	...	...
L51S-415	5	25	40.88	-67	30	08.8	19.602	0.073	-0.030	0.114	...	...
L51S-414	5	25	42.21	-67	31	14.1	19.603	0.064	0.026	0.111	...	...
L51N-440	5	25	17.25	-67	27	12.9	19.603	0.051	-0.078	0.092	...	...
L51N-432	5	25	21.04	-67	26	45.4	19.604	0.077	0.460	0.133	...	...
L51N-439	5	25	29.46	-67	28	36.6	19.604	0.080	-0.024	0.120	...	...
L51S-409	5	25	19.80	-67	29	04.6	19.605	0.082	0.444	0.145	...	...
L51S-403	5	25	40.15	-67	30	45.3	19.606	0.055	0.862	0.155	...	...
L51N-436	5	25	25.35	-67	26	19.3	19.618	0.054	0.448	0.103	...	...
L54N-386	5	26	14.06	-67	29	03.3	19.619	0.097	0.001	0.145	...	...
L51S-413	5	25	49.46	-67	31	52.2	19.620	0.061	0.518	0.155	...	...
L51N-444	5	25	19.96	-67	26	07.0	19.621	0.053	-0.135	0.103	...	...
L51S-430	5	25	41.82	-67	29	18.8	19.626	0.059	-0.283	0.105	...	...
L51S-410	5	25	47.24	-67	29	29.8	19.627	0.089	0.891	0.204	...	...
L51S-425	5	25	42.69	-67	29	34.9	19.628	0.099	-0.055	0.162	...	...
L51N-443	5	25	39.26	-67	27	38.1	19.628	0.042	0.031	0.085	...	...
L54N-388	5	26	07.58	-67	27	18.8	19.629	0.058	0.200	0.128	...	...
L54N-396	5	26	20.90	-67	29	23.6	19.632	0.099	-0.115	0.151	...	...
L51S-416	5	25	24.69	-67	32	06.7	19.635	0.072	0.662	0.157	...	...
L51N-447	5	25	42.72	-67	25	48.1	19.639	0.086	0.167	0.122	...	...
L54N-393	5	26	13.11	-67	29	19.1	19.639	0.100	0.093	0.157	...	...
L54N-394	5	26	21.89	-67	29	13.7	19.639	0.090	0.105	0.157	...	...
L51S-428	5	25	26.88	-67	29	55.0	19.641	0.076	0.143	0.127	...	...
L51N-441	5	25	46.16	-67	25	49.6	19.641	0.046	0.731	0.158	...	...
L51N-449	5	25	31.36	-67	28	43.3	19.641	0.086	0.134	0.178	...	...
L51S-426	5	25	50.87	-67	29	00.5	19.642	0.081	0.189	0.131	...	...
L51N-448	5	25	12.74	-67	26	44.1	19.643	0.063	0.177	0.116	...	...
L54N-397	5	26	26.29	-67	28	57.8	19.644	0.084	0.134	0.132	...	...
L51S-434	5	25	29.63	-67	29	48.2	19.646	0.067	-0.179	0.100	...	...
L54N-402	5	25	55.15	-67	27	55.8	19.646	0.078	-0.134	0.117	-0.914	0.161
L51S-421	5	25	39.61	-67	28	58.2	19.648	0.065	0.527	0.137	...	...
L51S-422	5	25	42.76	-67	29	13.8	19.649	0.079	0.489	0.156	...	...
L51S-433	5	25	49.67	-67	31	13.0	19.649	0.076	-0.046	0.130	...	...
L54N-389	5	26	06.10	-67	29	32.2	19.649	0.079	0.646	0.238	...	...
L51N-451	5	25	22.80	-67	26	22.3	19.651	0.060	0.275	0.127	...	...
L51N-452	5	25	26.90	-67	27	44.2	19.651	0.061	0.210	0.117	...	...
L51S-431	5	25	51.48	-67	31	46.4	19.652	0.074	0.102	0.124	...	...
L54N-391	5	26	25.77	-67	29	25.1	19.652	0.122	0.554	0.264	...	...
L51S-423	5	25	42.01	-67	30	37.8	19.654	0.064	0.600	0.147	...	...
L54N-403	5	26	30.01	-67	28	10.9	19.662	0.074	0.215	0.121	...	...
L51S-420	5	25	16.03	-67	32	26.9	19.665	0.060	0.915	0.178	...	...
L51N-461	5	25	48.60	-67	27	11.7	19.665	0.101	-0.600	0.130	...	...
L54N-398	5	26	03.07	-67	26	55.4	19.666	0.081	0.528	0.188	...	...
L54N-404	5	26	07.98	-67	28	53.3	19.666	0.065	0.290	0.138	...	...
L54N-405	5	26	14.97	-67	26	44.2	19.668	0.095	0.172	0.152	...	...
L51S-437	5	25	43.20	-67	29	04.8	19.672	0.077	0.192	0.140	...	...
L51S-432	5	25	29.16	-67	31	45.1	19.673	0.098	0.570	0.165	...	...
L51S-439	5	25	31.22	-67	32	07.6	19.673	0.064	0.060	0.117	...	...
L54N-406	5	26	23.76	-67	29	22.4	19.673	0.089	0.054	0.175	...	...
L51S-429	5	25	41.65	-67	29	24.6	19.674	0.053	0.906	0.188	...	...
L51S-445	5	25	27.76	-67	29	13.3	19.676	0.074	-0.100	0.172	-0.560	0.268
L51S-440	5	25	19.35	-67	29	01.1	19.679	0.077	0.145	0.130	...	...

L51S-441	5	25	13.88	-67	29	05.1	19.682	0.113	0.234	0.181	...	...
L54N-410	5	26	04.90	-67	27	19.3	19.685	0.102	-0.180	0.131	...	...
L51N-457	5	25	28.81	-67	26	34.0	19.686	0.064	0.178	0.140	...	...
L51N-458	5	25	35.38	-67	28	10.9	19.688	0.068	0.079	0.114	...	...
L51S-446	5	25	37.25	-67	29	15.3	19.696	0.075	0.185	0.147	...	...
L51S-442	5	25	29.23	-67	30	59.6	19.699	0.082	0.539	0.154	...	...
L51N-463	5	25	40.55	-67	27	50.7	19.699	0.039	0.112	0.088	...	...
L51S-443	5	25	37.84	-67	30	32.2	19.706	0.069	0.672	0.162	...	...
L51N-469	5	25	19.10	-67	28	01.6	19.709	0.063	-0.053	0.113	...	...
L51N-466	5	25	34.11	-67	27	57.5	19.711	0.056	0.248	0.121	...	...
L54N-412	5	25	55.05	-67	27	36.0	19.712	0.063	0.273	0.129	...	...
L51S-444	5	25	34.27	-67	30	23.0	19.713	0.075	0.804	0.166	...	...
L51N-468	5	25	47.59	-67	28	43.4	19.715	0.048	0.279	0.113	...	...
L51S-448	5	25	31.20	-67	29	47.5	19.717	0.077	0.155	0.128	...	...
L51N-471	5	25	48.09	-67	27	12.0	19.717	0.061	-0.122	0.129	...	...
L51N-473	5	25	15.01	-67	28	10.6	19.718	0.082	-0.130	0.144	...	...
L51S-451	5	25	48.74	-67	31	11.5	19.719	0.070	-0.014	0.113	...	...
L51S-453	5	25	36.83	-67	29	23.8	19.720	0.067	-0.067	0.114	...	...
L51N-467	5	25	20.32	-67	26	07.4	19.724	0.054	0.514	0.155	...	...
L51N-470	5	25	19.93	-67	25	56.8	19.725	0.059	0.092	0.117	...	...
L51S-449	5	25	17.35	-67	30	44.7	19.732	0.074	0.509	0.155	...	...
L51N-474	5	25	39.96	-67	26	42.2	19.732	0.067	0.095	0.120	...	...
L51N-475	5	25	35.88	-67	28	41.2	19.735	0.058	0.101	0.099	...	...
L51S-455	5	25	38.21	-67	32	04.3	19.737	0.083	0.193	0.136	...	...
L51S-457	5	25	43.10	-67	29	19.9	19.737	0.076	0.114	0.141	...	...
L51S-452	5	25	13.66	-67	30	49.8	19.740	0.078	0.463	0.159	...	...
L51N-480	5	25	37.74	-67	26	07.4	19.740	0.115	-0.158	0.149	...	...
L51S-462	5	25	51.58	-67	30	20.7	19.748	0.064	0.065	0.133	...	...
L54N-420	5	26	21.21	-67	25	58.9	19.748	0.079	-0.006	0.134	...	...
L51S-454	5	25	24.18	-67	29	31.0	19.750	0.078	0.537	0.180	...	...
L51S-459	5	25	15.52	-67	30	59.8	19.750	0.056	0.241	0.122	...	...
L54N-419	5	26	05.45	-67	26	22.0	19.751	0.064	0.180	0.112	...	...
L54N-422	5	26	14.95	-67	28	00.8	19.751	0.092	-0.082	0.137	...	...
L51N-486	5	25	49.13	-67	26	17.8	19.755	0.083	-0.099	0.150	...	...
L54N-421	5	26	06.96	-67	29	05.4	19.756	0.106	0.021	0.205	...	...
L51S-463	5	25	36.42	-67	32	22.9	19.762	0.088	0.111	0.131	...	...
L51S-458	5	25	16.44	-67	30	45.6	19.767	0.100	0.701	0.190	...	...
L51N-487	5	25	17.29	-67	28	54.7	19.768	0.068	0.054	0.148	...	...
L51N-490	5	25	43.76	-67	25	58.0	19.768	0.063	-0.030	0.110	...	...
L54N-426	5	26	14.78	-67	27	55.3	19.769	0.109	-0.075	0.162	...	...
L51N-488	5	25	22.06	-67	27	02.0	19.772	0.067	0.133	0.147	...	...
L51S-467	5	25	14.37	-67	30	45.1	19.774	0.066	-0.107	0.105	...	...
L54N-418	5	26	29.29	-67	27	24.7	19.776	0.080	0.851	0.182	...	...
L51S-464	5	25	24.73	-67	31	50.6	19.779	0.081	0.512	0.167	...	...
L51S-465	5	25	26.03	-67	29	22.5	19.781	0.096	0.206	0.184	...	...
L51S-469	5	25	41.88	-67	31	44.2	19.788	0.068	0.098	0.111	...	...
L54N-429	5	26	21.82	-67	28	45.8	19.789	0.079	0.109	0.139	...	...
L51S-468	5	25	34.23	-67	30	01.0	19.795	0.084	0.279	0.170	...	...
L51N-496	5	25	19.77	-67	27	49.3	19.799	0.069	0.025	0.131	...	...
L51S-474	5	25	12.63	-67	30	08.9	19.803	0.099	-0.024	0.169	...	...
L54N-441	5	26	05.27	-67	29	20.2	19.806	0.129	-0.541	0.171	-0.404	0.192
L51N-498	5	25	38.99	-67	28	11.6	19.807	0.073	-0.017	0.134	...	...
L51S-470	5	25	38.74	-67	29	47.0	19.812	0.071	0.556	0.157	...	...
L51N-497	5	25	30.09	-67	28	41.6	19.812	0.091	0.134	0.157	...	...
L51S-487	5	25	12.73	-67	29	17.3	19.813	0.109	-0.626	0.203	...	...
L54N-440	5	26	29.58	-67	27	53.7	19.813	0.078	-0.247	0.134	...	...
L54N-436	5	26	22.90	-67	26	52.2	19.815	0.078	0.184	0.159	...	...
L51N-500	5	25	20.19	-67	26	05.6	19.818	0.060	0.198	0.138	...	...
L51S-476	5	25	14.63	-67	32	05.7	19.820	0.097	0.254	0.182	...	...
L54N-444	5	26	13.28	-67	29	34.1	19.824	0.140	-0.449	0.189	...	...
L54N-431	5	26	21.99	-67	29	02.7	19.826	0.085	0.749	0.256	...	...
L51N-503	5	25	42.60	-67	28	42.2	19.828	0.067	-0.056	0.126	...	...
L51S-477	5	25	50.89	-67	32	34.9	19.829	0.086	0.361	0.182	...	...
L51N-501	5	25	44.05	-67	28	19.2	19.834	0.056	0.355	0.120	...	...
L51S-473	5	25	37.20	-67	31	01.3	19.835	0.083	0.861	0.223	...	...
L51N-502	5	25	43.09	-67	26	24.0	19.835	0.063	0.123	0.140	...	...

L51S-485	5	25	19.88	-67	31	21.1	19.837	0.094	-0.028	0.133	...	...
L51S-486	5	25	48.29	-67	30	44.2	19.837	0.085	-0.061	0.125	...	...
L51N-506	5	25	31.71	-67	28	42.4	19.837	0.112	-0.100	0.179	...	...
L51S-490	5	25	41.30	-67	30	18.1	19.839	0.075	-0.341	0.121	-0.325	0.247
L51N-505	5	25	19.37	-67	26	49.0	19.841	0.084	0.034	0.136	...	...
L51S-475	5	25	25.10	-67	31	04.3	19.843	0.095	0.790	0.216	...	...
L51S-479	5	25	37.55	-67	31	15.6	19.843	0.085	0.670	0.178	...	...
L51S-483	5	25	46.95	-67	31	12.5	19.844	0.092	0.375	0.166	...	...
L51S-478	5	25	16.94	-67	31	24.7	19.845	0.073	0.708	0.200	...	...
L51N-509	5	25	25.17	-67	26	24.3	19.845	0.060	-0.091	0.098	...	...
L51S-480	5	25	31.38	-67	29	49.9	19.846	0.097	0.626	0.188	...	...
L54N-443	5	26	21.10	-67	26	22.1	19.851	0.079	0.253	0.155	...	...
L51S-482	5	25	12.92	-67	30	54.5	19.852	0.069	0.688	0.245	...	...
L51S-489	5	25	15.06	-67	31	18.1	19.855	0.069	0.304	0.138	...	...
L51N-507	5	25	30.37	-67	28	53.5	19.856	0.078	0.288	0.172	...	...
L51N-510	5	25	18.24	-67	27	16.2	19.857	0.074	0.081	0.140	...	...
L51S-493	5	25	33.89	-67	29	55.4	19.858	0.072	0.023	0.121	...	...
L54N-454	5	26	05.28	-67	29	25.3	19.858	0.163	-0.166	0.220	...	...
L54N-451	5	26	01.37	-67	28	18.8	19.859	0.065	0.035	0.167	...	...
L51S-484	5	25	21.01	-67	29	43.1	19.861	0.073	0.555	0.154	...	...
L54N-446	5	26	14.27	-67	25	59.7	19.861	0.097	0.376	0.191	...	...
L51S-491	5	25	50.05	-67	28	57.2	19.872	0.091	0.412	0.174	...	...
L51N-516	5	25	28.91	-67	28	35.5	19.872	0.065	0.138	0.106	...	...
L51N-513	5	25	27.40	-67	28	00.4	19.879	0.069	0.401	0.120	...	...
L54N-455	5	26	01.98	-67	29	16.2	19.880	0.102	0.076	0.175	...	...
L51S-500	5	25	42.21	-67	31	01.6	19.881	0.069	-0.163	0.110	...	...
L51N-517	5	25	36.19	-67	26	36.6	19.881	0.056	0.176	0.125	...	...
L51S-497	5	25	28.08	-67	29	10.5	19.885	0.106	0.045	0.171	0.007	0.507
L51N-521	5	25	19.72	-67	27	01.8	19.885	0.094	-0.212	0.147	...	...
L51S-499	5	25	44.91	-67	30	11.2	19.888	0.096	0.030	0.175	...	...
L51S-498	5	25	18.86	-67	32	26.7	19.893	0.104	0.189	0.167	...	...
L51S-496	5	25	27.50	-67	30	29.2	19.897	0.078	0.340	0.176	...	...
L51N-525	5	25	12.67	-67	28	33.2	19.901	0.060	-0.047	0.108	...	...
L51S-501	5	25	40.08	-67	29	42.9	19.907	0.086	0.408	0.157	...	...
L51S-495	5	25	24.00	-67	31	02.0	19.909	0.092	0.644	0.213	...	...
L51N-523	5	25	30.44	-67	27	07.6	19.918	0.068	0.405	0.197	...	...
L51S-507	5	25	27.78	-67	29	38.2	19.921	0.110	0.023	0.173	...	...
L51N-527	5	25	33.76	-67	26	05.5	19.922	0.101	0.218	0.176	...	...
L51S-506	5	25	48.18	-67	30	02.2	19.930	0.078	0.419	0.166	...	...
L51S-510	5	25	49.53	-67	32	05.0	19.931	0.105	0.078	0.168	...	...
L54N-465	5	26	05.17	-67	27	26.7	19.935	0.108	0.052	0.173	...	...
L51N-529	5	25	16.02	-67	28	28.0	19.936	0.079	0.343	0.203	...	...
L54N-464	5	26	08.45	-67	29	24.5	19.936	0.130	0.101	0.201	...	...
L51N-532	5	25	42.53	-67	27	23.2	19.938	0.091	0.040	0.146	...	...
L51N-533	5	25	48.62	-67	26	30.7	19.945	0.077	0.158	0.136	...	...
L51S-512	5	25	36.57	-67	29	40.4	19.946	0.098	0.353	0.185	...	...
L51N-537	5	25	20.27	-67	27	25.3	19.951	0.071	-0.019	0.123	...	...
L51N-536	5	25	38.16	-67	28	51.3	19.952	0.052	0.074	0.112	...	...
L51S-513	5	25	19.18	-67	32	33.7	19.958	0.096	0.409	0.178	...	...
L51S-514	5	25	21.80	-67	31	44.5	19.960	0.106	0.361	0.178	...	...
L51N-539	5	25	17.03	-67	27	20.3	19.961	0.075	0.154	0.141	...	...
L51S-515	5	25	19.12	-67	31	05.2	19.963	0.113	0.395	0.196	...	...
L51S-516	5	25	45.83	-67	29	14.0	19.964	0.078	0.384	0.171	...	...
L51S-517	5	25	21.91	-67	29	00.1	19.964	0.109	0.144	0.200	...	...
L51N-544	5	25	16.64	-67	27	12.1	19.967	0.091	0.096	0.150	...	...
L51N-548	5	25	14.74	-67	28	33.7	19.969	0.073	-0.080	0.128	...	...
L51N-547	5	25	37.48	-67	28	12.1	19.972	0.072	0.013	0.140	...	...
L51N-540	5	25	13.81	-67	28	10.9	19.975	0.157	0.453	0.243	...	...
L51N-551	5	25	33.72	-67	28	37.9	19.975	0.138	-0.207	0.203	...	...
L51N-545	5	25	28.52	-67	26	05.7	19.981	0.076	0.365	0.123	...	...
L51S-521	5	25	14.83	-67	32	01.8	19.982	0.096	0.301	0.169	...	...
L51S-523	5	25	40.88	-67	31	12.7	19.990	0.093	0.226	0.184	...	...
L51S-524	5	25	14.97	-67	30	45.7	19.994	0.114	0.173	0.185	...	...
L51S-533	5	25	27.52	-67	30	06.2	19.997	0.088	-0.296	0.127	...	...
L51S-518	5	25	46.34	-67	31	49.7	19.998	0.108	0.775	0.260	...	...
L51S-527	5	25	26.59	-67	29	38.7	20.000	0.120	-0.074	0.182	...	...

L51N-558	5	25	28.97	-67	27	58.5	20.007	0.074	-0.127	0.112	...	...
L51S-529	5	25	35.38	-67	29	02.6	20.011	0.098	0.140	0.183	...	...
L51S-532	5	25	44.68	-67	31	07.2	20.015	0.094	0.154	0.169	...	...
L51S-528	5	25	19.65	-67	30	01.6	20.020	0.094	0.377	0.166	...	...
L51S-538	5	25	45.83	-67	30	05.5	20.021	0.100	-0.234	0.137	...	...
L51S-522	5	25	29.32	-67	32	30.4	20.024	0.084	1.086	0.304	...	...
L51N-559	5	25	32.85	-67	28	54.0	20.026	0.076	0.099	0.139	...	...
L51N-557	5	25	14.44	-67	28	49.5	20.027	0.068	0.416	0.176	...	...
L51N-561	5	25	47.85	-67	27	14.2	20.030	0.075	-0.025	0.149	...	...
L51S-539	5	25	29.44	-67	29	45.8	20.034	0.099	0.003	0.153	...	...
L51N-562	5	25	18.59	-67	28	42.6	20.034	0.075	-0.124	0.131	...	...
L51S-531	5	25	20.19	-67	31	40.8	20.035	0.083	0.646	0.234	...	...
L51S-535	5	25	19.82	-67	29	54.6	20.037	0.134	0.365	0.238	...	...
L51N-565	5	25	32.53	-67	28	15.2	20.040	0.067	-0.066	0.125	...	...
L51N-566	5	25	50.63	-67	28	17.2	20.041	0.078	-0.052	0.130	...	...
L51N-564	5	25	31.89	-67	28	17.4	20.042	0.077	0.004	0.143	...	...
L51S-541	5	25	15.79	-67	30	45.4	20.050	0.084	0.142	0.156	...	...
L51S-537	5	25	47.10	-67	31	09.1	20.053	0.122	0.541	0.204	...	...
L51S-548	5	25	31.86	-67	29	18.2	20.054	0.100	-0.296	0.150	...	...
L51S-536	5	25	21.41	-67	29	53.0	20.056	0.112	0.780	0.242	...	...
L51S-543	5	25	45.61	-67	29	02.1	20.060	0.122	0.059	0.214	...	...
L51S-540	5	25	19.01	-67	31	37.2	20.063	0.062	0.444	0.151	...	...
L54N-480	5	26	24.14	-67	26	27.6	20.063	0.128	-0.167	0.185	...	...
L51S-542	5	25	16.12	-67	30	01.2	20.065	0.075	0.307	0.183	...	...
L51N-574	5	25	15.16	-67	28	24.0	20.068	0.079	0.134	0.148	...	...
L51N-577	5	25	39.15	-67	28	13.2	20.070	0.083	0.036	0.187	...	...
L51S-544	5	25	37.74	-67	29	41.5	20.072	0.131	0.313	0.215	...	...
L51S-546	5	25	34.38	-67	28	58.4	20.075	0.087	0.236	0.188	...	...
L51S-549	5	25	39.37	-67	30	14.1	20.079	0.074	0.118	0.143	...	...
L54N-478	5	26	23.51	-67	29	12.6	20.079	0.113	0.769	0.272	...	...
L51S-550	5	25	36.00	-67	32	33.7	20.080	0.118	0.092	0.224	...	...
L51N-582	5	25	22.88	-67	28	37.3	20.090	0.067	-0.106	0.109	...	...
L51N-590	5	25	18.54	-67	26	34.2	20.099	0.066	-0.076	0.167	...	...
L51S-553	5	25	16.18	-67	30	52.9	20.102	0.087	0.265	0.200	...	...
L51N-583	5	25	20.92	-67	26	27.4	20.102	0.099	0.113	0.196	...	...
L51S-557	5	25	27.34	-67	29	18.6	20.103	0.127	0.051	0.203	...	...
L51S-555	5	25	21.80	-67	29	49.2	20.104	0.111	0.190	0.164	...	...
L54N-486	5	26	09.45	-67	29	26.8	20.104	0.122	0.042	0.197	...	...
L51S-558	5	25	13.47	-67	32	07.0	20.107	0.083	0.133	0.258	...	...
L51N-594	5	25	39.49	-67	26	09.2	20.114	0.122	0.165	0.206	...	...
L51N-599	5	25	44.95	-67	26	27.8	20.116	0.092	0.034	0.160	...	...
L51S-564	5	25	37.68	-67	30	36.0	20.121	0.103	0.086	0.194	...	...
L51S-566	5	25	43.89	-67	30	40.4	20.124	0.114	-0.096	0.169	...	...
L54N-490	5	26	04.94	-67	29	28.6	20.138	0.166	-0.245	0.236	...	...
L54N-491	5	26	12.72	-67	27	51.2	20.139	0.121	-0.265	0.170	...	...
L51N-610	5	25	28.08	-67	28	20.1	20.147	0.097	-0.045	0.156	...	...
L51S-572	5	25	48.95	-67	30	33.1	20.150	0.124	-0.070	0.175	...	...
L51S-568	5	25	20.17	-67	31	55.2	20.152	0.108	0.440	0.202	...	...
L51S-576	5	25	21.48	-67	29	43.8	20.153	0.212	-0.311	0.310	...	...
L51S-569	5	25	16.26	-67	30	35.9	20.154	0.114	0.378	0.219	...	...
L51S-571	5	25	22.23	-67	30	30.4	20.161	0.104	0.240	0.199	...	...
L51S-575	5	25	46.13	-67	30	37.4	20.170	0.098	0.168	0.208	...	...
L51S-578	5	25	12.71	-67	31	22.6	20.172	0.124	-0.034	0.219	...	...
L51S-573	5	25	45.68	-67	28	58.6	20.175	0.116	0.310	0.216	...	...
L51N-621	5	25	47.16	-67	27	01.8	20.183	0.089	0.044	0.142	...	...
L51N-619	5	25	23.04	-67	27	33.4	20.196	0.103	0.327	0.172	...	...
L51N-618	5	25	35.90	-67	28	24.4	20.198	0.097	0.430	0.245	...	...
L51S-579	5	25	15.59	-67	28	55.0	20.202	0.123	0.342	0.235	...	...
L51N-629	5	25	23.73	-67	28	08.8	20.204	0.123	0.199	0.224	...	...
L51S-580	5	25	42.99	-67	28	58.5	20.205	0.135	0.053	0.210	...	...
L51N-638	5	25	18.98	-67	28	49.3	20.223	0.087	0.168	0.204	...	...
L51N-654	5	25	26.28	-67	28	04.1	20.228	0.093	-0.234	0.156	...	...
L51N-656	5	25	30.33	-67	28	32.9	20.233	0.093	-0.250	0.150	...	...
L51N-648	5	25	25.51	-67	27	36.2	20.236	0.065	0.191	0.171	...	...
L51S-584	5	25	16.47	-67	31	45.7	20.240	0.098	0.457	0.227	...	...
L51S-587	5	25	47.30	-67	31	05.8	20.242	0.124	0.269	0.207	...	...

L51S-590	5	25	45.09	-67	32	39.7	20.242	0.104	0.027	0.177	...	...
L51S-589	5	25	40.97	-67	29	07.4	20.244	0.135	0.078	0.215	...	...
L51S-595	5	25	44.66	-67	30	08.7	20.254	0.131	-0.168	0.199	...	...
L51S-592	5	25	39.97	-67	29	51.0	20.261	0.121	0.104	0.209	...	...
L51S-599	5	25	47.51	-67	31	36.6	20.284	0.119	0.049	0.232	...	...
L51S-602	5	25	16.25	-67	29	03.9	20.301	0.132	-0.062	0.188	...	...
L51S-606	5	25	36.89	-67	29	45.1	20.302	0.137	-0.230	0.223	...	...
L51S-601	5	25	36.02	-67	29	17.6	20.305	0.083	0.056	0.181	...	...
L51S-600	5	25	25.13	-67	31	50.8	20.308	0.148	0.529	0.280	...	...
L51S-609	5	25	14.58	-67	30	42.2	20.318	0.129	-0.127	0.202	...	...
L51N-684	5	25	41.26	-67	26	27.0	20.319	0.096	-0.083	0.167	...	...
L51N-689	5	25	49.19	-67	28	03.5	20.339	0.127	-0.038	0.189	...	...
L51N-610	5	25	46.68	-67	29	45.1	20.344	0.136	0.423	0.320	...	...
L51N-691	5	25	28.07	-67	26	27.9	20.345	0.130	0.013	0.206	...	...
L51S-614	5	25	12.35	-67	29	12.2	20.347	0.187	-0.157	0.302	...	...
L51S-617	5	25	28.89	-67	29	57.7	20.351	0.134	-0.157	0.207	...	...
L51N-698	5	25	30.11	-67	28	29.9	20.363	0.118	0.183	0.213	...	...
L51S-624	5	25	41.55	-67	29	45.2	20.401	0.130	0.434	0.285	...	...
L51S-631	5	25	23.64	-67	32	08.7	20.408	0.136	-0.049	0.203	...	...
L51N-732	5	25	31.94	-67	27	54.4	20.437	0.131	0.029	0.211	...	...
L51S-639	5	25	37.10	-67	29	32.5	20.448	0.139	-0.401	0.196	...	...
L51S-634	5	25	22.08	-67	30	40.0	20.451	0.099	-0.139	0.207	...	...
L51S-630	5	25	46.05	-67	29	47.0	20.458	0.177	1.206	0.597	...	...
L51S-638	5	25	40.91	-67	29	10.8	20.470	0.125	0.170	0.254	...	...
L51S-643	5	25	17.37	-67	29	01.5	20.480	0.127	-0.215	0.214	...	...
L51S-649	5	25	21.36	-67	29	56.5	20.530	0.178	-0.063	0.262	...	...
L51S-648	5	25	32.25	-67	29	31.9	20.535	0.148	0.160	0.274	...	...
L51S-650	5	25	16.79	-67	31	47.3	20.582	0.137	0.152	0.261	...	...
L54N-505	5	26	04.75	-67	29	22.5	20.597	0.242	-0.127	0.389	...	...
L51N-790	5	25	19.67	-67	27	47.7	20.637	0.157	-0.169	0.238	...	...
L51N-800	5	25	27.19	-67	28	43.8	20.676	0.149	0.131	0.283	...	...
L51S-659	5	25	18.75	-67	31	46.5	20.703	0.143	0.001	0.267	...	...
L51S-665	5	25	41.08	-67	29	31.7	20.723	0.241	-0.395	0.310	...	...
L51S-669	5	25	23.47	-67	31	50.6	20.792	0.225	-0.338	0.423	...	...
L51S-672	5	25	26.73	-67	29	23.0	20.830	0.160	0.098	0.348	...	...
L51S-673	5	25	40.34	-67	29	24.9	20.871	0.199	-0.218	0.312	...	...
L51S-674	5	25	22.11	-67	31	26.4	20.895	0.186	0.134	0.292	...	...
L51S-676	5	25	40.69	-67	29	23.3	20.904	0.211	0.064	0.370	...	...

Table 4f

D226-5	5	31	55.42	-68	40	08.7	13.706	0.011	0.180	0.023	-1.183	0.024
D226-6	5	32	01.13	-68	40	22.4	14.018	0.016	-0.081	0.034	-0.580	0.042
D226-9	5	31	55.82	-68	40	16.3	15.097	0.006	-0.116	0.010	-0.674	0.018
D226-10	5	31	59.56	-68	40	36.6	15.197	0.004	-0.161	0.007	-0.801	0.017
D226-11	5	31	49.21	-68	41	20.5	15.372	0.006	1.283	0.011	1.539	0.117
D226-13	5	31	54.96	-68	40	46.8	15.431	0.016	-0.135	0.020	-0.744	0.016
D226-14	5	32	00.98	-68	40	22.6	15.576	0.065	-0.147	0.079	-1.545	0.194
D226-16	5	31	45.66	-68	41	55.5	16.063	0.010	1.519	0.022	...	...
D226-17	5	32	00.77	-68	40	19.4	16.191	0.021	-0.151	0.025	-0.644	0.045
D226-18	5	32	13.91	-68	39	35.9	16.208	0.008	-0.038	0.011	-0.692	0.024
D226-20	5	31	47.41	-68	41	12.6	16.248	0.008	-0.133	0.011	-0.688	0.025
D226-21	5	31	59.92	-68	40	41.7	16.285	0.007	-0.145	0.011	-0.717	0.040
D226-22	5	32	10.34	-68	39	05.7	16.334	0.012	0.047	0.017	-0.631	0.029
D226-23	5	31	57.25	-68	42	24.4	16.397	0.008	-0.134	0.011	-0.686	0.027
D226-24	5	32	01.65	-68	40	25.4	16.487	0.018	0.078	0.120	-1.235	0.155
D226-25	5	32	03.01	-68	40	42.9	16.488	0.011	-0.142	0.015	-0.691	0.031
D226-26	5	31	49.80	-68	39	10.2	16.685	0.010	-0.118	0.015	-0.540	0.034
D226-27	5	31	57.42	-68	41	31.9	16.690	0.010	-0.164	0.015	-0.622	0.030
D226-28	5	31	59.86	-68	40	45.8	16.704	0.010	-0.098	0.014	-0.693	0.038
D226-32	5	31	46.40	-68	41	27.4	16.813	0.009	-0.093	0.014	-0.526	0.032
D226-29	5	31	57.63	-68	41	21.0	16.853	0.015	1.466	0.042	...	...
D226-30	5	32	00.96	-68	41	18.9	16.861	0.024	1.526	0.057	...	...
D226-31	5	31	50.77	-68	39	41.8	16.871	0.012	1.300	0.033	...	...
D226-35	5	32	16.11	-68	42	07.8	16.892	0.011	-0.134	0.016	-0.749	0.036
D226-34	5	31	55.95	-68	40	58.1	16.894	0.009	0.093	0.015	-0.692	0.048
D226-33	5	31	56.70	-68	41	17.8	16.906	0.019	0.662	0.026	0.363	0.094
D226-36	5	31	50.57	-68	42	15.7	16.952	0.011	-0.076	0.018	-0.552	0.030
D226-38	5	31	53.42	-68	41	15.7	16.969	0.011	-0.170	0.017	-0.649	0.027
D226-39	5	31	45.72	-68	41	11.0	17.006	0.011	-0.102	0.018	-0.705	0.031
D226-40	5	31	45.22	-68	41	00.5	17.017	0.009	0.056	0.014	-0.636	0.037
D226-37	5	31	36.21	-68	41	40.4	17.018	0.012	1.363	0.029	...	...
D226-42	5	32	05.06	-68	40	32.7	17.066	0.011	-0.083	0.018	-0.725	0.030
D226-41	5	31	40.12	-68	41	32.2	17.120	0.010	1.606	0.029	...	...
D226-43	5	31	57.36	-68	39	15.6	17.120	0.009	-0.051	0.016	-0.506	0.041
D226-44	5	32	00.47	-68	40	21.9	17.124	0.011	-0.035	0.019	-0.586	0.065
D226-46	5	32	09.15	-68	40	43.1	17.169	0.010	0.010	0.019	-0.521	0.045
D226-45	5	32	00.78	-68	39	55.2	17.223	0.014	1.490	0.034	...	...
D226-49	5	31	55.44	-68	40	07.9	17.238	0.058	-0.202	0.081	...	...
D226-47	5	31	54.41	-68	42	03.1	17.256	0.011	1.612	0.039	...	...
D226-50	5	31	55.22	-68	39	29.9	17.266	0.011	-0.131	0.016	-0.526	0.044
D226-51	5	31	44.24	-68	38	50.0	17.281	0.015	-0.026	0.027	-0.452	0.046
D226-53	5	32	10.32	-68	41	46.0	17.335	0.012	-0.012	0.020	-0.405	0.048
D226-52	5	31	48.75	-68	39	09.1	17.355	0.012	1.296	0.039	...	...
D226-56	5	31	37.74	-68	42	07.9	17.376	0.014	-0.040	0.024	-0.415	0.080
D226-58	5	31	56.82	-68	38	59.0	17.403	0.021	-0.008	0.031	-0.721	0.053
D226-59	5	31	58.16	-68	40	37.8	17.403	0.168	-0.184	0.191	-0.556	0.057
D226-61	5	32	00.54	-68	40	26.1	17.420	0.016	-0.090	0.026	-0.775	0.074
D226-54	5	31	52.72	-68	40	46.4	17.426	0.012	1.341	0.039	...	...
D226-55	5	31	58.42	-68	41	21.5	17.434	0.017	1.316	0.079	...	...
D226-57	5	31	41.44	-68	39	49.9	17.455	0.012	1.387	0.038	...	...
D226-60	5	32	11.78	-68	41	00.8	17.477	0.019	1.352	0.063	...	...
D226-63	5	31	45.95	-68	41	38.6	17.491	0.018	0.938	0.048	...	...
D226-62	5	31	35.73	-68	40	59.0	17.495	0.012	1.267	0.040	...	...
D226-64	5	31	37.70	-68	40	55.8	17.508	0.011	1.293	0.037	...	...
D226-65	5	32	12.39	-68	41	47.3	17.522	0.014	1.376	0.037	...	...
D226-66	5	31	53.14	-68	39	26.5	17.541	0.012	0.746	0.024	0.812	0.189
D226-68	5	31	57.63	-68	40	36.5	17.557	0.027	0.145	0.035	0.189	0.075
D226-70	5	31	55.05	-68	39	32.5	17.563	0.014	-0.073	0.020	-0.570	0.050
D226-71	5	31	57.10	-68	40	32.3	17.566	0.016	-0.014	0.026	-0.309	0.063
D226-67	5	32	04.95	-68	42	09.2	17.609	0.015	1.668	0.050	...	...
D226-69	5	31	42.85	-68	39	50.4	17.619	0.013	1.298	0.041	...	...
D226-72	5	31	47.18	-68	40	37.1	17.629	0.034	0.853	0.047	...	...
D226-73	5	31	36.22	-68	38	51.3	17.645	0.022	1.160	0.050	...	...
D226-74	5	31	56.13	-68	40	32.8	17.652	0.061	0.929	0.078	...	...

D226-76	5	32	15.83	-68	40	15.3	17.677	0.156	-0.160	0.180	-0.741	0.082
D226-75	5	32	01.76	-68	40	24.6	17.690	0.120	0.266	0.225	...	...
D226-78	5	31	54.97	-68	40	36.7	17.744	0.015	-0.032	0.024	-0.570	0.061
D226-77	5	31	42.90	-68	41	52.7	17.779	0.018	1.369	0.059	...	...
D226-80	5	31	54.93	-68	42	15.9	17.800	0.014	0.587	0.031	0.348	0.193
D226-81	5	31	38.96	-68	40	01.8	17.802	0.012	0.611	0.036	0.279	0.171
D226-83	5	31	56.80	-68	40	28.4	17.810	0.016	-0.037	0.027	-0.566	0.057
D226-79	5	31	50.64	-68	38	56.8	17.831	0.017	1.445	0.054	...	...
D226-82	5	32	13.00	-68	41	15.9	17.859	0.016	1.437	0.046	...	...
D226-86	5	31	47.69	-68	41	27.2	17.889	0.017	-0.016	0.027	-0.164	0.080
D226-88	5	31	43.25	-68	41	53.1	17.899	0.027	-0.064	0.040	-0.387	0.084
D226-89	5	32	16.49	-68	40	06.1	17.914	0.024	-0.004	0.034	-0.165	0.113
D226-85	5	31	59.98	-68	42	10.8	17.922	0.024	1.100	0.043	...	...
D226-91	5	32	12.60	-68	41	03.9	17.932	0.023	0.072	0.034	-0.223	0.122
D226-93	5	31	58.98	-68	41	27.6	17.945	0.016	-0.002	0.031	-0.349	0.064
D226-87	5	32	09.35	-68	39	36.4	17.950	0.018	1.350	0.059	...	...
D226-96	5	31	37.60	-68	40	20.6	17.950	0.021	-0.120	0.031	-0.664	0.060
D226-97	5	32	01.90	-68	40	25.3	17.957	0.330	-0.353	0.498	...	...
D226-92	5	31	36.42	-68	41	55.2	17.967	0.018	0.892	0.063	...	...
D226-90	5	32	14.12	-68	39	45.0	17.969	0.030	1.038	0.053	...	...
D226-99	5	31	49.55	-68	42	24.4	17.975	0.018	-0.103	0.027	-0.417	0.072
D226-95	5	31	36.47	-68	40	37.3	18.001	0.021	1.102	0.056	...	...
D226-94	5	32	11.08	-68	39	20.0	18.004	0.023	1.339	0.061	...	...
D226-98	5	32	00.68	-68	41	55.2	18.021	0.019	1.029	0.047	...	...
D226-103	5	32	05.12	-68	42	12.3	18.062	0.021	0.156	0.036	0.100	0.221
D226-100	5	31	58.98	-68	41	37.4	18.064	0.022	1.201	0.060	...	...
D226-104	5	32	15.03	-68	41	37.5	18.068	0.013	-0.029	0.024	-0.468	0.094
D226-101	5	31	35.30	-68	41	56.8	18.084	0.187	1.288	0.298	...	...
D226-106	5	31	56.85	-68	39	13.2	18.093	0.016	0.060	0.028	-0.268	0.074
D226-102	5	31	56.14	-68	38	54.7	18.101	0.017	1.390	0.060	...	...
D226-107	5	32	05.01	-68	40	30.5	18.121	0.023	0.089	0.036	-0.309	0.073
D226-105	5	31	55.70	-68	41	21.5	18.127	0.021	0.950	0.057	...	...
D226-108	5	31	43.64	-68	39	08.1	18.129	0.019	0.008	0.032	-0.156	0.111
D226-110	5	32	16.99	-68	40	03.9	18.132	0.022	0.017	0.037	-0.457	0.074
D226-111	5	31	51.57	-68	41	42.3	18.172	0.021	0.855	0.059	...	...
D226-109	5	31	52.62	-68	40	35.0	18.181	0.023	1.174	0.052	...	...
D226-116	5	31	58.74	-68	40	22.7	18.193	0.022	-0.025	0.036	-0.577	0.093
D226-114	5	32	10.14	-68	40	13.0	18.204	0.033	0.698	0.112	...	...
D226-112	5	32	08.90	-68	40	59.4	18.213	0.017	1.367	0.057	...	...
D226-118	5	32	01.07	-68	39	15.9	18.216	0.289	0.391	0.329	...	...
D226-121	5	32	09.49	-68	39	46.8	18.218	0.023	0.010	0.039	-0.355	0.104
D226-120	5	32	14.71	-68	41	13.9	18.242	0.023	0.675	0.058	...	...
D226-113	5	31	48.06	-68	39	34.0	18.243	0.022	1.680	0.089	...	...
D226-117	5	31	49.10	-68	41	35.5	18.254	0.020	1.299	0.059	...	...
D226-126	5	32	05.82	-68	41	30.8	18.263	0.019	0.005	0.031	-0.474	0.105
D226-119	5	31	36.74	-68	38	53.3	18.273	0.022	1.492	0.084	...	...
D226-122	5	31	54.55	-68	39	26.3	18.278	0.028	0.788	0.055	...	...
D226-123	5	32	02.63	-68	42	05.4	18.292	0.025	1.101	0.063	...	...
D226-124	5	31	43.08	-68	42	25.7	18.297	0.025	1.162	0.057	...	...
D226-127	5	31	55.70	-68	40	36.5	18.298	0.021	0.084	0.039	-0.010	0.217
D226-125	5	31	43.69	-68	38	46.9	18.304	0.024	1.044	0.071	...	...
D226-128	5	31	59.03	-68	41	10.6	18.333	0.020	-0.097	0.031	-0.527	0.086
D226-129	5	32	01.38	-68	41	32.5	18.344	0.021	0.148	0.039	0.168	0.169
D226-132	5	31	37.17	-68	41	48.7	18.351	0.023	-0.004	0.037	0.178	0.170
D226-130	5	32	10.74	-68	40	54.5	18.354	0.021	0.196	0.035	0.203	0.186
D226-131	5	31	49.46	-68	40	34.6	18.401	0.022	1.263	0.074	...	...
D226-138	5	31	51.59	-68	41	12.6	18.405	0.034	-0.115	0.047	-0.534	0.105
D226-134	5	31	44.85	-68	41	34.9	18.418	0.028	0.993	0.097	...	...
D226-133	5	31	50.63	-68	42	25.3	18.422	0.031	1.133	0.092	...	...
D226-139	5	31	41.75	-68	42	32.8	18.423	0.025	0.020	0.043	...	...
D226-135	5	31	53.57	-68	38	45.5	18.443	0.064	1.061	0.499	...	...
D226-136	5	31	50.20	-68	41	20.9	18.451	0.028	1.056	0.072	...	...
D226-137	5	32	02.52	-68	41	17.9	18.453	0.023	1.006	0.055	...	...
D226-143	5	31	43.33	-68	41	09.9	18.470	0.024	0.023	0.040	...	...
D226-141	5	31	43.55	-68	40	13.6	18.485	0.026	1.173	0.089	...	...
D226-142	5	31	36.54	-68	41	23.6	18.513	0.023	1.147	0.061	...	...

D226-145	5	31	54.72	-68	41	21.6	18.529	0.030	0.693	0.062	...	...
D226-148	5	32	11.45	-68	40	57.6	18.530	0.025	0.135	0.044	0.091	0.237
D226-144	5	32	01.86	-68	41	02.0	18.531	0.029	1.008	0.096	...	...
D226-151	5	32	03.89	-68	39	19.8	18.538	0.033	0.114	0.047	-0.474	0.146
D226-152	5	31	40.41	-68	39	47.8	18.541	0.024	0.085	0.042	-0.069	0.173
D226-155	5	31	59.63	-68	40	15.5	18.554	0.029	-0.051	0.047	-0.344	0.120
D226-154	5	31	50.85	-68	39	08.8	18.555	0.035	0.115	0.053	...	...
D226-146	5	32	09.37	-68	42	17.8	18.559	0.026	1.297	0.086	...	...
D226-150	5	31	45.37	-68	41	11.0	18.566	0.032	0.906	0.082	...	...
D226-157	5	31	59.47	-68	40	26.5	18.569	0.031	0.114	0.057	-0.131	0.168
D226-149	5	31	57.18	-68	41	17.4	18.570	0.026	1.014	0.081	...	...
D226-160	5	31	48.83	-68	41	37.2	18.580	0.055	0.061	0.145	-0.633	0.187
D226-159	5	31	52.64	-68	40	04.7	18.586	0.030	0.229	0.050	0.181	0.263
D226-164	5	32	05.50	-68	42	08.4	18.605	0.022	-0.026	0.050	-0.376	0.171
D226-156	5	31	35.83	-68	41	19.5	18.607	0.032	1.075	0.078	...	...
D226-170	5	31	40.91	-68	40	33.5	18.623	0.031	-0.112	0.044	-0.540	0.095
D226-162	5	31	56.10	-68	42	31.8	18.624	0.034	0.920	0.083	...	...
D226-158	5	31	36.54	-68	39	21.5	18.627	0.030	1.294	0.080	...	...
D226-161	5	31	41.35	-68	40	48.0	18.632	0.033	1.128	0.103	...	...
D226-163	5	31	48.89	-68	40	40.1	18.641	0.027	1.112	0.072	...	...
D226-166	5	31	53.10	-68	39	01.2	18.646	0.035	0.780	0.076	...	...
D226-167	5	31	54.95	-68	41	01.8	18.654	0.035	0.766	0.073	...	...
D226-175	5	31	57.70	-68	39	59.7	18.655	0.029	-0.090	0.044	-0.237	0.133
D226-177	5	31	41.77	-68	41	49.3	18.665	0.074	0.015	0.093	...	...
D226-168	5	31	42.53	-68	40	53.1	18.669	0.041	1.024	0.089	...	...
D226-171	5	31	54.34	-68	42	05.2	18.680	0.029	1.127	0.094	...	...
D226-178	5	31	42.09	-68	42	23.5	18.681	0.043	0.278	0.071	...	...
D226-169	5	31	53.48	-68	40	18.1	18.682	0.063	1.307	0.178	...	...
D226-180	5	31	48.01	-68	40	39.6	18.689	0.020	-0.089	0.035	-0.503	0.139
D226-176	5	32	02.87	-68	40	21.0	18.690	0.035	0.617	0.070	-0.531	0.181
D226-174	5	31	55.95	-68	41	44.2	18.693	0.044	1.032	0.089	...	...
D226-181	5	31	39.74	-68	40	40.0	18.712	0.028	0.411	0.064	...	...
D226-184	5	31	38.85	-68	41	54.6	18.719	0.031	0.103	0.050	...	...
D226-179	5	32	07.25	-68	39	53.9	18.724	0.036	0.885	0.088	...	...
D226-182	5	32	08.62	-68	41	58.6	18.734	0.029	0.654	0.053	...	...
D226-186	5	31	44.19	-68	38	45.2	18.755	0.196	0.627	0.746	-1.024	0.891
D226-183	5	32	09.93	-68	42	04.8	18.757	0.037	1.155	0.098	...	...
D226-185	5	31	43.81	-68	41	30.3	18.757	0.044	0.810	0.071	...	...
D226-193	5	32	01.73	-68	41	25.9	18.757	0.034	0.128	0.060	-0.329	0.156
D226-195	5	31	52.07	-68	41	44.5	18.760	0.039	0.015	0.055	-0.323	0.164
D226-196	5	31	46.43	-68	39	53.3	18.766	0.039	0.035	0.061	-0.107	0.198
D226-188	5	32	01.37	-68	41	41.0	18.774	0.042	0.860	0.081	...	...
D226-199	5	31	57.86	-68	41	21.7	18.776	0.043	-0.049	0.077	-0.009	0.241
D226-190	5	31	45.15	-68	42	19.0	18.777	0.030	0.749	0.059	...	...
D226-189	5	31	37.91	-68	40	02.9	18.784	0.037	0.962	0.084	...	...
D226-187	5	31	48.02	-68	42	06.4	18.785	0.033	1.189	0.096	...	...
D226-200	5	31	43.58	-68	40	37.7	18.786	0.042	0.062	0.063	-0.203	0.152
D226-202	5	31	44.85	-68	40	11.4	18.792	0.255	0.137	0.291	...	...
D226-201	5	32	02.38	-68	41	09.7	18.795	0.029	0.250	0.063	...	...
D226-192	5	32	03.18	-68	41	37.8	18.800	0.132	1.210	0.216	...	...
D226-194	5	31	51.25	-68	39	26.9	18.804	0.029	1.217	0.097	...	...
D226-191	5	32	10.62	-68	40	13.6	18.806	0.036	1.368	0.123	...	...
D226-197	5	31	45.26	-68	41	46.5	18.814	0.045	0.878	0.092	...	...
D226-198	5	31	41.11	-68	38	53.4	18.816	0.036	0.912	0.098	...	...
D226-210	5	31	57.80	-68	42	16.8	18.818	0.043	-0.026	0.066	-0.324	0.160
D226-213	5	31	51.71	-68	40	48.3	18.824	0.065	-0.130	0.088	-0.168	0.184
D226-203	5	32	01.71	-68	39	52.7	18.828	0.026	0.908	0.077	...	...
D226-211	5	32	03.07	-68	40	41.1	18.830	0.061	0.208	0.111	...	...
D226-204	5	31	59.64	-68	41	34.9	18.840	0.025	1.019	0.071	...	...
D226-205	5	31	50.36	-68	40	35.6	18.843	0.034	1.055	0.079	...	...
D226-206	5	31	54.10	-68	41	20.5	18.847	0.036	1.022	0.106	...	...
D226-207	5	31	37.20	-68	40	39.9	18.855	0.033	1.085	0.101	...	...
D226-209	5	31	41.99	-68	41	12.8	18.859	0.029	1.100	0.106	...	...
D226-214	5	31	54.59	-68	39	36.2	18.859	0.039	0.598	0.073	...	...
D226-208	5	31	42.85	-68	39	34.0	18.866	0.039	1.330	0.136	...	...
D226-225	5	31	59.92	-68	40	25.3	18.871	0.044	-0.037	0.067	-0.581	0.186

D226-223	5	31	58.02	-68	39	51.6	18.874	0.052	0.226	0.074	...	...
D226-215	5	31	45.55	-68	40	24.0	18.875	0.034	0.763	0.072	...	...
D226-212	5	32	04.19	-68	39	45.4	18.892	0.039	1.444	0.135	...	...
D226-216	5	32	01.77	-68	39	37.8	18.894	0.036	1.201	0.124	...	...
D226-221	5	31	45.83	-68	42	01.3	18.896	0.040	0.989	0.084	...	...
D226-217	5	31	37.73	-68	41	16.2	18.899	0.031	1.305	0.097	...	...
D226-219	5	31	43.25	-68	39	07.1	18.899	0.033	1.113	0.095	...	...
D226-220	5	31	51.23	-68	41	45.8	18.901	0.042	1.127	0.108	...	...
D226-218	5	31	57.28	-68	40	30.5	18.910	0.041	1.510	0.166	...	...
D226-227	5	31	46.52	-68	38	53.5	18.914	0.034	0.550	0.075	...	...
D226-224	5	32	07.44	-68	41	55.6	18.921	0.036	1.266	0.138	...	...
D226-222	5	31	58.68	-68	39	14.6	18.925	0.033	1.486	0.118	...	...
D226-237	5	32	01.77	-68	40	36.4	18.940	0.039	0.037	0.062	-0.041	0.141
D226-231	5	31	56.12	-68	42	23.2	18.945	0.031	0.890	0.077	...	...
D226-236	5	31	43.04	-68	39	38.7	18.945	0.040	0.211	0.060	...	...
D226-226	5	32	02.44	-68	41	06.1	18.947	0.038	1.522	0.120	...	...
D226-228	5	31	45.49	-68	41	45.7	18.950	0.040	1.283	0.126	...	...
D226-242	5	31	57.29	-68	39	36.2	18.950	0.040	0.027	0.059	-0.133	0.221
D226-230	5	32	14.20	-68	42	24.5	18.954	0.037	1.093	0.101	...	...
D226-232	5	32	05.46	-68	42	27.3	18.954	0.038	0.985	0.099	...	...
D226-244	5	31	53.27	-68	40	18.1	18.954	0.084	0.049	0.121	...	...
D226-246	5	32	00.40	-68	41	41.7	18.955	0.040	0.055	0.072	-0.153	0.193
D226-241	5	31	56.35	-68	40	46.1	18.960	0.063	0.314	0.119	-0.759	0.223
D226-247	5	31	56.59	-68	38	59.5	18.960	0.072	0.140	0.111	...	...
D226-234	5	31	52.24	-68	39	56.0	18.962	0.042	0.725	0.089	...	...
D226-229	5	31	37.06	-68	40	00.3	18.965	0.038	1.415	0.124	...	...
D226-250	5	32	02.34	-68	39	14.8	18.966	0.054	-0.031	0.075	-0.435	0.227
D226-239	5	31	50.63	-68	41	12.3	18.968	0.038	0.542	0.081	...	...
D226-233	5	32	03.49	-68	42	01.7	18.972	0.058	1.231	0.131	...	...
D226-240	5	31	40.84	-68	40	40.9	18.976	0.043	0.685	0.094	...	...
D226-238	5	32	11.31	-68	40	23.8	18.978	0.039	0.899	0.099	...	...
D226-257	5	31	43.06	-68	39	19.2	18.979	0.036	0.023	0.069	0.061	0.259
D226-235	5	31	44.01	-68	42	15.1	18.980	0.040	1.102	0.115	...	...
D226-255	5	31	55.04	-68	39	24.0	18.982	0.049	0.117	0.074	...	...
D226-259	5	31	43.06	-68	40	50.1	18.984	0.059	0.066	0.076	...	...
D226-254	5	31	54.75	-68	40	00.8	18.985	0.060	0.204	0.092	...	...
D226-249	5	31	53.94	-68	40	36.6	18.997	0.037	0.852	0.129	...	...
D226-245	5	32	07.95	-68	39	23.2	18.998	0.044	1.073	0.108	...	...
D226-260	5	31	36.94	-68	41	57.2	19.000	0.043	0.391	0.147	...	...
D226-243	5	32	10.03	-68	42	28.6	19.001	0.036	1.191	0.124	...	...
D226-252	5	31	50.54	-68	38	46.5	19.010	0.049	0.943	0.126	...	...
D226-263	5	32	08.58	-68	41	33.9	19.011	0.036	0.115	0.062	-0.489	0.244
D226-253	5	31	58.00	-68	42	18.3	19.013	0.051	0.903	0.109	...	...
D226-256	5	31	45.10	-68	40	43.4	19.015	0.042	0.893	0.102	...	...
D226-248	5	31	46.29	-68	42	11.2	19.017	0.042	1.366	0.160	...	...
D226-267	5	32	04.88	-68	41	17.2	19.020	0.034	0.078	0.057	...	...
D226-261	5	32	08.19	-68	39	59.0	19.028	0.037	1.032	0.098	...	...
D226-270	5	31	43.27	-68	42	09.6	19.029	0.041	0.199	0.066	...	...
D226-258	5	31	36.48	-68	40	44.3	19.030	0.031	1.153	0.109	...	...
D226-274	5	31	37.50	-68	42	06.4	19.032	0.073	-0.115	0.102	...	...
D226-264	5	32	09.00	-68	39	48.2	19.035	0.038	0.582	0.095	...	...
D226-269	5	31	39.00	-68	39	40.0	19.042	0.046	0.549	0.099	...	...
D226-262	5	32	01.38	-68	39	28.4	19.045	0.032	1.072	0.099	...	...
D226-268	5	31	39.65	-68	40	59.5	19.045	0.038	0.632	0.071	...	...
D226-277	5	31	42.58	-68	41	11.6	19.046	0.051	0.157	0.072	...	...
D226-276	5	31	43.91	-68	41	52.0	19.050	0.036	0.274	0.066	...	...
D226-265	5	31	53.88	-68	41	33.1	19.051	0.055	0.950	0.144	...	...
D226-266	5	31	41.98	-68	40	14.9	19.052	0.058	0.828	0.115	...	...
D226-271	5	31	53.57	-68	41	06.3	19.061	0.060	0.828	0.117	...	...
D226-275	5	31	54.90	-68	40	57.9	19.073	0.030	0.805	0.105	...	...
D226-278	5	32	00.22	-68	41	35.4	19.076	0.049	0.852	0.115	...	...
D226-283	5	31	54.85	-68	39	55.3	19.076	0.041	0.172	0.076	-0.564	0.174
D226-280	5	31	38.47	-68	42	14.6	19.078	0.060	0.482	0.106	...	...
D226-279	5	32	04.55	-68	40	51.8	19.079	0.043	0.844	0.111	...	...
D226-273	5	31	50.88	-68	39	58.9	19.083	0.047	1.091	0.149	...	...
D226-286	5	32	10.18	-68	42	00.9	19.085	0.043	0.199	0.082	...	...

D226-289	5	31	52.53	-68	41	25.1	19.085	0.040	-0.020	0.063	...	...
D226-290	5	31	46.55	-68	40	43.4	19.092	0.034	0.093	0.060	...	...
D226-287	5	31	36.81	-68	42	17.0	19.108	0.067	0.680	0.123	...	...
D226-291	5	32	04.29	-68	39	15.1	19.108	0.062	0.141	0.087	...	...
D226-282	5	31	54.06	-68	41	10.7	19.112	0.044	1.124	0.121	...	...
D226-281	5	31	36.96	-68	40	53.2	19.117	0.043	1.348	0.165	...	...
D226-288	5	32	02.82	-68	40	18.6	19.117	0.047	0.774	0.096	...	...
D226-285	5	31	49.14	-68	40	44.8	19.119	0.036	1.047	0.131	...	...
D226-300	5	31	50.44	-68	41	42.6	19.120	0.050	-0.013	0.077	...	...
D226-284	5	31	54.14	-68	39	35.0	19.121	0.041	1.171	0.116	...	...
D226-298	5	32	06.31	-68	40	37.0	19.130	0.055	0.285	0.106	...	...
D226-292	5	31	44.03	-68	40	42.9	19.137	0.044	0.793	0.118	...	...
D226-302	5	31	59.79	-68	40	22.9	19.138	0.056	0.285	0.132	-0.662	0.232
D226-308	5	31	39.37	-68	41	05.4	19.139	0.049	-0.096	0.069	...	...
D226-295	5	31	59.95	-68	42	12.6	19.141	0.063	0.743	0.106	...	...
D226-293	5	31	59.14	-68	38	58.8	19.144	0.038	0.852	0.117	...	...
D226-294	5	32	14.68	-68	41	07.2	19.147	0.043	0.916	0.143	...	...
D226-297	5	31	52.02	-68	42	19.8	19.147	0.047	0.762	0.114	...	...
D226-309	5	31	44.84	-68	40	39.0	19.153	0.036	0.160	0.061	...	...
D226-310	5	32	10.80	-68	38	50.9	19.153	0.039	0.163	0.068	...	...
D226-296	5	31	37.65	-68	41	52.2	19.156	0.041	1.064	0.127	...	...
D226-312	5	31	48.27	-68	41	51.0	19.160	0.075	0.262	0.151	...	...
D226-307	5	31	37.28	-68	42	01.4	19.162	0.058	0.437	0.119	...	...
D226-314	5	31	44.11	-68	41	27.4	19.163	0.049	0.174	0.087	...	...
D226-303	5	32	05.65	-68	42	26.2	19.167	0.054	0.871	0.103	...	...
D226-317	5	31	44.46	-68	41	36.7	19.171	0.056	0.012	0.077	...	...
D226-306	5	31	41.98	-68	42	24.6	19.176	0.064	0.832	0.142	...	...
D226-316	5	31	52.01	-68	40	37.0	19.176	0.037	0.348	0.084	...	...
D226-305	5	31	36.72	-68	41	56.4	19.178	0.068	0.925	0.251	...	...
D226-311	5	32	14.68	-68	42	06.0	19.180	0.054	0.766	0.111	...	...
D226-304	5	31	58.16	-68	40	37.1	19.181	0.230	1.066	0.376	...	...
D226-315	5	31	37.44	-68	41	01.5	19.185	0.079	0.663	0.150	...	...
D226-301	5	31	50.05	-68	41	26.0	19.188	0.074	1.509	0.207	...	...
D226-313	5	32	11.97	-68	39	59.3	19.195	0.053	1.008	0.131	...	...
D226-332	5	31	55.64	-68	41	44.1	19.202	0.044	0.002	0.074	...	...
D226-333	5	31	38.50	-68	40	40.9	19.208	0.051	0.008	0.090	...	...
D226-319	5	32	09.61	-68	42	19.8	19.214	0.052	0.939	0.132	...	...
D226-320	5	32	00.64	-68	40	48.9	19.214	0.051	0.922	0.103	...	...
D226-326	5	32	10.44	-68	42	16.5	19.214	0.073	0.703	0.120	...	...
D226-318	5	32	03.29	-68	39	24.4	19.215	0.055	0.998	0.137	...	...
D226-328	5	32	11.05	-68	42	30.8	19.215	0.057	0.603	0.108	...	...
D226-327	5	31	45.09	-68	42	26.1	19.218	0.084	0.663	0.173	...	...
D226-323	5	31	55.27	-68	42	15.7	19.222	0.030	0.998	0.097	...	...
D226-340	5	32	07.06	-68	42	25.6	19.224	0.041	-0.001	0.068	...	...
D226-325	5	32	14.47	-68	39	18.5	19.226	0.053	1.054	0.122	...	...
D226-322	5	31	52.27	-68	39	27.5	19.228	0.035	1.177	0.132	...	...
D226-343	5	31	36.51	-68	41	33.7	19.228	0.043	-0.051	0.077	...	...
D226-324	5	32	15.61	-68	41	38.3	19.231	0.045	1.193	0.144	...	...
D226-339	5	31	41.86	-68	38	51.4	19.233	0.049	0.229	0.074	...	...
D226-336	5	31	48.75	-68	41	36.2	19.235	0.098	0.471	0.349	...	...
D226-345	5	31	55.28	-68	40	44.1	19.235	0.042	0.004	0.072	-0.918	0.216
D226-330	5	31	50.84	-68	41	17.0	19.236	0.042	0.979	0.130	...	...
D226-321	5	31	46.77	-68	41	36.5	19.244	0.061	1.599	0.249	...	...
D226-337	5	31	48.53	-68	39	29.7	19.244	0.057	0.571	0.110	...	...
D226-329	5	32	11.40	-68	41	11.7	19.245	0.060	1.231	0.179	...	...
D226-346	5	31	58.54	-68	41	22.6	19.245	0.041	0.227	0.169	...	...
D226-334	5	32	00.32	-68	38	54.1	19.252	0.043	0.959	0.144	...	...
D226-335	5	31	44.58	-68	40	48.6	19.255	0.050	0.934	0.113	...	...
D226-353	5	31	57.38	-68	40	18.6	19.261	0.054	0.182	0.099	...	...
D226-344	5	31	47.73	-68	41	37.5	19.263	0.056	0.773	0.123	...	...
D226-338	5	32	05.64	-68	39	34.8	19.269	0.040	1.141	0.139	...	...
D226-362	5	31	41.15	-68	41	34.5	19.272	0.063	-0.043	0.088	...	...
D226-341	5	32	10.76	-68	40	23.3	19.276	0.053	1.179	0.126	...	...
D226-348	5	32	14.79	-68	41	29.3	19.276	0.048	0.904	0.102	...	...
D226-342	5	31	41.99	-68	39	19.6	19.281	0.053	1.202	0.123	...	...
D226-365	5	31	57.98	-68	40	37.4	19.282	0.253	0.048	0.310	...	...

D226-347	5	31	59.06	-68	39	29.2	19.284	0.062	1.120	0.151	...	...
D226-368	5	32	08.66	-68	39	46.6	19.285	0.062	-0.004	0.088	...	...
D226-350	5	32	09.67	-68	40	21.0	19.287	0.045	0.946	0.125	...	...
D226-364	5	32	16.68	-68	41	58.6	19.288	0.046	0.231	0.095	...	...
D226-351	5	32	04.00	-68	40	16.4	19.291	0.058	1.020	0.170	...	...
D226-357	5	31	40.06	-68	41	45.5	19.291	0.040	0.707	0.098	...	...
D226-355	5	31	44.86	-68	40	50.3	19.292	0.059	0.820	0.114	...	...
D226-358	5	31	58.44	-68	41	38.0	19.294	0.071	0.763	0.135	...	...
D226-376	5	31	58.45	-68	41	01.0	19.294	0.057	-0.097	0.078	...	...
D226-352	5	32	11.81	-68	39	44.8	19.298	0.054	1.177	0.137	...	...
D226-354	5	31	53.69	-68	39	51.4	19.299	0.058	1.071	0.147	...	...
D226-370	5	32	14.99	-68	39	06.5	19.301	0.042	0.324	0.101	...	...
D226-360	5	31	40.28	-68	41	18.2	19.302	0.088	0.858	0.135	...	...
D226-361	5	32	07.47	-68	40	24.5	19.310	0.049	0.987	0.128	...	...
D226-367	5	32	09.55	-68	42	25.8	19.317	0.069	0.825	0.132	...	...
D226-392	5	32	00.02	-68	40	22.0	19.320	0.059	-0.206	0.092	-0.322	0.284
D226-366	5	31	48.30	-68	41	35.1	19.323	0.045	1.009	0.144	...	...
D226-373	5	31	53.77	-68	40	04.0	19.324	0.065	0.707	0.126	...	...
D226-388	5	31	39.81	-68	39	06.5	19.332	0.047	0.304	0.097	...	...
D226-372	5	31	43.68	-68	42	08.8	19.333	0.042	1.006	0.116	...	...
D226-393	5	32	00.40	-68	40	54.6	19.333	0.059	0.064	0.094	...	...
D226-375	5	31	49.78	-68	42	28.6	19.338	0.049	0.977	0.134	...	...
D226-378	5	31	36.56	-68	42	05.7	19.339	0.051	0.868	0.116	...	...
D226-374	5	31	46.59	-68	40	08.6	19.340	0.050	1.050	0.142	...	...
D226-377	5	32	01.52	-68	42	28.9	19.340	0.053	0.904	0.152	...	...
D226-380	5	31	44.15	-68	38	59.8	19.340	0.046	0.758	0.109	...	...
D226-369	5	31	43.81	-68	41	08.4	19.341	0.042	1.272	0.149	...	...
D226-379	5	31	47.34	-68	39	25.0	19.341	0.060	0.814	0.134	...	...
D226-389	5	31	54.18	-68	40	05.6	19.342	0.057	0.513	0.131	...	...
D226-381	5	32	09.43	-68	39	29.7	19.345	0.060	0.864	0.133	...	...
D226-401	5	31	53.30	-68	40	02.7	19.346	0.044	0.185	0.086	...	...
D226-408	5	31	54.49	-68	41	46.0	19.346	0.057	-0.065	0.088	...	...
D226-382	5	31	48.27	-68	40	00.6	19.348	0.040	0.880	0.145	...	...
D226-404	5	32	06.94	-68	42	00.3	19.350	0.035	0.130	0.083	...	...
D226-396	5	31	42.23	-68	39	58.5	19.351	0.064	0.422	0.117	...	...
D226-397	5	31	57.81	-68	42	10.5	19.351	0.063	0.409	0.111	...	...
D226-406	5	31	36.87	-68	38	55.4	19.354	0.055	0.183	0.111	...	...
D226-387	5	31	37.01	-68	42	22.7	19.355	0.058	0.844	0.145	...	...
D226-385	5	31	41.92	-68	40	55.8	19.357	0.056	0.929	0.128	...	...
D226-394	5	31	50.89	-68	39	10.9	19.357	0.059	0.624	0.117	...	...
D226-410	5	31	53.06	-68	40	00.7	19.361	0.045	0.115	0.084	...	...
D226-391	5	32	05.56	-68	39	02.8	19.363	0.048	0.961	0.173	...	...
D226-395	5	31	56.69	-68	39	20.2	19.369	0.055	0.882	0.124	...	...
D226-398	5	31	43.75	-68	41	34.1	19.369	0.046	0.843	0.138	...	...
D226-384	5	32	05.49	-68	40	26.8	19.370	0.052	1.231	0.147	...	...
D226-412	5	32	06.05	-68	40	45.2	19.370	0.058	0.213	0.098	...	...
D226-399	5	31	48.93	-68	39	47.1	19.373	0.058	0.932	0.148	...	...
D226-402	5	31	44.33	-68	42	25.9	19.379	0.044	0.848	0.139	...	...
D226-407	5	31	58.30	-68	42	28.7	19.380	0.051	0.800	0.136	...	...
D226-409	5	31	39.50	-68	41	29.7	19.389	0.049	0.838	0.128	...	...
D226-420	5	32	00.80	-68	41	18.4	19.391	0.086	0.221	0.126	...	...
D226-424	5	31	37.87	-68	39	52.2	19.394	0.072	0.087	0.106	...	...
D226-430	5	31	41.02	-68	39	35.9	19.395	0.057	0.014	0.091	...	...
D226-436	5	31	49.89	-68	42	09.7	19.396	0.055	-0.222	0.087	...	...
D226-428	5	31	58.94	-68	40	53.6	19.397	0.052	0.069	0.094	...	...
D226-416	5	31	43.53	-68	39	03.6	19.401	0.065	0.670	0.116	...	...
D226-414	5	31	56.34	-68	40	44.0	19.403	0.069	0.802	0.146	...	...
D226-441	5	32	08.59	-68	41	32.1	19.404	0.052	-0.138	0.081	-0.515	0.220
D226-418	5	31	48.50	-68	39	53.2	19.405	0.073	0.730	0.159	...	...
D226-423	5	32	11.05	-68	42	12.5	19.405	0.051	0.380	0.104	...	...
D226-427	5	31	44.94	-68	42	26.9	19.405	0.060	0.280	0.144	...	...
D226-432	5	32	08.16	-68	40	26.1	19.407	0.047	0.155	0.075	...	...
D226-429	5	32	14.88	-68	40	39.3	19.408	0.065	0.329	0.115	...	...
D226-435	5	32	10.92	-68	40	49.9	19.408	0.065	0.138	0.105	-0.740	0.197
D226-415	5	31	49.80	-68	42	02.1	19.415	0.055	1.041	0.144	...	...
D226-446	5	32	08.34	-68	42	20.9	19.416	0.044	-0.033	0.089	...	...

D226-444	5	31	43.92	-68	38	50.2	19.420	0.068	0.103	0.123	...	...
D226-445	5	31	38.87	-68	42	23.4	19.422	0.049	0.111	0.093	...	...
D226-431	5	31	54.72	-68	42	05.6	19.424	0.055	0.639	0.131	...	...
D226-421	5	31	49.47	-68	40	32.7	19.428	0.047	1.093	0.178	...	...
D226-434	5	31	44.07	-68	41	01.1	19.428	0.060	0.604	0.130	...	...
D226-437	5	31	44.08	-68	41	37.3	19.428	0.085	0.500	0.134	...	...
D226-448	5	32	12.17	-68	42	11.1	19.429	0.063	0.196	0.103	...	...
D226-438	5	31	46.28	-68	40	51.6	19.435	0.068	0.628	0.128	...	...
D226-439	5	31	52.57	-68	42	15.4	19.437	0.045	0.646	0.116	...	...
D226-443	5	32	16.09	-68	40	13.4	19.437	0.055	0.596	0.133	...	...
D226-451	5	31	48.44	-68	42	00.0	19.439	0.050	0.065	0.086	...	...
D226-422	5	31	54.38	-68	41	30.3	19.441	0.060	1.270	0.171	...	...
D226-440	5	31	49.46	-68	41	57.2	19.450	0.059	0.947	0.138	...	...
D226-449	5	31	48.78	-68	41	55.8	19.454	0.051	0.675	0.138	...	...
D226-447	5	31	44.71	-68	40	14.3	19.457	0.054	0.865	0.134	...	...
D226-461	5	32	10.37	-68	41	52.5	19.459	0.059	-0.046	0.093	...	...
D226-457	5	31	54.21	-68	41	19.0	19.460	0.060	0.284	0.111	...	...
D226-442	5	31	59.08	-68	40	19.5	19.462	0.065	1.198	0.184	...	...
D226-464	5	31	50.00	-68	39	26.2	19.462	0.056	-0.002	0.084	...	...
D226-488	5	31	36.79	-68	40	17.6	19.472	0.080	-0.792	0.100	...	...
D226-466	5	32	09.47	-68	39	38.1	19.478	0.062	0.170	0.109	...	...
D226-454	5	31	38.92	-68	39	30.6	19.479	0.048	0.793	0.146	...	...
D226-453	5	31	45.90	-68	40	52.3	19.482	0.065	0.888	0.147	...	...
D226-455	5	31	38.21	-68	42	25.9	19.483	0.055	0.861	0.156	...	...
D226-478	5	31	37.57	-68	39	43.2	19.485	0.053	-0.067	0.092	...	...
D226-477	5	32	05.69	-68	39	31.5	19.486	0.055	-0.008	0.088	...	...
D226-459	5	31	47.03	-68	41	57.1	19.491	0.054	0.887	0.167	...	...
D226-475	5	32	08.74	-68	41	46.5	19.495	0.064	0.279	0.100	...	...
D226-463	5	32	16.95	-68	41	30.8	19.497	0.055	0.804	0.118	...	...
D226-473	5	31	52.60	-68	41	54.4	19.497	0.077	0.349	0.140	...	...
D226-472	5	31	58.11	-68	42	10.3	19.499	0.070	0.396	0.123	...	...
D226-474	5	32	16.84	-68	40	47.4	19.504	0.050	0.509	0.121	...	...
D226-483	5	31	47.65	-68	41	56.4	19.505	0.073	0.217	0.109	...	...
D226-480	5	32	14.08	-68	39	19.8	19.506	0.060	0.319	0.103	...	...
D226-489	5	31	46.11	-68	38	53.0	19.508	0.055	0.043	0.097	...	...
D226-460	5	32	02.04	-68	40	35.4	19.509	0.062	1.189	0.193	...	...
D226-468	5	32	03.68	-68	40	15.5	19.515	0.083	0.869	0.180	...	...
D226-491	5	32	03.20	-68	40	42.3	19.515	0.083	0.127	0.182	-1.193	0.339
D226-495	5	31	39.16	-68	41	37.7	19.515	0.060	0.014	0.088	...	...
D226-492	5	32	03.52	-68	39	32.6	19.516	0.047	0.121	0.097	...	...
D226-481	5	31	46.39	-68	41	31.7	19.518	0.060	0.596	0.117	...	...
D226-476	5	31	42.46	-68	41	33.6	19.519	0.057	0.807	0.115	...	...
D226-496	5	32	13.22	-68	40	09.2	19.523	0.075	0.201	0.121	...	...
D226-482	5	31	37.08	-68	41	22.6	19.525	0.052	0.716	0.150	...	...
D226-487	5	31	44.86	-68	41	23.3	19.532	0.057	0.646	0.162	...	...
D226-497	5	32	10.30	-68	40	14.0	19.535	0.057	0.394	0.110	...	...
D226-486	5	32	03.76	-68	39	18.4	19.543	0.066	0.976	0.168	...	...
D226-484	5	31	52.81	-68	41	10.1	19.544	0.062	1.107	0.171	...	...
D226-517	5	31	50.00	-68	42	26.8	19.556	0.061	0.104	0.109	...	...
D226-508	5	32	01.90	-68	40	45.8	19.559	0.065	0.480	0.126	...	...
D226-501	5	31	45.79	-68	41	13.3	19.560	0.064	0.626	0.147	...	...
D226-498	5	31	46.28	-68	38	57.3	19.568	0.058	0.957	0.152	...	...
D226-512	5	31	50.59	-68	40	31.4	19.569	0.061	0.527	0.125	...	...
D226-523	5	32	09.92	-68	40	43.5	19.569	0.063	0.167	0.108	...	...
D226-507	5	31	39.30	-68	41	34.3	19.571	0.073	0.807	0.205	...	...
D226-527	5	31	48.03	-68	40	18.0	19.572	0.057	0.121	0.098	...	...
D226-503	5	31	59.55	-68	40	41.9	19.574	0.080	0.919	0.212	...	...
D226-526	5	31	36.01	-68	40	17.2	19.575	0.073	0.201	0.119	...	...
D226-511	5	32	10.57	-68	39	15.7	19.578	0.117	0.839	0.203	...	...
D226-524	5	32	00.41	-68	41	06.0	19.578	0.055	0.354	0.110	...	...
D226-532	5	31	44.41	-68	38	49.1	19.578	0.118	0.100	0.202	...	...
D226-533	5	31	55.89	-68	40	49.8	19.579	0.057	0.082	0.110	...	...
D226-515	5	31	49.93	-68	41	00.5	19.581	0.059	0.719	0.162	...	...
D226-514	5	31	40.24	-68	39	37.8	19.582	0.078	0.771	0.166	...	...
D226-516	5	32	16.22	-68	40	59.0	19.585	0.113	0.807	0.226	...	...
D226-530	5	32	14.57	-68	39	58.2	19.591	0.045	0.455	0.115	...	...

D226-541	5	32	05.53	-68	40	24.7	19.593	0.064	0.070	0.101	...	...
D226-522	5	32	00.85	-68	41	52.2	19.598	0.061	0.825	0.142	...	...
D226-525	5	32	07.40	-68	42	20.0	19.601	0.064	0.856	0.201	...	...
D226-550	5	31	35.86	-68	40	04.5	19.607	0.114	0.212	0.150	...	...
D226-540	5	31	47.10	-68	41	14.5	19.616	0.066	0.620	0.152	...	...
D226-552	5	31	39.60	-68	42	08.3	19.616	0.073	0.251	0.106	...	...
D226-553	5	32	03.75	-68	40	36.1	19.619	0.075	0.322	0.134	...	...
D226-537	5	32	01.96	-68	40	03.3	19.621	0.056	0.846	0.182	...	...
D226-555	5	31	38.35	-68	41	22.2	19.624	0.076	0.190	0.144	...	...
D226-559	5	32	04.19	-68	42	22.9	19.627	0.079	0.165	0.127	...	...
D226-567	5	31	40.94	-68	40	12.1	19.628	0.074	-0.028	0.123	...	...
D226-575	5	31	36.53	-68	38	57.5	19.630	0.065	-0.054	0.105	...	...
D226-539	5	32	00.77	-68	39	14.1	19.633	0.060	1.097	0.240	...	...
D226-566	5	31	57.53	-68	42	00.7	19.637	0.041	0.232	0.107	...	...
D226-562	5	31	53.49	-68	40	53.3	19.638	0.058	0.343	0.143	...	...
D226-547	5	31	57.72	-68	39	21.8	19.639	0.069	0.964	0.192	...	...
D226-564	5	32	04.43	-68	41	34.8	19.640	0.101	0.340	0.151	...	...
D226-582	5	32	01.46	-68	39	34.0	19.645	0.061	0.080	0.110	...	...
D226-557	5	31	54.48	-68	40	01.4	19.648	0.073	0.702	0.158	...	...
D226-568	5	31	44.29	-68	40	58.6	19.648	0.065	0.407	0.145	...	...
D226-578	5	31	54.29	-68	39	54.9	19.650	0.068	0.248	0.114	...	...
D226-583	5	32	10.97	-68	41	10.3	19.650	0.063	0.216	0.115	...	...
D226-586	5	32	01.93	-68	42	16.9	19.656	0.079	-0.066	0.123	...	...
D226-569	5	31	58.95	-68	39	41.6	19.658	0.063	0.642	0.139	...	...
D226-558	5	31	45.01	-68	41	48.0	19.660	0.067	0.986	0.169	...	...
D226-570	5	31	43.80	-68	40	35.3	19.663	0.077	0.738	0.183	...	...
D226-584	5	31	35.96	-68	41	37.0	19.664	0.158	0.401	0.262	...	...
D226-589	5	31	52.16	-68	40	02.5	19.664	0.074	0.066	0.124	...	...
D226-565	5	31	52.91	-68	41	12.6	19.665	0.069	0.902	0.168	...	...
D226-572	5	32	06.37	-68	41	59.5	19.671	0.075	0.906	0.162	...	...
D226-576	5	31	49.70	-68	42	07.9	19.671	0.078	0.852	0.196	...	...
D226-593	5	32	06.85	-68	39	60.0	19.671	0.083	0.124	0.126	...	...
D226-573	5	32	03.53	-68	40	32.9	19.678	0.064	1.061	0.215	...	...
D226-601	5	31	57.03	-68	41	31.7	19.682	0.090	0.014	0.126	...	...
D226-603	5	31	38.16	-68	41	32.8	19.690	0.066	0.115	0.108	...	...
D226-608	5	31	52.37	-68	41	09.1	19.699	0.073	-0.073	0.106	...	...
D226-605	5	32	10.79	-68	38	54.9	19.700	0.078	0.301	0.128	...	...
D226-596	5	31	58.85	-68	40	12.8	19.702	0.072	0.792	0.165	...	...
D226-607	5	31	54.46	-68	42	11.3	19.705	0.066	0.113	0.123	...	...
D226-590	5	32	04.00	-68	39	46.8	19.717	0.076	1.221	0.238	...	...
D226-602	5	31	56.70	-68	41	33.7	19.724	0.074	0.978	0.168	...	...
D226-614	5	31	38.40	-68	39	46.0	19.726	0.068	0.266	0.129	...	...
D226-615	5	31	43.34	-68	39	49.7	19.729	0.065	0.310	0.123	...	...
D226-626	5	31	43.87	-68	41	14.0	19.731	0.087	-0.185	0.137	...	...
D226-622	5	31	54.66	-68	40	39.3	19.736	0.079	0.103	0.138	...	...
D226-620	5	31	59.54	-68	41	36.8	19.742	0.053	0.305	0.100	...	...
D226-631	5	31	48.66	-68	42	06.3	19.747	0.094	-0.004	0.135	...	...
D226-612	5	31	51.53	-68	40	48.7	19.749	0.141	0.851	0.217	...	...
D226-625	5	31	39.92	-68	40	02.2	19.761	0.066	0.537	0.115	...	...
D226-633	5	31	49.05	-68	42	04.0	19.765	0.074	0.209	0.113	...	...
D226-617	5	31	37.78	-68	41	07.5	19.766	0.077	1.057	0.303	...	...
D226-630	5	32	06.95	-68	40	33.4	19.768	0.100	0.503	0.169	...	...
D226-627	5	32	05.51	-68	42	22.7	19.769	0.070	0.688	0.224	...	...
D226-624	5	31	43.01	-68	42	03.0	19.777	0.072	0.977	0.197	...	...
D226-635	5	31	59.14	-68	39	33.9	19.778	0.079	0.439	0.155	...	...
D226-640	5	32	08.29	-68	42	24.6	19.780	0.075	0.162	0.140	...	...
D226-649	5	31	50.20	-68	41	09.5	19.785	0.068	0.051	0.143	...	...
D226-639	5	32	05.71	-68	40	51.5	19.787	0.078	0.385	0.150	...	...
D226-628	5	31	38.90	-68	40	04.0	19.789	0.057	1.134	0.274	...	...
D226-645	5	32	08.49	-68	40	48.8	19.790	0.065	0.286	0.121	...	...
D226-650	5	31	37.73	-68	38	48.9	19.793	0.071	0.211	0.135	...	...
D226-632	5	31	43.23	-68	41	54.3	19.798	0.132	1.094	0.332	...	...
D226-658	5	31	47.87	-68	39	18.7	19.798	0.090	0.003	0.136	...	...
D226-656	5	31	52.11	-68	39	34.1	19.800	0.075	0.082	0.125	...	...
D226-641	5	32	04.17	-68	38	57.7	19.807	0.079	0.764	0.252	...	...
D226-653	5	32	04.43	-68	41	42.7	19.807	0.115	0.425	0.183	...	...

D226-657	5	32	01.32	-68	40	30.5	19.807	0.080	0.208	0.211	...	...
D226-637	5	32	11.95	-68	41	01.8	19.812	0.147	1.213	0.460	...	...
D226-661	5	31	58.34	-68	40	03.0	19.813	0.074	0.118	0.124	...	...
D226-671	5	31	53.97	-68	42	02.7	19.819	0.073	0.029	0.124	...	...
D226-647	5	32	04.01	-68	41	29.7	19.820	0.087	0.943	0.278	...	...
D226-672	5	31	58.30	-68	41	34.1	19.826	0.084	0.185	0.166	...	...
D226-664	5	31	44.42	-68	40	28.1	19.829	0.067	0.397	0.155	...	...
D226-680	5	32	04.84	-68	42	20.0	19.829	0.080	0.010	0.117	...	...
D226-667	5	32	02.71	-68	39	49.1	19.831	0.101	0.346	0.168	...	...
D226-676	5	31	50.12	-68	39	12.9	19.835	0.079	0.176	0.134	...	...
D226-660	5	31	50.44	-68	41	25.3	19.847	0.108	0.911	0.259	...	...
D226-682	5	32	11.81	-68	39	57.2	19.847	0.090	0.329	0.160	...	...
D226-686	5	32	09.64	-68	38	56.9	19.852	0.094	0.235	0.200	...	...
D226-688	5	31	36.30	-68	42	27.1	19.853	0.083	0.191	0.151	...	...
D226-694	5	31	58.69	-68	40	24.9	19.859	0.074	0.182	0.142	...	...
D226-678	5	32	12.46	-68	42	11.3	19.864	0.091	0.823	0.201	...	...
D226-702	5	31	41.26	-68	42	12.9	19.866	0.080	0.138	0.158	...	...
D226-704	5	31	47.49	-68	41	16.5	19.866	0.092	-0.066	0.137	...	...
D226-697	5	32	05.99	-68	40	03.0	19.868	0.077	0.269	0.152	...	...
D226-709	5	31	41.49	-68	38	55.6	19.874	0.083	0.083	0.146	...	...
D226-710	5	31	51.30	-68	40	17.0	19.875	0.120	0.075	0.205	...	...
D226-695	5	32	07.05	-68	41	51.4	19.876	0.083	0.562	0.161	...	...
D226-713	5	31	42.01	-68	40	20.1	19.880	0.107	0.137	0.169	...	...
D226-705	5	31	41.34	-68	41	33.3	19.883	0.104	0.315	0.169	...	...
D226-684	5	31	53.37	-68	41	06.7	19.885	0.123	1.121	0.287	...	...
D226-724	5	31	45.64	-68	40	06.0	19.889	0.100	-0.043	0.153	...	...
D226-716	5	31	47.67	-68	40	45.0	19.892	0.088	0.174	0.150	...	...
D226-719	5	31	59.12	-68	40	26.0	19.892	0.105	0.138	0.179	...	...
D226-714	5	31	56.74	-68	39	47.6	19.893	0.090	0.329	0.166	...	...
D226-717	5	31	35.77	-68	41	30.5	19.895	0.084	0.239	0.127	...	...
D226-732	5	32	01.74	-68	40	21.3	19.896	0.116	-0.227	0.184	...	...
D226-727	5	32	11.77	-68	42	31.3	19.898	0.057	-0.065	0.137	...	...
D226-691	5	32	16.25	-68	42	01.7	19.902	0.072	1.249	0.321	...	...
D226-723	5	32	03.28	-68	41	43.6	19.917	0.106	0.618	0.227	...	...
D226-726	5	31	58.43	-68	40	41.7	19.917	0.079	0.380	0.164	...	...
D226-729	5	31	47.15	-68	40	19.5	19.926	0.073	0.481	0.137	...	...
D226-737	5	31	51.58	-68	39	17.6	19.927	0.058	0.260	0.122	...	...
D226-742	5	31	46.72	-68	39	14.9	19.929	0.076	0.080	0.146	...	...
D226-752	5	32	01.92	-68	40	19.5	19.939	0.093	0.004	0.165	...	...
D226-753	5	31	53.52	-68	40	45.9	19.950	0.094	0.201	0.147	...	...
D226-748	5	31	55.03	-68	40	24.7	19.951	0.095	0.365	0.202	...	...
D226-754	5	31	59.42	-68	42	16.7	19.953	0.080	0.229	0.138	...	...
D226-740	5	31	54.74	-68	42	09.5	19.961	0.072	0.937	0.205	...	...
D226-759	5	31	58.29	-68	41	35.8	19.963	0.089	0.262	0.164	...	...
D226-766	5	31	37.99	-68	42	28.1	19.977	0.081	0.161	0.158	...	...
D226-767	5	31	46.14	-68	39	47.7	19.977	0.085	0.152	0.134	...	...
D226-769	5	31	54.06	-68	41	30.1	19.980	0.092	0.234	0.153	...	...
D226-750	5	31	40.04	-68	42	12.0	19.983	0.102	1.068	0.314	...	...
D226-774	5	31	48.24	-68	42	03.6	19.988	0.082	0.256	0.167	...	...
D226-775	5	31	40.85	-68	40	45.1	19.995	0.059	0.406	0.151	...	...
D226-779	5	31	39.87	-68	40	32.2	19.998	0.084	0.176	0.167	...	...
D226-772	5	31	52.59	-68	41	46.5	20.001	0.093	0.667	0.252	...	...
D226-777	5	31	59.81	-68	41	42.7	20.011	0.077	0.502	0.174	...	...
D226-778	5	31	48.81	-68	41	05.8	20.023	0.088	0.778	0.226	...	...
D226-795	5	31	41.21	-68	42	28.1	20.025	0.094	-0.008	0.167	...	...
D226-792	5	31	39.50	-68	38	53.1	20.028	0.097	0.226	0.174	...	...
D226-789	5	31	52.70	-68	41	29.3	20.031	0.101	0.468	0.189	...	...
D226-800	5	31	37.18	-68	41	05.5	20.032	0.096	-0.038	0.175	...	...
D226-794	5	32	04.33	-68	41	59.2	20.036	0.090	0.305	0.167	...	...
D226-799	5	31	46.91	-68	41	30.3	20.042	0.093	0.219	0.191	...	...
D226-812	5	32	09.68	-68	39	32.4	20.048	0.109	-0.037	0.153	...	...
D226-815	5	31	38.36	-68	41	52.5	20.049	0.137	-0.033	0.210	...	...
D226-805	5	31	48.56	-68	39	45.9	20.051	0.121	0.253	0.208	...	...
D226-806	5	31	43.88	-68	41	15.4	20.060	0.086	0.448	0.233	...	...
D226-811	5	31	38.69	-68	41	27.5	20.064	0.135	0.349	0.207	...	...
D226-810	5	31	38.36	-68	42	22.1	20.067	0.076	0.438	0.164	...	...

D226-820	5	32	01.70	-68	40	28.3	20.067	0.113	0.096	0.192	...	...
D226-809	5	31	41.90	-68	39	47.6	20.070	0.113	0.518	0.231	...	...
D226-817	5	31	58.88	-68	40	45.3	20.071	0.140	0.366	0.230	...	...
D226-826	5	31	50.61	-68	39	32.1	20.093	0.095	0.163	0.180	...	...
D226-842	5	31	49.29	-68	42	16.9	20.126	0.119	-0.038	0.181	...	...
D226-835	5	31	37.08	-68	41	54.7	20.129	0.122	0.677	0.269	...	...
D226-846	5	31	44.24	-68	42	12.6	20.137	0.112	-0.076	0.175	...	...
D226-839	5	31	52.40	-68	41	23.4	20.138	0.105	0.521	0.247	...	...
D226-857	5	31	35.65	-68	40	17.2	20.146	0.113	-0.161	0.167	...	...
D226-845	5	32	00.96	-68	42	06.2	20.148	0.077	0.223	0.128	...	...
D226-843	5	32	06.64	-68	38	58.9	20.149	0.094	0.467	0.244	...	...
D226-858	5	32	16.15	-68	39	47.2	20.150	0.116	-0.105	0.176	...	...
D226-841	5	31	47.19	-68	40	47.7	20.151	0.087	0.573	0.212	...	...
D226-847	5	32	03.56	-68	41	26.0	20.153	0.096	0.292	0.173	...	...
D226-840	5	31	55.43	-68	40	55.9	20.154	0.122	0.710	0.269	...	...
D226-852	5	31	55.55	-68	40	31.9	20.158	0.120	0.285	0.245	...	...
D226-859	5	31	42.97	-68	38	55.5	20.166	0.093	0.109	0.164	...	...
D226-865	5	31	39.41	-68	41	21.9	20.180	0.100	-0.048	0.154	...	...
D226-874	5	32	00.34	-68	42	03.8	20.200	0.125	0.054	0.189	...	...
D226-878	5	31	57.80	-68	40	33.6	20.200	0.153	-0.150	0.204	...	...
D226-871	5	31	45.65	-68	39	47.5	20.205	0.096	0.241	0.163	...	...
D226-894	5	32	01.68	-68	40	17.7	20.239	0.133	-0.248	0.201	...	...
D226-892	5	31	56.19	-68	40	47.3	20.247	0.188	-0.032	0.313	...	...
D226-880	5	31	59.41	-68	40	40.6	20.248	0.142	0.647	0.416	...	...
D226-882	5	31	35.90	-68	41	38.0	20.253	0.135	0.564	0.272	...	...
D226-899	5	31	54.26	-68	40	27.1	20.253	0.238	-0.265	0.292	...	...
D226-900	5	31	41.47	-68	39	36.7	20.261	0.093	-0.151	0.156	...	...
D226-904	5	31	57.07	-68	42	25.7	20.280	0.145	0.106	0.237	...	...
D226-909	5	31	39.29	-68	41	39.9	20.284	0.096	-0.186	0.144	...	...
D226-905	5	31	46.16	-68	39	53.6	20.287	0.121	0.202	0.223	...	...
D226-911	5	31	41.18	-68	42	14.7	20.300	0.131	0.040	0.211	...	...
D226-913	5	31	39.20	-68	38	51.8	20.301	0.128	0.012	0.195	...	...
D226-915	5	31	37.90	-68	41	53.8	20.316	0.114	0.312	0.222	...	...
D226-920	5	31	59.08	-68	41	04.7	20.318	0.143	-0.123	0.191	...	...
D226-916	5	31	36.21	-68	40	19.6	20.319	0.130	0.259	0.209	...	...
D226-921	5	31	50.82	-68	42	15.2	20.352	0.144	0.642	0.404	...	...
D226-935	5	31	54.30	-68	42	14.6	20.382	0.115	-0.015	0.187	...	...
D226-942	5	31	38.52	-68	42	24.9	20.419	0.103	0.309	0.235	...	...
D226-953	5	31	45.35	-68	41	36.0	20.424	0.151	-0.127	0.245	...	...
D226-947	5	32	00.49	-68	39	56.1	20.426	0.139	0.381	0.267	...	...
D226-954	5	32	11.57	-68	41	53.5	20.427	0.154	-0.110	0.211	...	...
D226-944	5	31	36.36	-68	41	53.0	20.430	0.161	0.532	0.304	...	...
D226-948	5	32	08.25	-68	42	19.3	20.438	0.128	0.584	0.325	...	...
D226-951	5	32	14.21	-68	41	14.5	20.448	0.114	0.580	0.315	...	...
D226-955	5	31	41.57	-68	42	25.0	20.453	0.132	0.439	0.225	...	...
D226-964	5	31	49.71	-68	42	17.9	20.454	0.163	0.158	0.243	...	...
D226-963	5	32	14.98	-68	41	40.9	20.458	0.144	0.304	0.216	...	...
D226-965	5	31	38.38	-68	42	27.7	20.466	0.129	0.235	0.255	...	...
D226-968	5	31	52.36	-68	41	13.2	20.466	0.130	0.010	0.220	...	...
D226-967	5	32	15.72	-68	42	02.6	20.480	0.157	0.397	0.334	...	...
D226-982	5	31	51.11	-68	41	42.4	20.561	0.154	0.277	0.280	...	...
D226-989	5	31	44.38	-68	41	25.7	20.601	0.162	0.022	0.294	...	...
D226-996	5	31	52.34	-68	39	54.6	20.646	0.183	-0.082	0.265	...	...
D226-998	5	32	12.53	-68	41	11.5	20.677	0.168	0.118	0.291	...	...
D226-1004	5	31	46.35	-68	40	09.7	20.776	0.168	0.516	0.350	...	...
D226-1007	5	31	40.55	-68	40	36.3	20.836	0.220	0.162	0.328	...	...
D226-1017	5	31	56.05	-68	40	55.0	21.001	0.263	-0.300	0.349	...	...
D226-1018	5	32	10.30	-68	41	03.8	21.033	0.208	0.061	0.362	...	...
D226-1022	5	32	00.30	-68	40	38.8	21.091	0.245	-0.062	0.356	...	...

Table 4g

D231-1	5	33	10.13	-67	43	59.7	12.300	0.001	1.054	0.001	0.741	0.011
D231-2	5	33	10.73	-67	42	43.4	13.192	0.004	0.029	0.089	-1.103	0.111
D231-4	5	33	09.93	-67	44	20.6	14.958	0.004	0.066	0.008	-0.848	0.009
D231-5	5	33	09.84	-67	43	34.1	15.046	0.006	1.239	0.014	1.083	0.049
D231-6	5	33	29.58	-67	41	05.7	15.347	0.005	1.819	0.017	1.068	0.092
D231-7	5	33	17.20	-67	44	31.7	15.518	0.006	-0.113	0.011	-0.814	0.014
D231-8	5	33	13.07	-67	42	59.2	15.775	0.008	-0.111	0.012	-0.909	0.015
D231-9	5	33	21.43	-67	42	46.8	15.876	0.007	0.003	0.014	-0.832	0.018
D231-10	5	33	23.87	-67	43	04.6	15.893	0.006	0.045	0.014	-0.464	0.019
D231-11	5	33	14.86	-67	42	40.9	15.969	0.007	1.197	0.020	1.366	0.118
D231-12	5	33	22.66	-67	41	18.0	16.073	0.009	-0.091	0.013	-0.556	0.019
D231-13	5	33	24.89	-67	44	35.3	16.323	0.008	0.612	0.023	0.061	0.050
D231-15	5	32	56.24	-67	42	12.7	16.379	0.010	-0.045	0.016	-0.818	0.019
D231-14	5	33	15.19	-67	43	08.2	16.385	0.010	0.970	0.022	0.714	0.083
D231-16	5	33	21.93	-67	43	20.6	16.387	0.008	-0.047	0.015	-0.752	0.021
D231-17	5	33	13.94	-67	43	05.4	16.391	0.012	-0.112	0.021	-0.872	0.023
D231-18	5	33	12.08	-67	41	02.8	16.440	0.010	-0.140	0.018	-0.818	0.024
D231-19	5	32	54.86	-67	42	22.2	16.670	0.010	-0.008	0.017	-0.679	0.022
D231-20	5	33	18.64	-67	43	24.3	16.721	0.008	-0.005	0.016	-0.492	0.031
D231-21	5	33	19.56	-67	43	18.2	16.785	0.010	0.904	0.030	0.833	0.138
D231-22	5	32	51.81	-67	43	05.8	16.794	0.009	0.650	0.019	0.501	0.058
D231-23	5	33	16.72	-67	42	31.8	16.887	0.012	-0.123	0.021	-0.167	0.029
D231-24	5	33	16.08	-67	42	31.3	16.948	0.011	1.276	0.043	1.311	0.323
D231-25	5	32	55.90	-67	42	09.5	16.995	0.013	0.099	0.022	-0.724	0.028
D231-26	5	33	01.06	-67	42	24.3	17.092	0.011	0.137	0.026	-0.767	0.038
D231-28	5	33	16.63	-67	44	02.9	17.167	0.014	-0.026	0.026	-0.721	0.034
D231-27	5	32	56.79	-67	43	36.9	17.187	0.015	1.458	0.049	...	...
D231-29	5	33	10.53	-67	43	31.4	17.191	0.014	-0.020	0.025	-0.792	0.036
D231-32	5	33	24.22	-67	43	30.7	17.230	0.014	-0.072	0.024	-0.517	0.035
D231-30	5	33	04.39	-67	44	29.7	17.267	0.011	1.620	0.049	...	...
D231-31	5	33	24.38	-67	42	44.9	17.305	0.016	1.813	0.053	...	...
D231-36	5	33	23.25	-67	40	59.2	17.339	0.015	-0.093	0.028	-0.610	0.038
D231-33	5	32	51.29	-67	44	31.5	17.352	0.017	1.523	0.057	...	...
D231-37	5	33	26.83	-67	43	32.0	17.354	0.018	-0.085	0.037	-0.506	0.049
D231-35	5	33	14.07	-67	42	12.1	17.357	0.015	0.664	0.040	-0.053	0.097
D231-34	5	33	19.99	-67	41	28.0	17.361	0.016	0.911	0.043	...	...
D231-38	5	33	03.43	-67	43	34.0	17.457	0.017	-0.056	0.030	-0.825	0.037
D231-40	5	33	01.14	-67	43	26.3	17.508	0.017	0.301	0.039	-0.412	0.062
D231-39	5	33	21.80	-67	42	41.7	17.561	0.016	1.674	0.064	...	...
D231-43	5	32	59.18	-67	41	54.5	17.566	0.013	0.094	0.034	-0.667	0.056
D231-42	5	33	11.12	-67	44	31.0	17.576	0.013	0.940	0.049	0.356	0.171
D231-44	5	33	17.77	-67	43	02.6	17.601	0.017	0.050	0.032	-0.519	0.048
D231-45	5	33	16.73	-67	44	28.4	17.649	0.019	-0.010	0.031	-0.686	0.046
D231-46	5	33	09.66	-67	41	01.9	17.654	0.019	-0.085	0.033	-0.513	0.049
D231-47	5	33	23.22	-67	43	52.0	17.658	0.022	-0.172	0.034	-0.717	0.044
D231-49	5	33	29.72	-67	41	09.2	17.678	0.022	-0.193	0.041	-0.473	0.066
D231-48	5	32	56.80	-67	42	15.4	17.731	0.018	1.253	0.058	...	...
D231-50	5	33	13.71	-67	44	09.9	17.737	0.023	0.137	0.044	-0.332	0.075
D231-51	5	33	05.34	-67	40	57.3	17.767	0.020	-0.112	0.037	-0.540	0.060
D231-54	5	33	07.17	-67	42	49.3	17.798	0.024	-0.013	0.041	-0.701	0.064
D231-53	5	33	14.01	-67	41	59.3	17.820	0.019	0.988	0.071	...	...
D231-52	5	33	03.32	-67	44	17.6	17.824	0.015	1.165	0.083	...	...
D231-56	5	33	18.64	-67	41	53.5	17.852	0.020	0.056	0.050	-0.568	0.076
D231-57	5	33	14.99	-67	41	04.1	17.854	0.023	-0.105	0.040	-0.646	0.064
D231-55	5	33	17.11	-67	41	23.8	17.883	0.024	1.393	0.090	...	...
D231-58	5	33	19.20	-67	44	07.1	17.906	0.023	0.051	0.046	-0.300	0.080
D231-59	5	32	53.74	-67	44	17.8	17.962	0.021	1.146	0.071	...	...
D231-60	5	33	01.69	-67	43	15.3	17.981	0.023	0.204	0.047	-0.562	0.084
D231-62	5	33	06.86	-67	43	30.3	17.992	0.026	0.014	0.043	-0.612	0.065
D231-63	5	33	17.21	-67	42	25.0	17.998	0.019	0.139	0.049	-0.235	0.084
D231-64	5	33	00.56	-67	43	00.9	18.031	0.022	0.188	0.051	-0.387	0.107
D231-61	5	33	17.45	-67	44	33.8	18.043	0.028	1.497	0.106	...	...
D231-65	5	32	56.81	-67	44	27.5	18.054	0.030	0.336	0.056	-0.254	0.127
D231-66	5	32	53.46	-67	43	19.9	18.060	0.028	0.273	0.060	-0.135	0.116

D231-67	5	33	17.31	-67	42	22.0	18.083	0.025	0.099	0.051	-0.417	0.101
D231-69	5	33	15.13	-67	41	43.2	18.084	0.022	-0.099	0.041	-0.625	0.078
D231-71	5	33	24.88	-67	42	58.3	18.109	0.046	-0.124	0.068	-0.627	0.085
D231-72	5	33	26.94	-67	42	10.7	18.115	0.027	-0.027	0.040	-0.647	0.081
D231-74	5	33	16.26	-67	41	47.4	18.122	0.028	-0.091	0.052	-0.384	0.074
D231-75	5	33	17.89	-67	41	05.7	18.129	0.022	0.026	0.048	-0.496	0.088
D231-68	5	33	16.32	-67	42	24.5	18.133	0.028	1.123	0.080	...	...
D231-76	5	33	13.72	-67	44	38.8	18.152	0.028	0.062	0.047	-0.396	0.097
D231-78	5	32	52.77	-67	41	18.4	18.157	0.021	0.115	0.053	-0.723	0.083
D231-70	5	32	54.08	-67	44	38.9	18.171	0.025	1.604	0.134	...	...
D231-77	5	33	26.88	-67	43	17.3	18.171	0.030	0.485	0.070	-0.156	0.156
D231-73	5	33	03.10	-67	41	37.2	18.172	0.036	1.217	0.078	...	...
D231-82	5	33	25.36	-67	41	51.4	18.208	0.029	-0.070	0.053	-0.370	0.075
D231-83	5	33	26.16	-67	41	32.1	18.213	0.034	-0.063	0.052	-0.570	0.082
D231-84	5	33	16.31	-67	42	13.0	18.214	0.024	-0.094	0.045	-0.668	0.070
D231-85	5	32	54.90	-67	42	55.8	18.224	0.024	0.111	0.045	-0.292	0.100
D231-80	5	32	52.24	-67	43	53.3	18.238	0.039	0.954	0.111	...	...
D231-88	5	33	21.02	-67	44	36.8	18.245	0.025	0.078	0.051	-0.648	0.076
D231-89	5	32	53.17	-67	41	52.8	18.253	0.031	0.084	0.053	-0.594	0.084
D231-86	5	32	51.65	-67	44	32.4	18.256	0.050	0.762	0.098	...	...
D231-81	5	33	27.43	-67	41	17.5	18.258	0.029	1.107	0.067	...	...
D231-90	5	33	10.45	-67	42	41.2	18.261	0.024	0.035	0.060	-0.339	0.093
D231-92	5	33	09.66	-67	43	12.7	18.277	0.033	0.014	0.056	-0.842	0.103
D231-87	5	33	06.31	-67	43	36.4	18.280	0.025	1.002	0.109	...	...
D231-91	5	33	25.93	-67	44	06.4	18.288	0.026	0.374	0.058	-0.612	0.101
D231-94	5	33	16.34	-67	44	22.3	18.306	0.023	-0.024	0.054	-0.662	0.085
D231-93	5	33	16.23	-67	44	07.4	18.324	0.030	0.692	0.070	...	...
D231-96	5	32	51.83	-67	41	31.1	18.355	0.038	0.417	0.080	-0.491	0.116
D231-95	5	32	53.55	-67	43	42.2	18.367	0.034	0.758	0.089	...	...
D231-101	5	33	07.76	-67	43	09.4	18.390	0.026	-0.020	0.061	-0.166	0.113
D231-98	5	33	13.87	-67	44	15.2	18.391	0.030	0.662	0.093	...	...
D231-97	5	33	16.55	-67	43	19.9	18.392	0.033	0.820	0.101	...	...
D231-99	5	33	09.26	-67	42	14.0	18.440	0.040	1.299	0.139	...	...
D231-102	5	33	20.51	-67	43	32.3	18.441	0.033	1.100	0.132	...	...
D231-104	5	32	54.76	-67	43	29.2	18.444	0.035	0.779	0.117	...	...
D231-107	5	33	05.89	-67	42	29.0	18.450	0.034	-0.076	0.056	-0.448	0.094
D231-109	5	33	29.65	-67	42	58.8	18.457	0.052	-0.114	0.078	-0.696	0.092
D231-110	5	33	15.37	-67	41	10.9	18.469	0.029	0.126	0.067	-0.337	0.135
D231-105	5	33	25.81	-67	41	05.4	18.487	0.035	1.278	0.143	...	...
D231-106	5	33	20.47	-67	41	25.3	18.490	0.037	1.090	0.112	...	...
D231-112	5	33	25.97	-67	43	47.9	18.495	0.030	0.147	0.055	-0.380	0.127
D231-113	5	33	01.85	-67	42	40.7	18.496	0.039	0.112	0.066	-0.583	0.106
D231-111	5	33	11.65	-67	42	38.1	18.504	0.034	0.826	0.083	...	...
D231-114	5	33	07.65	-67	42	26.3	18.562	0.035	1.263	0.180	...	...
D231-117	5	33	01.47	-67	44	20.2	18.575	0.035	0.148	0.085	-0.437	0.156
D231-120	5	32	59.59	-67	43	10.6	18.581	0.026	-0.191	0.060	-0.608	0.098
D231-116	5	32	52.67	-67	44	28.6	18.590	0.033	0.879	0.107	...	...
D231-121	5	32	56.71	-67	44	02.0	18.590	0.029	0.024	0.060	0.028	0.145
D231-122	5	33	04.66	-67	42	57.2	18.610	0.039	0.092	0.077	-0.118	0.263
D231-126	5	33	22.16	-67	42	24.0	18.620	0.035	-0.069	0.062	-0.462	0.098
D231-119	5	32	51.64	-67	41	35.4	18.621	0.041	0.781	0.104	...	...
D231-127	5	33	07.32	-67	41	55.0	18.638	0.039	0.002	0.084	-0.577	0.118
D231-118	5	32	57.45	-67	43	21.9	18.640	0.030	1.270	0.133	...	...
D231-124	5	33	03.78	-67	41	55.6	18.650	0.039	0.710	0.095	...	...
D231-125	5	33	24.99	-67	42	59.5	18.659	0.046	0.924	0.164	...	...
D231-128	5	33	23.91	-67	43	46.1	18.663	0.033	0.034	0.068	-0.272	0.149
D231-123	5	33	00.19	-67	41	12.6	18.664	0.035	1.204	0.138	...	...
D231-129	5	33	07.85	-67	44	36.2	18.679	0.033	0.271	0.069	-0.500	0.135
D231-133	5	33	18.45	-67	41	58.2	18.738	0.041	-0.131	0.078	-0.420	0.133
D231-132	5	33	16.35	-67	43	11.7	18.741	0.031	0.512	0.103	...	...
D231-134	5	33	28.05	-67	43	31.5	18.748	0.038	-0.084	0.074	-0.162	0.124
D231-137	5	33	10.90	-67	41	09.0	18.765	0.034	-0.111	0.070	-0.259	0.138
D231-136	5	33	14.14	-67	43	15.2	18.776	0.039	0.301	0.098	...	...
D231-138	5	32	56.36	-67	41	51.6	18.783	0.049	0.025	0.084	-0.094	0.147
D231-141	5	33	20.87	-67	41	46.7	18.794	0.050	-0.105	0.090	-0.322	0.129
D231-142	5	33	11.14	-67	44	11.4	18.806	0.035	0.114	0.091	-0.266	0.154

D231-144	5	33	01.53	-67	43	24.4	18.809	0.054	-0.033	0.084	-0.253	0.134
D231-140	5	33	03.92	-67	42	35.7	18.824	0.031	0.607	0.126	...	...
D231-146	5	33	24.85	-67	41	49.3	18.824	0.046	-0.015	0.083	-0.101	0.145
D231-139	5	33	14.54	-67	42	48.0	18.829	0.039	0.988	0.151	...	...
D231-149	5	32	58.49	-67	43	37.0	18.864	0.042	0.160	0.085	-0.203	0.189
D231-148	5	33	28.39	-67	42	43.8	18.878	0.051	0.629	0.144	...	...
D231-150	5	33	14.66	-67	43	48.8	18.889	0.063	0.639	0.118	...	...
D231-156	5	33	15.74	-67	42	47.8	18.898	0.036	-0.031	0.086	-0.125	0.164
D231-152	5	33	12.08	-67	41	45.6	18.904	0.042	0.779	0.158	...	...
D231-157	5	33	26.55	-67	43	45.5	18.905	0.047	-0.084	0.077	-0.343	0.135
D231-159	5	33	19.84	-67	42	03.4	18.911	0.047	-0.100	0.080	-0.368	0.116
D231-151	5	33	04.00	-67	41	57.8	18.918	0.047	1.149	0.150	...	...
D231-153	5	33	10.91	-67	43	32.2	18.920	0.041	1.086	0.156	...	...
D231-161	5	33	10.79	-67	43	10.7	18.929	0.048	0.094	0.091	-0.103	0.236
D231-167	5	33	12.69	-67	42	42.3	18.940	0.043	-0.143	0.083	-0.565	0.144
D231-158	5	32	57.65	-67	41	19.1	18.946	0.048	0.839	0.119	...	...
D231-163	5	33	10.55	-67	43	51.9	18.951	0.056	0.313	0.133	-0.387	0.240
D231-168	5	33	07.69	-67	42	13.1	18.955	0.052	0.179	0.093	-0.368	0.182
D231-171	5	33	17.93	-67	41	28.2	18.962	0.053	0.081	0.093	-0.287	0.181
D231-164	5	33	12.61	-67	42	59.5	18.976	0.076	0.878	0.166	...	...
D231-162	5	33	19.64	-67	41	50.9	18.980	0.041	1.025	0.171	...	...
D231-170	5	33	03.78	-67	43	14.4	18.985	0.053	0.778	0.128	...	...
D231-173	5	33	18.94	-67	41	08.8	18.985	0.054	0.205	0.107	...	...
D231-166	5	33	14.71	-67	41	39.4	18.986	0.049	1.009	0.154	...	...
D231-174	5	32	52.63	-67	41	09.1	19.001	0.111	0.507	0.149	...	...
D231-172	5	33	16.19	-67	44	32.8	19.005	0.043	0.966	0.133	...	...
D231-178	5	33	08.82	-67	43	45.8	19.023	0.050	0.563	0.165	...	...
D231-181	5	33	20.99	-67	41	14.6	19.024	0.047	0.170	0.105	-0.408	0.192
D231-175	5	33	26.53	-67	41	02.0	19.033	0.050	1.068	0.192	...	...
D231-183	5	33	08.04	-67	43	27.7	19.036	0.058	0.414	0.123	...	...
D231-192	5	33	03.53	-67	43	24.4	19.049	0.059	0.049	0.084	-0.382	0.143
D231-179	5	33	10.35	-67	43	11.1	19.051	0.052	1.097	0.185	...	...
D231-196	5	33	10.17	-67	42	48.2	19.051	0.040	-0.212	0.096	-0.630	0.148
D231-184	5	32	59.10	-67	41	33.5	19.054	0.062	0.833	0.143	...	...
D231-193	5	32	52.41	-67	43	40.8	19.058	0.058	0.154	0.095	-0.428	0.211
D231-182	5	33	11.09	-67	41	10.7	19.059	0.038	0.972	0.168	...	...
D231-197	5	33	21.82	-67	42	52.6	19.062	0.041	0.044	0.080	-0.599	0.177
D231-195	5	33	00.15	-67	42	46.2	19.063	0.044	0.160	0.103	-0.821	0.162
D231-188	5	33	00.32	-67	42	19.1	19.069	0.200	0.666	0.267	...	...
D231-191	5	32	59.31	-67	41	36.4	19.074	0.047	0.652	0.112	...	...
D231-189	5	32	53.61	-67	43	21.9	19.086	0.055	1.055	0.201	...	...
D231-198	5	33	05.16	-67	41	16.3	19.086	0.059	0.507	0.173	...	...
D231-194	5	33	15.70	-67	41	59.6	19.089	0.057	0.820	0.178	...	...
D231-204	5	33	07.34	-67	42	19.2	19.094	0.039	-0.026	0.096	-0.632	0.212
D231-205	5	33	03.98	-67	44	04.5	19.098	0.045	0.052	0.086	...	...
D231-203	5	33	27.81	-67	43	14.7	19.100	0.056	0.152	0.097	-0.729	0.139
D231-206	5	33	08.72	-67	42	36.0	19.101	0.055	0.051	0.098	-0.450	0.162
D231-210	5	33	06.26	-67	42	10.7	19.107	0.053	-0.155	0.082	...	...
D231-199	5	33	23.08	-67	41	01.3	19.110	0.054	0.881	0.224	...	...
D231-208	5	33	09.18	-67	43	38.9	19.112	0.053	0.111	0.103	-0.511	0.179
D231-209	5	33	29.31	-67	42	53.6	19.118	0.075	0.123	0.104	-0.342	0.159
D231-202	5	33	00.38	-67	41	29.4	19.120	0.065	0.855	0.214	...	...
D231-207	5	33	07.17	-67	41	19.4	19.134	0.055	0.645	0.144	...	...
D231-215	5	33	16.29	-67	42	10.1	19.141	0.050	-0.013	0.109	-0.606	0.164
D231-214	5	33	22.58	-67	44	19.3	19.146	0.045	0.103	0.101	...	...
D231-221	5	33	13.76	-67	41	08.7	19.157	0.061	-0.187	0.098	-0.648	0.158
D231-212	5	33	17.73	-67	43	27.6	19.159	0.067	0.614	0.150	...	...
D231-224	5	33	24.79	-67	43	33.7	19.170	0.091	-0.159	0.140	...	...
D231-225	5	33	19.82	-67	41	07.6	19.174	0.050	-0.132	0.091	-0.642	0.150
D231-218	5	33	05.15	-67	43	46.3	19.179	0.048	0.709	0.141	...	...
D231-220	5	33	01.91	-67	42	19.9	19.179	0.057	0.562	0.128	...	...
D231-223	5	32	51.15	-67	41	11.2	19.186	0.057	0.202	0.127	...	...
D231-216	5	33	13.97	-67	44	36.5	19.189	0.056	0.998	0.199	...	...
D231-219	5	33	00.53	-67	41	13.8	19.195	0.053	0.988	0.173	...	...
D231-227	5	32	54.75	-67	43	51.6	19.203	0.060	0.106	0.115	...	...
D231-231	5	33	03.16	-67	43	55.0	19.205	0.073	-0.099	0.122	...	...

D231-233	5	33	19.81	-67	43	07.1	19.216	0.052	0.008	0.118	...	...
D231-229	5	33	21.98	-67	43	56.5	19.225	0.038	0.589	0.111	...	...
D231-239	5	33	20.85	-67	43	20.0	19.234	0.059	-0.004	0.094	...	...
D231-240	5	33	19.75	-67	43	44.2	19.235	0.051	-0.019	0.106	-0.534	0.176
D231-241	5	33	10.89	-67	42	38.5	19.243	0.045	0.080	0.124	-0.941	0.187
D231-238	5	33	29.51	-67	41	43.2	19.244	0.060	0.230	0.123	...	...
D231-244	5	33	17.96	-67	43	14.0	19.262	0.057	-0.196	0.100	-0.305	0.192
D231-251	5	33	13.71	-67	42	36.3	19.288	0.054	0.015	0.103	-0.832	0.146
D231-256	5	32	57.92	-67	44	33.1	19.298	0.066	-0.138	0.132	-0.096	0.245
D231-252	5	33	04.98	-67	41	55.5	19.299	0.083	0.134	0.144	...	...
D231-246	5	32	57.94	-67	43	02.7	19.300	0.055	0.521	0.130	...	...
D231-261	5	33	29.53	-67	43	53.6	19.329	0.072	-0.099	0.111	...	...
D231-257	5	33	03.01	-67	41	35.9	19.333	0.098	0.568	0.199	...	...
D231-264	5	33	28.03	-67	41	24.8	19.349	0.070	-0.063	0.110	...	...
D231-262	5	33	28.71	-67	41	50.6	19.358	0.068	0.308	0.148	...	...
D231-263	5	32	51.54	-67	41	03.2	19.360	0.069	0.177	0.143	...	...
D231-266	5	33	02.54	-67	42	57.9	19.374	0.060	0.285	0.128	...	...
D231-268	5	33	26.94	-67	42	56.9	19.374	0.062	-0.153	0.130	...	...
D231-270	5	32	59.33	-67	42	34.4	19.398	0.073	-0.008	0.109	...	...
D231-274	5	33	26.42	-67	42	33.7	19.412	0.066	-0.102	0.101	...	...
D231-282	5	33	12.61	-67	41	43.2	19.439	0.076	-0.053	0.131	-0.587	0.195
D231-283	5	33	09.48	-67	44	26.0	19.442	0.069	-0.030	0.117	0.001	0.320
D231-287	5	33	26.84	-67	43	46.9	19.450	0.074	0.043	0.127	...	...
D231-288	5	33	26.58	-67	43	03.4	19.454	0.071	0.082	0.118	...	...
D231-293	5	33	26.22	-67	42	54.4	19.458	0.064	-0.111	0.133	...	...
D231-291	5	32	53.64	-67	42	36.1	19.460	0.067	0.039	0.132	...	...
D231-295	5	33	28.16	-67	42	32.6	19.465	0.061	0.031	0.134	...	...
D231-296	5	33	24.21	-67	42	59.3	19.470	0.083	0.097	0.159	...	...
D231-300	5	33	25.71	-67	44	14.3	19.480	0.077	0.055	0.145	...	...
D231-303	5	33	21.74	-67	41	04.4	19.485	0.079	-0.008	0.136	...	...
D231-302	5	33	08.47	-67	43	06.9	19.490	0.067	0.250	0.148	...	...
D231-308	5	33	18.21	-67	42	13.7	19.509	0.068	-0.004	0.135	...	...
D231-312	5	32	58.89	-67	41	17.1	19.527	0.071	-0.040	0.133	...	...
D231-317	5	33	26.01	-67	41	44.1	19.542	0.087	0.000	0.155	...	...
D231-316	5	32	55.61	-67	42	22.9	19.543	0.062	0.145	0.150	...	...
D231-321	5	33	27.03	-67	43	30.7	19.561	0.101	0.155	0.232	...	...
D231-324	5	33	11.20	-67	43	04.9	19.564	0.082	-0.001	0.142	-0.564	0.274
D231-318	5	33	25.26	-67	44	16.4	19.569	0.076	0.457	0.165	...	...
D231-319	5	33	16.35	-67	42	28.5	19.577	0.063	0.660	0.204	-0.003	0.669
D231-329	5	33	27.05	-67	41	36.7	19.582	0.082	0.138	0.157	...	...
D231-333	5	32	58.35	-67	43	42.6	19.601	0.084	0.277	0.188	...	...
D231-348	5	33	19.36	-67	41	54.4	19.609	0.092	-0.476	0.140	0.073	0.284
D231-341	5	32	54.27	-67	42	26.1	19.614	0.073	0.089	0.143	-0.594	0.267
D231-344	5	33	09.57	-67	42	53.0	19.631	0.090	0.123	0.163	...	...
D231-349	5	32	51.51	-67	43	53.1	19.638	0.068	0.162	0.169	...	...
D231-345	5	33	09.32	-67	43	13.3	19.642	0.098	0.383	0.195	-1.143	0.331
D231-350	5	33	11.93	-67	43	27.5	19.644	0.077	0.257	0.200	...	...
D231-355	5	33	26.22	-67	42	56.2	19.644	0.076	-0.160	0.154	...	...
D231-361	5	33	20.18	-67	43	16.7	19.681	0.074	-0.131	0.135	...	...
D231-371	5	33	22.44	-67	41	16.4	19.726	0.098	0.008	0.162	...	...
D231-368	5	33	19.36	-67	41	59.6	19.733	0.091	0.240	0.178	...	...
D231-365	5	33	16.81	-67	44	24.3	19.736	0.078	0.584	0.261	...	...
D231-367	5	33	17.81	-67	44	27.8	19.736	0.103	0.409	0.240	...	...
D231-376	5	33	10.29	-67	42	39.5	19.795	0.071	0.683	0.380	...	...
D231-392	5	33	12.08	-67	42	48.0	19.859	0.108	0.608	0.237	...	...
D231-406	5	33	13.11	-67	43	03.3	19.863	0.123	-0.225	0.187	...	...
D231-408	5	32	53.88	-67	44	29.7	19.864	0.099	-0.312	0.174	...	...
D231-409	5	33	13.70	-67	43	05.0	19.868	0.146	-0.221	0.231	...	...
D231-415	5	32	52.24	-67	43	57.8	19.884	0.099	-0.221	0.170	...	...
D231-404	5	33	07.78	-67	44	33.6	19.894	0.098	0.620	0.246	...	...
D231-419	5	33	09.11	-67	43	10.9	19.919	0.102	0.203	0.199	...	...
D231-427	5	33	13.64	-67	43	00.0	19.948	0.118	0.263	0.250	-0.850	0.446
D231-436	5	33	13.70	-67	42	01.0	19.962	0.114	0.058	0.234	...	...
D231-439	5	33	14.73	-67	43	06.9	19.990	0.123	0.250	0.240	...	...
D231-448	5	33	13.03	-67	44	26.2	20.030	0.115	-0.030	0.198	...	...
D231-459	5	33	24.65	-67	42	57.6	20.087	0.200	-0.351	0.264	...	...

D231-484	5	33	18.69	-67	41	55.1	20.343	0.129	-0.324	0.308	...	...
D231-490	5	33	21.54	-67	42	43.3	20.399	0.153	-0.153	0.253	...	...
D231-494	5	33	14.46	-67	42	14.1	20.408	0.190	-0.496	0.277	...	...

Table 4h

D301NE-1	5	43	26.94	-67	48	39.4	12.523	0.000	1.822	0.003	2.612	0.115
D301SW-1a	5	43	15.50	-67	51	09.7	13.223	...	-0.169	...	-0.951	...
D301SW-3	5	43	12.87	-67	51	16.3	13.698	0.005	-0.214	0.010	-0.999	0.011
D301SE-1	5	43	57.48	-67	52	40.4	13.736	0.003	0.608	0.007	0.250	0.013
D301NW-4	5	43	17.70	-67	50	36.6	13.920	0.005	-0.049	0.008	-0.969	0.010
D301SW-1b	5	43	15.50	-67	51	09.7	13.923	...	-0.169	...	-0.951	...
D301-1005	5	43	08.33	-67	50	52.5	14.110	...	-0.230	...	-1.030	...
D301NW-8	5	43	15.98	-67	49	51.2	14.482	0.005	-0.263	0.007	-1.009	0.008
D301NW-9	5	43	24.60	-67	50	31.1	14.522	0.004	-0.252	0.007	-0.958	0.010
D301SE-2	5	43	52.00	-67	54	17.3	14.849	0.002	0.882	0.008	0.674	0.025
D301SE-3	5	43	58.15	-67	52	11.0	14.957	0.005	0.838	0.010	-0.080	0.020
D301NW-10	5	43	20.56	-67	49	44.6	15.021	0.004	-0.204	0.006	-0.764	0.010
D301NE-4	5	43	59.19	-67	49	54.6	15.053	0.011	-0.150	0.015	-0.660	0.013
D301NW-11	5	43	18.08	-67	50	59.7	15.074	0.007	-0.221	0.010	-0.859	0.013
D301NE-5	5	43	34.85	-67	50	40.9	15.194	0.037	-0.064	0.088	-1.049	0.121
D301SE-6	5	43	46.32	-67	54	40.8	15.318	0.003	-0.089	0.007	-0.790	0.009
D301NE-6	5	43	35.02	-67	50	20.7	15.471	0.006	-0.194	0.010	-0.885	0.012
D301NW-12	5	43	23.79	-67	50	21.5	15.525	0.005	-0.270	0.008	-0.972	0.011
D301NW-13	5	43	06.71	-67	49	56.0	15.531	0.007	-0.223	0.011	-0.892	0.013
D301NW-14	5	43	23.90	-67	47	48.8	15.553	0.007	-0.148	0.011	-0.705	0.018
D301SW-9	5	43	10.03	-67	52	21.3	15.561	0.009	-0.180	0.017	-0.884	0.035
D301NW-15	5	43	12.25	-67	50	52.8	15.568	0.010	-0.248	0.014	-0.907	0.016
D301SW-10	5	43	02.08	-67	51	27.9	15.628	0.010	-0.162	0.017	-0.730	0.037
D301NE-9	5	43	59.77	-67	50	46.9	15.690	0.008	1.173	0.019	1.008	0.074
D301NE-10	5	43	51.08	-67	49	57.2	15.800	0.006	-0.077	0.011	-0.788	0.016
D301SW-11	5	42	50.72	-67	52	11.7	15.818	0.006	-0.026	0.016	-0.503	0.030
D301NW-16	5	43	09.34	-67	48	50.6	15.841	0.006	-0.254	0.010	-0.981	0.016
D301NW-17	5	43	06.49	-67	48	13.1	15.891	0.005	-0.126	0.009	-0.544	0.021
D301SE-8	5	43	47.40	-67	53	28.6	15.898	0.006	-0.157	0.011	-0.964	0.012
D301SE-7	5	43	32.40	-67	53	19.3	15.926	0.018	0.598	0.023	0.335	0.036
D301NE-11	5	43	45.73	-67	50	32.6	15.935	0.006	0.526	0.014	-0.125	0.036
D301SW-12	5	42	43.55	-67	52	03.1	15.957	0.009	1.396	0.022	0.783	0.117
D301SE-9	5	43	26.12	-67	53	34.9	15.962	0.007	0.843	0.014	0.513	0.040
D301NW-18	5	43	11.13	-67	50	40.3	16.007	0.015	-0.201	0.024	-0.886	0.023
D301SW-13	5	42	50.39	-67	53	58.5	16.057	0.008	1.740	0.035	...	...
D301NW-19	5	43	14.84	-67	48	49.7	16.084	0.008	-0.163	0.012	-0.599	0.020
D301SE-10	5	43	23.71	-67	53	48.1	16.112	0.007	0.773	0.017	0.421	0.042
D301NW-21	5	43	11.21	-67	50	52.1	16.277	0.008	1.492	0.021	...	...
D301NW-20	5	43	00.25	-67	48	59.1	16.290	0.008	1.821	0.024	...	...
D301NE-12	5	43	33.02	-67	49	58.7	16.334	0.011	1.700	0.032	...	...
D301NW-22	5	43	14.15	-67	51	04.3	16.336	0.007	-0.211	0.011	-0.821	0.020
D301NE-14	5	43	38.43	-67	47	54.4	16.353	0.010	1.503	0.034	...	...
D301NE-13	5	43	44.51	-67	50	38.6	16.355	0.010	1.629	0.041	1.080	0.237
D301NE-15	5	43	59.81	-67	49	49.7	16.377	0.009	0.799	0.022	0.388	0.076
D301NE-16	5	43	35.49	-67	47	36.7	16.386	0.011	-0.052	0.018	-0.577	0.026
D301SE-12	5	43	45.94	-67	53	24.1	16.418	0.009	1.728	0.033	...	...
D301SW-15	5	43	17.92	-67	51	45.0	16.448	0.009	0.728	0.023	0.477	0.095
D301NW-23	5	43	14.79	-67	47	26.3	16.464	0.010	0.504	0.021	0.362	0.060
D301NW-24	5	43	03.77	-67	50	42.2	16.474	0.021	-0.230	0.027	-0.452	0.033
D301SE-14	5	43	31.82	-67	53	35.6	16.483	0.010	-0.106	0.016	-0.617	0.020
D301SW-16	5	42	43.96	-67	54	25.5	16.510	0.011	1.829	0.030	...	...
D301SE-13	5	43	26.05	-67	52	03.9	16.524	0.010	1.836	0.035	...	...
D301SW-17	5	43	16.88	-67	51	52.7	16.525	0.011	-0.128	0.022	-0.620	0.038
D301NE-17	5	43	53.28	-67	47	49.4	16.555	0.010	1.197	0.027	1.144	0.218
D301NW-25	5	43	15.73	-67	50	48.7	16.601	0.012	-0.227	0.017	-0.766	0.023
D301SE-15	5	43	30.48	-67	53	57.1	16.612	0.011	0.923	0.027	0.812	0.103
D301NE-18	5	43	47.03	-67	48	28.8	16.622	0.012	-0.117	0.020	-0.727	0.028
D301SW-18	5	42	53.00	-67	53	23.0	16.627	0.013	0.648	0.024	0.344	0.078
D301SE-16	5	43	32.75	-67	54	48.2	16.676	0.012	1.442	0.038	...	...
D301SW-20	5	43	04.77	-67	51	49.5	16.687	0.009	-0.080	0.019	-0.415	0.049
D301SW-19	5	42	44.21	-67	53	17.3	16.702	0.010	1.117	0.024	1.110	0.160
D301NE-19	5	44	00.00	-67	47	58.8	16.711	0.011	0.885	0.032	0.327	0.128
D301SW-21	5	42	48.65	-67	53	31.0	16.744	0.008	1.227	0.028	...	...
D301SW-23	5	43	00.63	-67	53	58.4	16.753	0.010	0.869	0.026	0.804	0.137

D301NE-22	5	43	33.77	-67	47	26.9	16.756	0.011	-0.145	0.019	-0.980	0.026
D301NE-23	5	43	35.01	-67	50	41.1	16.770	0.160	-0.591	0.282	-0.431	0.412
D301NE-21	5	43	49.35	-67	50	54.4	16.771	0.012	0.585	0.027	0.215	0.089
D301SW-22	5	43	09.65	-67	52	16.8	16.771	0.011	1.283	0.032	...	...
D301NW-26	5	43	22.96	-67	47	39.8	16.793	0.010	1.535	0.029	...	...
D301NW-27	5	42	54.23	-67	48	33.9	16.801	0.006	1.660	0.036	...	...
D301NW-28	5	42	56.74	-67	50	28.8	16.802	0.009	-0.117	0.016	-0.472	0.031
D301SW-24	5	43	00.80	-67	53	02.8	16.803	0.013	1.545	0.037	...	...
D301SE-17	5	43	45.50	-67	52	14.4	16.817	0.011	1.322	0.029	...	...
D301NW-29	5	43	02.19	-67	49	19.9	16.820	0.008	-0.127	0.013	-0.760	0.026
D301SW-25	5	43	15.66	-67	52	010.0	16.826	0.010	0.780	0.023	0.507	0.122
D301SE-18	5	43	41.23	-67	53	03.0	16.838	0.011	0.573	0.029	0.288	0.069
D301SW-26	5	43	15.34	-67	52	32.6	16.873	0.010	-0.056	0.019	-0.560	0.043
D301NE-24	5	43	43.43	-67	49	50.7	16.879	0.009	-0.167	0.016	-0.775	0.027
D301SE-19	5	43	54.85	-67	54	29.2	16.891	0.010	1.740	0.048	...	...
D301SE-21	5	43	49.74	-67	52	49.8	16.902	0.012	-0.059	0.021	-0.443	0.032
D301NW-30	5	42	58.72	-67	48	22.4	16.914	0.008	0.577	0.015	0.009	0.075
D301SE-20	5	43	32.39	-67	51	44.6	16.920	0.012	1.980	0.052	...	...
D301NW-32	5	42	58.76	-67	50	17.5	16.929	0.010	-0.203	0.015	-0.676	0.029
D301SW-27	5	43	15.44	-67	54	38.4	16.931	0.011	1.145	0.034	...	...
D301NW-31	5	42	51.65	-67	50	42.1	16.932	0.010	0.544	0.021	0.212	0.068
D301NE-25	5	43	44.83	-67	47	11.5	16.942	0.033	0.649	0.193	...	...
D301SW-30	5	43	15.45	-67	51	11.5	16.977	0.034	-0.017	0.090	-0.198	0.286
D301SW-29	5	42	53.42	-67	54	21.3	16.984	0.010	0.872	0.030	1.078	0.210
D301NE-26	5	43	27.67	-67	50	34.1	16.990	0.016	1.115	0.038	...	...
D301SW-31	5	43	03.03	-67	53	23.5	17.004	0.011	-0.087	0.021	-0.282	0.066
D301SE-22	5	43	36.96	-67	51	58.5	17.019	0.011	1.618	0.040	...	...
D301SE-23	5	43	30.40	-67	53	42.9	17.019	0.013	1.539	0.040	...	...
D301SW-28	5	43	08.29	-67	54	09.1	17.025	0.011	2.995	0.101	...	...
D301SW-34	5	43	18.74	-67	54	13.4	17.038	0.013	-0.129	0.022	-0.645	0.050
D301NE-27	5	43	34.78	-67	49	33.4	17.041	0.011	-0.055	0.023	-0.520	0.035
D301NW-33	5	43	02.20	-67	48	34.1	17.052	0.010	0.565	0.019	0.121	0.077
D301SW-35	5	43	21.31	-67	54	05.5	17.057	0.008	-0.115	0.018	-0.578	0.051
D301NE-28	5	43	49.02	-67	50	32.9	17.078	0.015	-0.071	0.026	-0.507	0.041
D301SE-25	5	43	35.76	-67	54	28.1	17.090	0.013	1.194	0.039	...	...
D301SW-32	5	42	49.65	-67	51	50.7	17.093	0.013	1.422	0.027	...	...
D301NW-35	5	43	10.93	-67	50	40.0	17.109	0.018	-0.245	0.045	-0.684	0.089
D301SW-33	5	43	21.74	-67	54	07.9	17.125	0.012	1.939	0.041	...	...
D301NW-34	5	43	10.51	-67	49	12.9	17.151	0.009	1.093	0.034	...	...
D301SE-30	5	43	32.92	-67	52	37.7	17.164	0.018	-0.065	0.034	-0.565	0.047
D301NW-36	5	43	15.98	-67	49	39.1	17.167	0.010	-0.207	0.018	-0.720	0.032
D301NW-37	5	43	20.84	-67	48	05.5	17.178	0.011	-0.089	0.018	-0.578	0.042
D301SW-36	5	43	21.44	-67	53	38.9	17.198	0.009	1.423	0.053	...	...
D301NE-29	5	43	59.06	-67	50	57.6	17.200	0.015	1.213	0.046	...	...
D301SE-33	5	43	33.38	-67	53	19.7	17.209	0.013	-0.056	0.022	-0.520	0.030
D301SE-34	5	43	24.43	-67	52	27.3	17.220	0.014	-0.049	0.022	-0.566	0.029
D301SW-37	5	43	21.27	-67	51	55.0	17.229	0.012	1.542	0.063	...	...
D301SE-36	5	43	24.17	-67	52	38.4	17.234	0.013	-0.042	0.024	-0.675	0.035
D301SW-39	5	43	22.28	-67	51	40.7	17.246	0.011	-0.061	0.020	-0.451	0.041
D301SW-38	5	43	03.30	-67	53	54.7	17.252	0.011	1.303	0.043	...	...
D301SE-31	5	43	42.66	-67	51	10.9	17.260	0.013	1.321	0.039	...	...
D301NW-39	5	43	21.90	-67	50	27.8	17.262	0.011	-0.166	0.019	-0.653	0.028
D301NE-32	5	43	55.33	-67	50	46.2	17.266	0.016	-0.057	0.026	-0.536	0.049
D301SE-37	5	43	54.80	-67	54	38.5	17.270	0.016	0.706	0.033	0.152	0.088
D301NE-35	5	43	48.17	-67	48	32.5	17.280	0.017	-0.026	0.030	-0.691	0.042
D301SE-35	5	43	35.27	-67	51	54.6	17.287	0.027	1.309	0.052	...	...
D301NW-38	5	43	22.27	-67	49	33.0	17.299	0.013	1.790	0.044	...	...
D301NW-40	5	43	15.18	-67	49	33.5	17.304	0.010	-0.162	0.024	-0.466	0.039
D301NE-34	5	43	55.26	-67	49	35.2	17.334	0.017	1.289	0.075	...	...
D301SE-38	5	43	36.91	-67	51	02.5	17.344	0.028	0.218	0.061	-0.744	0.249
D301NW-44	5	43	04.11	-67	51	01.8	17.351	0.011	-0.204	0.020	-0.702	0.031
D301NE-37	5	43	40.04	-67	50	57.8	17.360	0.020	1.315	0.058	...	...
D301NW-42	5	43	12.45	-67	47	39.7	17.368	0.015	0.775	0.026	0.209	0.171
D301SW-41	5	43	16.75	-67	53	57.4	17.370	0.013	1.316	0.041	...	...
D301NW-41	5	43	17.63	-67	49	38.8	17.372	0.013	1.143	0.037	...	...
D301NW-45	5	43	08.35	-67	50	53.2	17.387	0.377	0.010	0.663	...	...

D301SW-42	5	43	06.24	-67	53	20.0	17.400	0.009	1.551	0.048	...	...
D301SE-39	5	43	36.78	-67	53	56.3	17.407	0.012	-0.020	0.030	-0.706	0.043
D301NE-38	5	43	34.08	-67	49	56.7	17.409	0.020	2.003	0.125	...	...
D301NW-43	5	43	05.94	-67	48	59.0	17.410	0.013	1.666	0.044	...	...
D301NE-40	5	43	55.43	-67	50	29.5	17.411	0.021	0.944	0.050	0.606	0.221
D301NE-41	5	43	36.13	-67	50	39.2	17.411	0.019	-0.141	0.031	-0.650	0.043
D301SW-46	5	43	14.78	-67	54	21.3	17.412	0.013	-0.077	0.027	-0.390	0.060
D301NW-46	5	42	46.95	-67	50	59.3	17.413	0.013	-0.097	0.022	-0.264	0.051
D301SW-47	5	43	01.75	-67	51	27.8	17.421	0.019	-0.148	0.038	-0.456	0.080
D301SW-43	5	42	47.82	-67	54	28.2	17.422	0.012	0.899	0.042	...	...
D301NE-42	5	43	46.49	-67	48	35.2	17.426	0.017	0.185	0.031	-0.498	0.058
D301NE-39	5	43	43.20	-67	48	53.4	17.432	0.023	1.730	0.097	...	...
D301SW-48	5	43	11.69	-67	52	27.8	17.433	0.011	0.009	0.026	-0.346	0.053
D301NW-48	5	42	57.41	-67	49	56.8	17.434	0.017	-0.096	0.025	-0.554	0.037
D301SW-44	5	42	43.17	-67	51	20.9	17.455	0.019	1.287	0.050	...	...
D301NE-43	5	43	39.81	-67	47	43.9	17.456	0.021	-0.176	0.034	-0.738	0.044
D301NW-47	5	42	51.95	-67	49	39.0	17.459	0.011	0.528	0.021	0.096	0.116
D301SE-41	5	43	26.53	-67	52	47.0	17.479	0.012	-0.047	0.026	-0.421	0.046
D301SW-49	5	43	04.37	-67	51	49.2	17.480	0.013	1.004	0.041	...	...
D301SE-44	5	43	36.33	-67	51	06.9	17.492	0.013	-0.107	0.029	-0.604	0.047
D301NW-49	5	42	46.15	-67	49	00.5	17.494	0.011	-0.097	0.018	-0.429	0.049
D301SE-43	5	43	50.76	-67	53	38.2	17.495	0.017	-0.050	0.031	-0.628	0.044
D301SW-50	5	43	05.52	-67	52	59.3	17.498	0.021	1.174	0.046	...	...
D301SE-40	5	43	27.35	-67	53	12.9	17.501	0.026	0.864	0.047	...	...
D301SE-45	5	43	30.92	-67	54	22.8	17.513	0.020	-0.069	0.030	-0.533	0.037
D301SE-47	5	43	28.30	-67	52	18.5	17.515	0.018	-0.122	0.032	-0.587	0.045
D301SW-51	5	43	15.99	-67	52	23.0	17.519	0.017	1.550	0.065	...	...
D301SE-48	5	43	30.15	-67	53	07.4	17.537	0.017	-0.087	0.028	-0.683	0.038
D301SE-51	5	43	32.98	-67	52	26.0	17.546	0.018	-0.069	0.032	-0.559	0.052
D301SE-49	5	43	34.28	-67	54	48.9	17.553	0.016	0.126	0.030	-0.345	0.056
D301SE-42	5	43	43.46	-67	51	39.8	17.557	0.017	1.759	0.071	...	...
D301NE-46	5	43	34.49	-67	49	57.0	17.576	0.024	-0.095	0.040	-0.699	0.057
D301NW-50	5	43	12.17	-67	49	35.3	17.580	0.013	1.460	0.048	...	...
D301SE-46	5	43	53.59	-67	52	26.0	17.581	0.018	1.453	0.056	...	...
D301NW-53	5	43	08.93	-67	48	20.8	17.591	0.014	-0.110	0.024	-0.284	0.058
D301NW-52	5	43	01.56	-67	47	37.2	17.592	0.039	0.703	0.060	-0.027	0.197
D301NW-51	5	42	59.21	-67	51	03.4	17.603	0.019	1.046	0.037	...	...
D301NW-55	5	43	16.03	-67	49	27.9	17.607	0.011	-0.146	0.020	-0.474	0.049
D301SW-53	5	42	55.17	-67	51	11.3	17.607	0.019	1.294	0.044	...	...
D301NE-44	5	43	37.64	-67	49	33.0	17.611	0.022	1.433	0.084	...	...
D301SE-50	5	43	51.70	-67	53	54.9	17.615	0.020	1.533	0.079	...	...
D301SE-52	5	43	25.08	-67	52	08.0	17.624	0.016	0.875	0.043	0.369	0.202
D301NE-47	5	43	32.54	-67	50	16.0	17.642	0.018	1.131	0.073	...	...
D301NW-57	5	43	14.84	-67	50	39.9	17.642	0.012	-0.120	0.028	-0.556	0.051
D301SE-54	5	43	44.37	-67	53	12.0	17.649	0.019	0.643	0.040	0.028	0.123
D301NW-54	5	43	24.74	-67	50	44.2	17.658	0.013	1.325	0.040	...	...
D301NW-59	5	42	47.94	-67	50	53.7	17.661	0.013	-0.137	0.025	-0.565	0.046
D301SE-53	5	43	50.32	-67	52	33.4	17.663	0.015	1.546	0.065	...	...
D301SE-56	5	43	41.01	-67	51	38.0	17.665	0.019	-0.049	0.037	-0.531	0.056
D301SW-55	5	43	09.50	-67	54	13.9	17.665	0.012	0.547	0.039	0.320	0.138
D301NE-48	5	43	51.11	-67	48	09.7	17.672	0.024	1.039	0.076	...	...
D301NW-56	5	43	02.16	-67	50	57.5	17.676	0.019	0.860	0.041	...	...
D301NE-49	5	43	25.81	-67	49	15.8	17.677	0.019	-0.169	0.039	-0.637	0.064
D301SE-57	5	43	30.92	-67	54	17.4	17.677	0.021	-0.089	0.031	-0.437	0.050
D301SE-58	5	43	58.45	-67	52	40.6	17.685	0.052	-0.253	0.067	-0.536	0.113
D301SE-55	5	43	41.04	-67	53	07.4	17.687	0.021	0.987	0.062	...	...
D301SW-58	5	43	13.37	-67	51	24.2	17.692	0.014	-0.100	0.034	-0.420	0.075
D301NW-58	5	43	07.93	-67	49	40.9	17.699	0.015	1.144	0.045	...	...
D301SE-59	5	43	39.13	-67	52	59.9	17.700	0.018	0.004	0.031	-0.435	0.060
D301SE-61	5	43	42.63	-67	53	11.2	17.707	0.030	-0.046	0.042	-0.432	0.126
D301SW-56	5	43	08.74	-67	52	05.5	17.715	0.015	0.950	0.034	...	...
D301SW-57	5	42	42.99	-67	53	01.4	17.722	0.013	0.656	0.028	...	...
D301NE-51	5	43	27.63	-67	50	36.2	17.727	0.031	-0.134	0.044	-0.438	0.067
D301NE-50	5	43	29.25	-67	48	01.2	17.734	0.024	1.047	0.080	...	...
D301NE-53	5	43	52.61	-67	48	26.9	17.735	0.030	-0.053	0.050	-0.765	0.066
D301NE-55	5	43	34.04	-67	49	08.5	17.741	0.028	-0.149	0.047	-0.566	0.063

D301NW-63	5	43	15.30	-67	50	51.7	17.742	0.015	-0.216	0.027	-0.696	0.046
D301SE-60	5	43	51.53	-67	54	35.6	17.761	0.019	1.240	0.061	...	...
D301NW-60	5	43	17.75	-67	50	34.0	17.769	0.022	1.664	0.112	...	...
D301NW-61	5	43	24.04	-67	48	38.8	17.771	0.014	1.236	0.058	...	...
D301NE-56	5	43	30.05	-67	49	37.0	17.772	0.027	0.162	0.047	-0.619	0.079
D301SW-60	5	43	15.73	-67	51	11.0	17.773	0.080	-0.252	0.180	-0.556	0.425
D301SE-62	5	43	24.46	-67	52	17.3	17.778	0.022	1.052	0.053	...	...
D301NW-62	5	43	24.44	-67	48	19.6	17.781	0.014	1.134	0.038	...	...
D301NW-64	5	43	21.21	-67	50	14.3	17.781	0.017	0.434	0.031	0.262	0.120
D301NW-66	5	43	00.60	-67	47	49.8	17.795	0.019	-0.138	0.030	-0.448	0.050
D301SW-59	5	43	12.18	-67	52	55.6	17.798	0.015	0.902	0.040	...	...
D301SE-63	5	43	49.82	-67	53	36.5	17.803	0.021	0.806	0.051	0.539	0.222
D301SW-63	5	42	57.79	-67	52	25.4	17.810	0.016	-0.026	0.029	-0.509	0.070
D301NE-58	5	43	59.97	-67	47	27.7	17.818	0.029	0.743	0.093	...	...
D301SW-61	5	42	48.54	-67	53	25.8	17.838	0.019	1.208	0.060	...	...
D301SE-65	5	43	35.08	-67	54	30.6	17.840	0.092	0.828	0.114	...	...
D301NE-59	5	43	52.43	-67	48	25.0	17.845	0.029	1.216	0.095	...	...
D301SE-64	5	43	42.95	-67	53	01.1	17.848	0.018	1.472	0.065	...	...
D301SW-62	5	42	45.71	-67	53	12.4	17.849	0.022	1.279	0.053	...	...
D301NW-65	5	43	17.85	-67	49	21.2	17.867	0.018	1.562	0.061	...	...
D301NE-60	5	43	26.30	-67	50	29.2	17.870	0.022	1.054	0.079	...	...
D301NW-67	5	43	21.08	-67	49	32.9	17.876	0.023	-0.218	0.036	-0.575	0.052
D301SW-64	5	42	44.64	-67	53	35.3	17.884	0.013	1.191	0.059	...	...
D301NE-61	5	43	36.49	-67	50	32.4	17.886	0.029	1.345	0.104	...	...
D301NE-65	5	43	27.32	-67	47	39.3	17.893	0.022	0.022	0.045	-0.374	0.075
D301SE-67	5	43	32.20	-67	51	08.9	17.893	0.023	-0.087	0.037	-0.442	0.066
D301NW-68	5	43	06.58	-67	50	56.8	17.905	0.019	-0.085	0.032	-0.365	0.067
D301SE-66	5	43	51.80	-67	54	32.8	17.907	0.021	1.369	0.077	...	...
D301NE-63	5	43	31.86	-67	50	29.9	17.924	0.032	1.184	0.095	...	...
D301SE-68	5	43	40.94	-67	54	07.4	17.938	0.025	0.376	0.043	-0.432	0.089
D301NW-70	5	43	08.14	-67	50	48.1	17.939	0.014	-0.124	0.026	-0.647	0.057
D301SW-67	5	43	07.39	-67	53	17.3	17.958	0.015	1.092	0.047	...	...
D301NE-67	5	43	47.13	-67	49	54.4	17.962	0.029	-0.007	0.048	-0.254	0.098
D301NW-71	5	43	17.07	-67	47	25.3	17.962	0.019	-0.146	0.028	-0.515	0.075
D301SW-70	5	42	52.14	-67	53	09.2	17.976	0.018	-0.040	0.031	-0.228	0.074
D301NW-72	5	43	22.83	-67	50	53.8	17.977	0.019	-0.113	0.031	-0.376	0.057
D301SE-69	5	43	54.89	-67	52	13.1	17.979	0.022	1.067	0.068	...	...
D301NW-69	5	43	19.63	-67	48	33.8	17.984	0.024	1.122	0.057	...	...
D301SW-68	5	43	09.16	-67	54	02.4	17.988	0.014	1.148	0.054	...	...
D301SW-71	5	42	49.49	-67	51	32.6	17.990	0.020	-0.111	0.032	-0.507	0.061
D301NE-66	5	43	55.18	-67	48	19.8	17.993	0.030	1.434	0.122	...	...
D301SE-74	5	43	43.01	-67	51	28.5	18.000	0.027	-0.076	0.046	-0.706	0.063
D301SW-69	5	43	14.19	-67	54	18.2	18.004	0.019	1.449	0.070	...	...
D301SE-71	5	43	32.27	-67	52	09.2	18.008	0.022	0.987	0.058	...	...
D301SE-76	5	43	29.57	-67	51	28.2	18.016	0.025	-0.047	0.042	-0.562	0.066
D301NW-73	5	42	45.90	-67	50	42.6	18.021	0.018	0.682	0.039	...	...
D301SE-70	5	43	29.20	-67	52	12.7	18.021	0.024	1.659	0.097	...	...
D301SW-73	5	43	06.63	-67	53	48.7	18.028	0.018	-0.070	0.043	-0.433	0.088
D301NE-70	5	43	33.39	-67	48	45.9	18.030	0.032	0.090	0.055	-0.537	0.094
D301NW-74	5	43	17.91	-67	49	04.2	18.035	0.034	0.358	0.047	0.079	0.147
D301SE-79	5	43	36.17	-67	54	34.2	18.037	0.030	-0.117	0.048	-0.498	0.064
D301NE-72	5	43	32.45	-67	47	18.0	18.039	0.032	-0.072	0.053	-0.545	0.072
D301SE-73	5	43	54.31	-67	53	00.3	18.040	0.024	1.166	0.071	...	...
D301SW-74	5	42	42.58	-67	53	32.4	18.042	0.018	-0.086	0.043	-0.263	0.092
D301NE-68	5	43	30.80	-67	50	24.1	18.043	0.029	0.976	0.095	...	...
D301SE-75	5	43	35.34	-67	51	05.3	18.043	0.025	0.840	0.068	...	...
D301SE-72	5	43	44.44	-67	51	24.8	18.049	0.025	1.428	0.080	...	...
D301SW-72	5	43	15.56	-67	53	48.5	18.050	0.022	1.006	0.042	...	...
D301NW-75	5	42	49.39	-67	48	08.9	18.055	0.014	-0.093	0.029	-0.527	0.059
D301NW-78	5	43	08.41	-67	49	17.9	18.060	0.022	-0.155	0.034	-0.632	0.063
D301NW-76	5	42	56.65	-67	48	34.6	18.061	0.016	-0.006	0.026	-0.180	0.097
D301SW-76	5	42	54.57	-67	51	12.9	18.063	0.032	-0.129	0.051	-0.197	0.099
D301NE-71	5	43	28.61	-67	49	47.2	18.068	0.029	0.749	0.083	0.025	0.211
D301SE-78	5	43	49.25	-67	51	30.4	18.076	0.026	0.868	0.064	...	...
D301SE-83	5	43	41.89	-67	54	36.2	18.079	0.025	0.004	0.040	-0.517	0.068
D301SE-84	5	43	26.32	-67	54	09.2	18.080	0.026	-0.009	0.055	-0.334	0.084

D301SE-82	5	43	27.90	-67	52	05.5	18.101	0.020	0.616	0.057	0.168	0.175
D301NW-77	5	42	57.75	-67	49	56.8	18.104	0.023	0.945	0.049	...	...
D301SE-80	5	43	37.66	-67	51	07.8	18.105	0.029	1.251	0.079	...	...
D301SW-79	5	42	52.51	-67	52	01.4	18.105	0.021	-0.075	0.038	-0.133	0.110
D301SE-85	5	43	56.00	-67	51	14.2	18.109	0.027	0.062	0.052	-0.124	0.103
D301SW-75	5	42	52.89	-67	53	07.1	18.113	0.022	1.036	0.053	...	...
D301SE-81	5	43	38.06	-67	53	11.5	18.114	0.031	1.147	0.098	...	...
D301NW-81	5	43	15.92	-67	49	30.7	18.127	0.012	-0.125	0.027	-0.534	0.062
D301SE-86	5	43	55.30	-67	52	59.3	18.130	0.029	-0.047	0.045	-0.792	0.060
D301NW-79	5	43	10.44	-67	49	48.7	18.132	0.026	0.457	0.048	-0.264	0.126
D301NE-78	5	43	28.23	-67	49	34.6	18.133	0.033	0.076	0.065	-0.134	0.111
D301NW-82	5	43	07.57	-67	50	54.7	18.133	0.020	-0.044	0.039	-0.371	0.075
D301SW-80	5	43	21.53	-67	51	22.4	18.133	0.018	0.005	0.044	-0.118	0.098
D301NW-83	5	43	06.57	-67	50	50.2	18.134	0.018	-0.140	0.032	-0.620	0.068
D301SW-77	5	43	10.20	-67	51	22.6	18.139	0.017	1.086	0.077	...	...
D301NE-77	5	43	30.11	-67	47	31.7	18.140	0.061	0.766	0.107	...	...
D301SW-82	5	43	18.29	-67	52	30.6	18.144	0.026	-0.141	0.043	-0.202	0.082
D301NE-75	5	43	49.48	-67	47	18.4	18.145	0.034	1.113	0.110	...	...
D301NE-79	5	43	48.41	-67	49	45.2	18.146	0.036	-0.099	0.059	-0.504	0.086
D301NW-80	5	42	52.81	-67	50	28.1	18.152	0.025	0.746	0.045	...	...
D301NE-81	5	43	34.04	-67	48	57.2	18.159	0.086	-0.031	0.105	-0.885	0.090
D301NE-76	5	43	34.45	-67	49	01.5	18.163	0.029	1.346	0.124	...	...
D301NE-85	5	43	51.36	-67	49	33.2	18.178	0.032	-0.057	0.052	-0.570	0.084
D301SW-81	5	42	56.44	-67	54	25.3	18.183	0.018	1.055	0.062	...	...
D301SW-85	5	42	53.15	-67	54	32.1	18.190	0.024	0.035	0.043	0.195	0.127
D301NW-85	5	42	47.44	-67	47	34.7	18.191	0.017	0.997	0.055	...	...
D301SE-88	5	43	40.15	-67	53	29.4	18.191	0.029	0.933	0.072	...	...
D301NE-82	5	43	35.92	-67	48	42.6	18.196	0.036	0.795	0.085	...	...
D301NE-80	5	43	47.16	-67	50	54.3	18.199	0.048	1.001	0.115	...	...
D301NW-84	5	42	45.36	-67	49	59.5	18.201	0.020	1.262	0.061	...	...
D301SE-89	5	43	23.86	-67	52	04.6	18.206	0.028	1.053	0.076	...	...
D301NE-84	5	43	53.03	-67	50	39.6	18.213	0.029	0.872	0.095	...	...
D301NE-83	5	43	36.52	-67	48	58.9	18.218	0.033	1.179	0.121	...	...
D301SW-83	5	42	46.60	-67	51	46.1	18.221	0.025	1.113	0.059	...	...
D301NE-89	5	43	49.18	-67	48	26.7	18.223	0.045	-0.027	0.071	-0.109	0.138
D301NE-88	5	43	58.85	-67	49	49.1	18.224	0.033	0.051	0.063	-0.322	0.129
D301NE-86	5	43	34.55	-67	48	56.3	18.234	0.039	1.072	0.112	...	...
D301NW-87	5	43	10.37	-67	49	55.5	18.237	0.022	-0.063	0.037	-0.519	0.062
D301SE-94	5	43	34.27	-67	51	14.1	18.239	0.022	-0.116	0.042	-0.493	0.080
D301SW-88	5	43	18.21	-67	53	55.7	18.243	0.023	0.091	0.041	-0.238	0.094
D301SW-90	5	43	14.73	-67	53	34.9	18.247	0.017	0.002	0.039	-0.376	0.132
D301SE-92	5	43	31.14	-67	52	02.6	18.250	0.040	0.962	0.082	...	...
D301NW-86	5	43	13.46	-67	48	54.9	18.251	0.023	0.991	0.064	...	...
D301NE-87	5	43	54.00	-67	48	09.5	18.252	0.037	0.998	0.118	...	...
D301NE-91	5	43	47.60	-67	47	59.8	18.257	0.043	-0.055	0.069	-0.233	0.109
D301NW-93	5	42	55.01	-67	50	08.5	18.277	0.020	-0.161	0.032	-0.694	0.083
D301NE-93	5	43	36.07	-67	48	52.9	18.279	0.036	0.058	0.059	-0.250	0.124
D301SW-87	5	43	19.31	-67	53	49.2	18.279	0.021	1.251	0.065	...	...
D301NE-95	5	43	31.27	-67	50	17.0	18.283	0.038	-0.048	0.069	-0.344	0.105
D301NW-95	5	43	09.01	-67	50	42.8	18.283	0.021	-0.093	0.037	-0.534	0.080
D301SW-86	5	43	15.21	-67	51	15.0	18.284	0.033	1.439	0.119	...	...
D301SW-94	5	42	53.83	-67	51	34.5	18.287	0.021	0.047	0.056	0.005	0.171
D301NW-90	5	43	11.98	-67	47	32.4	18.288	0.020	0.509	0.036	...	...
D301NW-94	5	43	22.41	-67	50	25.9	18.288	0.020	0.099	0.035	-0.165	0.081
D301SW-89	5	43	15.19	-67	51	55.2	18.288	0.024	1.019	0.071	...	...
D301NE-90	5	43	25.81	-67	49	26.9	18.290	0.038	1.313	0.175	...	...
D301NW-88	5	42	58.63	-67	49	04.5	18.290	0.019	0.782	0.050	...	...
D301SW-97	5	42	45.29	-67	51	13.5	18.294	0.023	-0.056	0.051	0.307	0.141
D301NE-96	5	43	45.22	-67	47	20.1	18.298	0.036	-0.191	0.058	-0.371	0.095
D301NW-89	5	43	20.00	-67	48	18.1	18.298	0.032	0.832	0.058	...	...
D301SW-92	5	42	51.36	-67	52	39.0	18.302	0.012	1.031	0.054	...	...
D301SW-93	5	42	58.50	-67	53	15.2	18.306	0.033	0.639	0.069	...	...
D301NW-91	5	43	18.39	-67	47	29.9	18.310	0.036	0.773	0.067	...	...
D301SW-91	5	43	05.70	-67	51	38.7	18.314	0.019	1.328	0.078	...	...
D301NE-92	5	43	52.04	-67	49	17.7	18.315	0.043	1.216	0.154	...	...
D301SW-95	5	42	55.66	-67	52	56.0	18.319	0.026	0.719	0.070	...	...

D301NW-97	5	42	45.72	-67	48	11.1	18.325	0.024	-0.167	0.037	-0.419	0.055
D301NW-92	5	42	45.43	-67	49	18.9	18.330	0.019	1.187	0.063	...	...
D301SE-98	5	43	27.62	-67	54	13.3	18.330	0.037	0.023	0.059	-0.202	0.107
D301SW-100	5	42	54.51	-67	53	37.4	18.330	0.028	0.100	0.047	-0.033	0.153
D301NE-94	5	43	51.21	-67	47	29.6	18.332	0.046	1.167	0.135	...	...
D301SW-96	5	43	18.07	-67	51	21.8	18.335	0.013	0.980	0.066	...	...
D301SE-96	5	43	24.70	-67	54	30.3	18.336	0.025	1.792	0.152	...	...
D301NE-100	5	43	59.03	-67	47	12.5	18.349	0.033	0.076	0.072	...	...
D301SW-98	5	42	44.93	-67	53	58.9	18.350	0.019	1.154	0.075	...	...
D301NE-99	5	43	25.98	-67	48	05.1	18.352	0.050	0.438	0.085	...	...
D301NW-96	5	43	17.53	-67	50	43.9	18.354	0.033	0.548	0.070	...	...
D301SW-104	5	42	46.32	-67	52	11.6	18.361	0.027	-0.034	0.050	-0.257	0.131
D301SE-97	5	43	24.50	-67	51	16.1	18.362	0.033	0.813	0.075	...	...
D301NW-102	5	43	04.82	-67	50	06.2	18.364	0.030	-0.085	0.044	-0.220	0.115
D301SW-99	5	42	44.07	-67	52	13.1	18.366	0.024	1.089	0.062	...	...
D301SW-102	5	42	47.37	-67	53	54.2	18.371	0.024	0.805	0.051	...	...
D301SW-106	5	43	19.03	-67	51	59.4	18.375	0.020	-0.047	0.047	-0.358	0.100
D301SW-101	5	42	55.90	-67	54	07.2	18.378	0.030	1.081	0.056	...	...
D301SW-105	5	43	10.64	-67	54	20.8	18.379	0.024	0.152	0.054	0.144	0.170
D301NW-98	5	43	06.17	-67	49	48.6	18.383	0.029	0.962	0.074	...	...
D301NE-98	5	43	30.78	-67	50	49.0	18.394	0.043	1.485	0.170	...	...
D301SE-102	5	43	44.76	-67	54	45.3	18.396	0.028	0.078	0.049	0.113	0.122
D301NW-99	5	43	13.00	-67	50	11.2	18.398	0.027	1.088	0.065	...	...
D301SE-99	5	43	32.94	-67	53	30.8	18.398	0.033	1.255	0.113	...	...
D301SE-100	5	43	55.44	-67	52	53.0	18.406	0.032	1.039	0.088	...	...
D301NW-100	5	42	58.28	-67	48	05.1	18.408	0.024	1.171	0.118	...	...
D301SW-108	5	43	12.68	-67	51	28.3	18.408	0.034	-0.056	0.053	-0.189	0.131
D301NW-101	5	43	21.28	-67	51	10.4	18.409	0.086	1.203	0.239	...	...
D301SW-103	5	42	53.81	-67	54	16.3	18.414	0.031	1.272	0.088	...	...
D301NW-107	5	42	57.96	-67	48	52.9	18.416	0.032	-0.134	0.044	-0.440	0.095
D301NE-104	5	43	47.13	-67	49	35.4	18.417	0.053	-0.081	0.076	-0.639	0.103
D301SW-107	5	43	14.63	-67	51	50.3	18.420	0.020	0.763	0.062	...	...
D301NE-103	5	43	34.40	-67	47	58.8	18.422	0.050	0.099	0.094	-0.323	0.156
D301NE-102	5	43	46.64	-67	49	54.4	18.426	0.038	0.698	0.100	...	...
D301NE-105	5	43	44.32	-67	48	05.0	18.426	0.045	-0.098	0.073	-0.067	0.148
D301NW-104	5	43	21.82	-67	49	10.1	18.428	0.018	0.624	0.062	...	...
D301NW-108	5	43	03.47	-67	50	59.6	18.428	0.033	-0.050	0.050	-0.249	0.108
D301NE-106	5	43	54.05	-67	49	06.6	18.429	0.045	-0.025	0.071	-0.218	0.135
D301NE-107	5	43	41.83	-67	48	38.9	18.432	0.039	0.011	0.076	-0.744	0.115
D301SE-103	5	43	41.29	-67	54	21.6	18.434	0.040	0.896	0.087	...	...
D301NW-103	5	42	54.34	-67	50	22.6	18.439	0.025	1.109	0.057	...	...
D301SE-105	5	43	49.83	-67	51	08.7	18.442	0.038	0.087	0.059	-0.277	0.092
D301NW-105	5	43	07.99	-67	50	24.0	18.444	0.028	0.819	0.056	...	...
D301SW-111	5	42	53.96	-67	53	03.2	18.448	0.027	-0.082	0.048	-0.279	0.115
D301SE-104	5	43	37.80	-67	51	35.7	18.449	0.037	1.114	0.096	...	...
D301NW-106	5	42	50.93	-67	48	19.5	18.455	0.021	1.053	0.086	...	...
D301SE-107	5	43	56.73	-67	52	00.8	18.464	0.039	-0.079	0.057	-0.596	0.078
D301SW-109	5	42	42.94	-67	53	44.7	18.474	0.027	1.113	0.087	...	...
D301SW-114	5	43	07.45	-67	53	05.2	18.483	0.032	-0.055	0.050	-0.004	0.150
D301NW-110	5	43	13.64	-67	48	13.7	18.485	0.030	1.016	0.087	...	...
D301SW-110	5	43	16.90	-67	53	48.1	18.489	0.022	0.864	0.072	...	...
D301NW-109	5	43	06.93	-67	48	53.6	18.495	0.026	1.276	0.095	...	...
D301SE-111	5	43	27.74	-67	51	05.5	18.499	0.046	-0.068	0.069	-0.301	0.106
D301NW-113	5	43	24.40	-67	47	39.8	18.501	0.033	-0.019	0.048	0.347	0.199
D301NW-111	5	42	48.52	-67	48	44.1	18.505	0.029	1.134	0.103	...	...
D301SW-112	5	42	46.36	-67	53	49.5	18.505	0.030	0.756	0.067	...	...
D301NE-111	5	43	27.86	-67	48	56.8	18.507	0.041	0.165	0.080	-0.947	0.133
D301SE-112	5	43	41.59	-67	54	20.8	18.510	0.044	-0.030	0.073	-0.431	0.095
D301NW-115	5	43	18.67	-67	49	49.6	18.513	0.030	0.007	0.048	-0.140	0.133
D301NW-112	5	43	16.79	-67	49	39.6	18.515	0.022	0.646	0.053	...	...
D301SE-110	5	43	41.63	-67	51	57.7	18.515	0.033	0.662	0.086	...	...
D301SE-106	5	43	56.14	-67	53	24.1	18.520	0.033	1.251	0.107	...	...
D301NW-117	5	42	57.50	-67	50	58.9	18.521	0.029	-0.089	0.049	-0.169	0.113
D301SE-109	5	43	42.73	-67	54	43.1	18.530	0.038	1.228	0.107	...	...
D301SE-114	5	43	26.56	-67	52	15.2	18.530	0.032	0.001	0.057	0.012	0.159
D301SE-115	5	43	33.32	-67	52	51.6	18.537	0.032	-0.040	0.059	-0.558	0.096

D301NE-112	5	43	33.70	-67	47	44.6	18.541	0.050	0.046	0.082	-0.838	0.106
D301NW-121	5	43	14.37	-67	49	15.1	18.541	0.032	-0.077	0.049	-0.500	0.075
D301NW-114	5	43	18.15	-67	48	12.3	18.542	0.031	0.701	0.084	...	...
D301NW-119	5	43	11.57	-67	49	48.7	18.543	0.039	0.390	0.083	-0.405	0.167
D301NW-122	5	42	51.96	-67	47	59.8	18.546	0.021	-0.044	0.040	-0.300	0.124
D301NW-120	5	43	09.71	-67	49	35.5	18.558	0.032	0.332	0.075	...	...
D301SW-116	5	43	02.07	-67	51	25.5	18.562	0.044	0.431	0.081	...	...
D301NW-118	5	42	50.35	-67	48	55.3	18.564	0.030	0.912	0.070	...	...
D301SE-116	5	43	32.76	-67	52	53.5	18.565	0.041	0.474	0.078	...	...
D301SE-118	5	43	30.68	-67	54	43.8	18.566	0.041	-0.083	0.055	-0.293	0.100
D301SE-119	5	43	31.97	-67	52	11.2	18.570	0.041	-0.097	0.061	-0.473	0.087
D301SE-113	5	43	50.41	-67	52	12.1	18.571	0.060	1.093	0.122	...	...
D301NW-123	5	42	56.12	-67	50	09.4	18.584	0.025	-0.033	0.043	-0.327	0.081
D301SE-121	5	43	48.61	-67	52	30.1	18.585	0.036	0.103	0.059	-0.321	0.132
D301NW-124	5	43	02.96	-67	49	25.8	18.586	0.025	-0.061	0.040	-0.426	0.107
D301SW-117	5	42	58.69	-67	54	06.3	18.592	0.020	0.950	0.094	...	...
D301NE-116	5	43	52.29	-67	48	30.7	18.595	0.060	0.107	0.086	-0.039	0.205
D301SW-118	5	42	57.70	-67	53	08.8	18.598	0.022	0.089	0.051	0.464	0.202
D301NW-127	5	42	46.48	-67	49	05.8	18.602	0.028	-0.165	0.047	-0.652	0.087
D301SE-124	5	43	38.70	-67	54	06.2	18.604	0.037	0.045	0.070	-0.272	0.130
D301SE-126	5	43	51.88	-67	52	46.5	18.604	0.036	0.013	0.072	-0.051	0.137
D301SE-120	5	43	27.14	-67	52	04.7	18.611	0.031	0.758	0.077	...	...
D301NW-129	5	43	09.25	-67	47	33.6	18.613	0.026	-0.073	0.054	-0.567	0.114
D301SE-127	5	43	52.47	-67	54	24.7	18.618	0.047	0.255	0.085	0.094	0.225
D301NE-115	5	43	42.12	-67	48	46.7	18.620	0.064	0.768	0.134	...	...
D301NW-130	5	42	59.67	-67	50	15.3	18.621	0.032	0.035	0.050	0.257	0.199
D301SE-125	5	43	24.84	-67	53	20.8	18.622	0.041	0.416	0.074	...	...
D301SE-123	5	43	44.61	-67	51	22.5	18.626	0.094	0.756	0.138	...	...
D301SE-130	5	43	33.92	-67	52	41.6	18.631	0.037	-0.076	0.065	-0.481	0.099
D301NW-126	5	43	24.14	-67	50	49.9	18.634	0.042	0.643	0.084	...	...
D301SW-119	5	43	22.03	-67	54	32.2	18.635	0.024	0.897	0.093	...	...
D301NW-125	5	43	14.50	-67	48	34.9	18.636	0.028	0.794	0.058	...	...
D301SW-124	5	43	15.51	-67	52	02.2	18.638	0.032	-0.009	0.048	-0.206	0.152
D301NE-120	5	43	55.82	-67	48	20.1	18.641	0.054	-0.155	0.086	0.012	0.181
D301NW-128	5	43	15.25	-67	49	51.8	18.642	0.029	0.709	0.072	...	...
D301SW-122	5	42	58.18	-67	51	21.7	18.654	0.034	0.828	0.080	...	...
D301SW-123	5	42	53.46	-67	52	23.6	18.656	0.026	0.791	0.063	...	...
D301SW-128	5	42	49.46	-67	54	35.1	18.657	0.024	-0.046	0.054	0.098	0.197
D301NW-135	5	43	15.17	-67	50	19.4	18.661	0.031	-0.064	0.051	-0.521	0.142
D301SE-128	5	43	33.10	-67	53	06.3	18.662	0.039	0.873	0.103	...	...
D301NW-136	5	43	02.80	-67	50	23.1	18.663	0.032	-0.022	0.057	-0.146	0.116
D301SW-129	5	43	01.25	-67	53	28.0	18.663	0.024	-0.084	0.056	...	...
D301SW-121	5	42	56.03	-67	52	12.2	18.664	0.028	1.251	0.059	...	...
D301SW-125	5	42	56.39	-67	52	58.9	18.669	0.031	0.468	0.115	...	...
D301NW-133	5	43	12.21	-67	49	07.2	18.670	0.019	0.319	0.055	-0.336	0.150
D301NW-131	5	43	11.73	-67	47	39.7	18.674	0.020	1.159	0.101	...	...
D301NE-117	5	43	47.95	-67	49	04.2	18.675	0.053	0.896	0.146	...	...
D301NW-137	5	43	18.62	-67	47	27.5	18.678	0.069	0.218	0.103	...	...
D301SW-130	5	42	56.54	-67	51	38.8	18.679	0.029	-0.008	0.061	-0.419	0.142
D301NW-132	5	42	45.38	-67	50	11.2	18.687	0.032	0.948	0.093	...	...
D301NW-141	5	43	02.80	-67	48	09.0	18.688	0.032	-0.059	0.049	-0.569	0.159
D301NE-121	5	43	28.18	-67	50	34.0	18.690	0.055	0.944	0.142	...	...
D301SE-132	5	43	40.52	-67	54	39.7	18.690	0.042	0.843	0.092	...	...
D301SE-131	5	43	45.96	-67	53	33.9	18.693	0.039	0.977	0.116	...	...
D301NE-122	5	43	33.37	-67	49	18.4	18.694	0.058	0.980	0.175	...	...
D301NE-123	5	43	30.10	-67	50	36.0	18.698	0.048	0.940	0.152	...	...
D301NE-127	5	43	33.83	-67	48	57.8	18.699	0.059	-0.321	0.144	...	...
D301SW-127	5	43	10.18	-67	53	27.5	18.699	0.024	1.050	0.066	...	...
D301NE-125	5	43	28.20	-67	47	35.2	18.701	0.052	0.400	0.126	...	...
D301SE-133	5	43	35.28	-67	52	21.3	18.703	0.042	1.072	0.111	...	...
D301NW-134	5	43	17.25	-67	48	18.2	18.704	0.035	1.097	0.090	...	...
D301SE-137	5	43	32.95	-67	52	36.0	18.704	0.059	-0.090	0.120	-0.035	0.219
D301NE-126	5	43	26.12	-67	49	02.3	18.705	0.054	0.044	0.092	0.390	0.296
D301SW-126	5	43	06.14	-67	51	15.1	18.705	0.028	1.205	0.100	...	...
D301SE-135	5	43	44.20	-67	53	08.5	18.710	0.035	0.893	0.096	...	...
D301SE-139	5	43	26.12	-67	52	24.8	18.718	0.040	-0.023	0.081	-0.178	0.146

D301NW-146	5	43	08.68	-67	49	32.7	18.720	0.031	-0.212	0.045	-0.406	0.094
D301NE-129	5	43	45.27	-67	50	38.1	18.721	0.056	-0.211	0.090	-0.472	0.128
D301NW-139	5	42	49.72	-67	48	37.5	18.721	0.034	0.818	0.078	...	...
D301SE-140	5	43	40.71	-67	51	33.0	18.722	0.044	-0.008	0.066	-0.409	0.140
D301NE-128	5	43	48.50	-67	50	45.5	18.724	0.056	0.188	0.111	...	...
D301NW-147	5	42	46.89	-67	49	01.5	18.726	0.050	-0.106	0.074	-0.322	0.130
D301NW-138	5	43	05.84	-67	49	48.2	18.730	0.038	1.062	0.104	...	...
D301NW-142	5	43	22.98	-67	47	52.2	18.733	0.039	0.859	0.093	...	...
D301NW-140	5	43	01.99	-67	47	25.5	18.736	0.065	1.132	0.122	...	...
D301NW-143	5	42	57.55	-67	47	56.6	18.738	0.038	0.921	0.085	...	...
D301SE-136	5	43	31.23	-67	52	13.3	18.741	0.042	1.030	0.113	...	...
D301NW-148	5	43	16.08	-67	50	13.2	18.747	0.032	0.321	0.058	...	...
D301SE-143	5	43	46.69	-67	52	26.7	18.749	0.045	0.023	0.074	-0.130	0.176
D301NW-145	5	42	45.50	-67	48	23.5	18.753	0.035	0.796	0.078	...	...
D301SE-138	5	43	27.99	-67	52	36.4	18.753	0.058	1.007	0.156	...	...
D301NW-144	5	42	45.93	-67	49	48.0	18.757	0.027	1.097	0.080	...	...
D301NW-152	5	43	18.85	-67	50	42.0	18.758	0.029	-0.025	0.048	-0.445	0.112
D301SE-142	5	43	24.45	-67	54	40.4	18.758	0.035	0.279	0.071	...	...
D301SW-134	5	43	17.07	-67	52	07.7	18.758	0.054	0.722	0.108	...	...
D301SW-133	5	43	06.71	-67	52	53.9	18.762	0.025	0.865	0.077	...	...
D301SW-135	5	43	18.13	-67	53	14.5	18.763	0.039	0.853	0.070	...	...
D301NW-155	5	43	07.26	-67	50	37.1	18.765	0.042	0.040	0.065	-0.431	0.133
D301NW-150	5	43	07.53	-67	50	51.5	18.767	0.036	0.554	0.095	...	...
D301NW-149	5	43	01.27	-67	49	48.8	18.768	0.022	0.676	0.075	...	...
D301SE-141	5	43	26.56	-67	53	07.3	18.770	0.045	0.726	0.102	...	...
D301SW-140	5	43	09.65	-67	51	17.0	18.773	0.035	-0.013	0.074	-0.145	0.191
D301SW-142	5	42	53.89	-67	51	21.1	18.774	0.028	-0.072	0.056	-0.191	0.151
D301SW-131	5	43	09.67	-67	54	08.6	18.778	0.034	1.305	0.136	...	...
D301SE-144	5	43	22.78	-67	53	11.0	18.780	0.050	0.741	0.097	...	...
D301NW-158	5	43	09.26	-67	48	53.1	18.781	0.032	-0.109	0.059	-0.478	0.126
D301SW-143	5	43	16.60	-67	54	00.8	18.782	0.031	0.083	0.054	0.163	0.166
D301SE-146	5	43	37.51	-67	52	33.1	18.784	0.038	0.687	0.100	...	...
D301SE-149	5	43	29.83	-67	51	34.5	18.786	0.043	-0.161	0.072	-0.092	0.162
D301NW-151	5	42	49.97	-67	50	01.4	18.787	0.035	0.817	0.096	...	...
D301SE-147	5	43	48.28	-67	54	30.2	18.787	0.031	0.232	0.070	...	...
D301SW-138	5	43	05.11	-67	53	23.2	18.788	0.023	0.894	0.085	...	...
D301SW-144	5	42	56.56	-67	52	58.7	18.789	0.054	0.196	0.081	-0.346	0.131
D301SW-137	5	42	51.73	-67	54	14.3	18.792	0.020	1.036	0.061	...	...
D301SE-145	5	43	49.12	-67	52	05.4	18.793	0.054	0.979	0.104	...	...
D301NW-160	5	42	50.43	-67	48	25.8	18.794	0.047	-0.111	0.070	-0.403	0.144
D301NW-159	5	42	54.94	-67	51	05.4	18.795	0.036	-0.034	0.054	-0.376	0.108
D301NW-161	5	43	09.25	-67	50	55.6	18.795	0.038	-0.112	0.062	-0.345	0.185
D301NW-156	5	42	57.29	-67	51	05.2	18.797	0.038	0.787	0.097	...	...
D301NW-162	5	42	55.78	-67	49	51.2	18.804	0.033	-0.139	0.050	-0.541	0.149
D301SW-139	5	42	45.10	-67	53	17.7	18.804	0.045	1.046	0.089	...	...
D301NE-136	5	43	37.96	-67	49	28.2	18.805	0.060	0.713	0.150	...	...
D301NW-157	5	43	16.54	-67	49	43.8	18.805	0.035	0.512	0.069	...	...
D301NW-153	5	43	06.95	-67	48	31.8	18.806	0.026	1.007	0.111	...	...
D301NW-154	5	42	54.38	-67	49	58.8	18.807	0.032	1.020	0.066	...	...
D301SW-146	5	42	55.49	-67	53	59.3	18.809	0.024	0.173	0.068	...	...
D301SW-141	5	42	58.75	-67	52	24.4	18.811	0.024	0.789	0.065	...	...
D301SE-151	5	43	37.40	-67	51	24.6	18.812	0.057	0.050	0.088	-0.054	0.192
D301NW-164	5	43	05.07	-67	47	55.1	18.816	0.033	-0.030	0.052	...	...
D301SW-145	5	43	03.96	-67	51	32.1	18.826	0.038	0.894	0.109	...	...
D301NW-168	5	43	04.26	-67	50	35.9	18.827	0.034	-0.099	0.055	-0.528	0.125
D301SW-147	5	42	52.31	-67	53	22.2	18.827	0.024	0.015	0.049	-0.022	0.139
D301NE-138	5	43	38.72	-67	49	45.3	18.838	0.064	0.542	0.141	...	...
D301SE-150	5	43	47.12	-67	52	22.7	18.838	0.038	0.948	0.114	...	...
D301NE-137	5	43	36.64	-67	50	38.1	18.841	0.060	0.839	0.178	...	...
D301SE-159	5	43	26.04	-67	51	31.6	18.845	0.057	-0.192	0.086	-0.500	0.115
D301SE-156	5	43	42.73	-67	53	47.6	18.847	0.042	0.127	0.083	-0.353	0.170
D301NW-163	5	43	13.14	-67	49	44.6	18.848	0.039	0.884	0.085	...	...
D301NE-142	5	43	53.64	-67	48	22.2	18.851	0.046	0.132	0.100	-0.089	0.227
D301NE-144	5	43	51.39	-67	49	10.6	18.851	0.067	0.068	0.112	-0.327	0.194
D301SE-160	5	43	42.61	-67	53	12.6	18.851	0.083	-0.108	0.249	-0.198	0.323
D301SE-161	5	43	41.42	-67	52	14.7	18.853	0.052	-0.145	0.081	-0.576	0.116

D301NW-169	5	42	55.66	-67	49	34.6	18.854	0.039	-0.074	0.062	-0.187	0.126
D301NW-167	5	43	23.85	-67	49	06.9	18.858	0.034	0.729	0.082	...	...
D301SE-162	5	43	31.69	-67	54	20.3	18.862	0.056	-0.004	0.079	0.043	0.184
D301NW-166	5	42	52.16	-67	48	59.0	18.864	0.038	0.862	0.083	...	...
D301SE-155	5	43	44.55	-67	54	23.2	18.865	0.054	0.770	0.099	...	...
D301NE-141	5	43	39.08	-67	48	24.5	18.866	0.086	0.530	0.156	...	...
D301SE-153	5	43	27.81	-67	52	42.9	18.873	0.033	1.076	0.133	...	...
D301SE-164	5	43	33.92	-67	53	59.8	18.873	0.046	0.194	0.075	...	...
D301NE-140	5	43	42.90	-67	50	33.9	18.874	0.056	0.746	0.174	...	...
D301SE-154	5	43	49.31	-67	54	28.8	18.880	0.038	1.141	0.146	...	...
D301SE-157	5	43	50.68	-67	52	14.3	18.882	0.061	0.908	0.133	...	...
D301SE-158	5	43	28.27	-67	52	35.5	18.884	0.065	0.802	0.135	...	...
D301NW-147	5	43	55.65	-67	50	49.1	18.885	0.070	0.556	0.138	...	...
D301NE-152	5	43	43.38	-67	48	37.3	18.885	0.069	-0.455	0.102	0.111	0.172
D301NW-177	5	43	04.70	-67	50	08.1	18.887	0.036	-0.056	0.054	-0.289	0.158
D301NE-145	5	43	54.06	-67	49	10.7	18.894	0.075	0.804	0.191	...	...
D301NW-171	5	43	19.27	-67	51	09.5	18.894	0.041	0.748	0.124	...	...
D301SE-170	5	43	48.79	-67	52	45.7	18.896	0.047	-0.050	0.074	-0.376	0.168
D301SE-163	5	43	30.60	-67	51	19.8	18.898	0.067	0.814	0.124	...	...
D301SE-166	5	43	36.46	-67	51	31.0	18.900	0.045	0.494	0.111	...	...
D301NW-179	5	43	05.15	-67	50	33.1	18.905	0.039	-0.152	0.050	-0.740	0.119
D301NW-173	5	42	50.98	-67	49	22.0	18.906	0.027	0.723	0.072	...	...
D301NE-151	5	43	55.20	-67	48	46.4	18.908	0.063	0.446	0.148	...	...
D301NW-170	5	42	46.90	-67	48	11.9	18.908	0.030	1.099	0.139	...	...
D301SW-150	5	43	01.56	-67	51	11.7	18.908	0.031	0.926	0.116	...	...
D301SW-149	5	43	19.13	-67	52	09.9	18.909	0.036	1.117	0.109	...	...
D301NW-172	5	42	56.64	-67	49	48.1	18.911	0.031	0.890	0.082	...	...
D301NE-153	5	43	27.67	-67	49	19.7	18.914	0.067	0.068	0.116	-0.681	0.159
D301NW-174	5	43	12.94	-67	49	40.1	18.915	0.029	0.902	0.093	...	...
D301NW-176	5	43	16.09	-67	49	41.5	18.916	0.032	0.766	0.094	...	...
D301SE-168	5	43	44.49	-67	53	54.9	18.919	0.051	0.759	0.119	...	...
D301SW-151	5	42	58.70	-67	52	06.6	18.921	0.029	1.021	0.108	...	...
D301NW-175	5	42	59.42	-67	47	41.8	18.923	0.031	0.943	0.117	...	...
D301SW-157	5	42	44.29	-67	51	29.7	18.924	0.034	-0.004	0.065	-0.487	0.121
D301SW-158	5	43	06.71	-67	51	13.9	18.928	0.028	0.039	0.065	...	...
D301SE-167	5	43	55.50	-67	53	32.9	18.931	0.047	1.102	0.131	...	...
D301SE-169	5	43	55.19	-67	52	32.9	18.932	0.045	0.924	0.125	...	...
D301NE-158	5	43	45.60	-67	50	52.0	18.934	0.074	-0.065	0.114	...	...
D301SE-153	5	43	08.71	-67	52	16.8	18.938	0.034	0.910	0.083	...	...
D301NW-182	5	43	09.31	-67	48	04.2	18.942	0.033	0.081	0.078	...	...
D301SW-152	5	43	06.64	-67	52	11.8	18.942	0.036	1.088	0.096	...	...
D301SE-172	5	43	25.88	-67	53	32.0	18.946	0.053	0.942	0.139	...	...
D301NW-178	5	43	12.66	-67	48	54.6	18.947	0.035	0.917	0.103	...	...
D301SE-171	5	43	23.64	-67	52	33.9	18.947	0.040	1.005	0.143	...	...
D301NE-163	5	43	56.92	-67	47	41.3	18.948	0.068	-0.015	0.123	-0.472	0.184
D301SW-160	5	42	52.06	-67	53	55.1	18.952	0.034	0.435	0.078	...	...
D301SE-173	5	43	31.29	-67	53	19.3	18.953	0.045	0.705	0.115	...	...
D301SW-155	5	42	42.73	-67	53	45.2	18.957	0.039	1.210	0.133	...	...
D301SW-165	5	43	19.74	-67	52	48.5	18.958	0.038	0.021	0.062	...	...
D301NW-180	5	42	55.72	-67	49	58.7	18.959	0.031	0.841	0.086	...	...
D301SE-178	5	43	30.38	-67	54	23.4	18.960	0.062	-0.047	0.092	...	...
D301NW-188	5	42	51.99	-67	49	58.3	18.961	0.033	-0.037	0.056	...	...
D301SW-161	5	42	48.06	-67	51	28.0	18.961	0.031	0.242	0.066	...	...
D301SW-166	5	43	16.08	-67	53	18.6	18.962	0.034	0.132	0.065	...	...
D301NE-168	5	43	49.70	-67	50	40.2	18.964	0.060	-0.167	0.103	-0.132	0.216
D301SW-156	5	42	59.68	-67	53	51.4	18.967	0.026	1.047	0.123	...	...
D301NW-181	5	43	09.02	-67	49	42.4	18.968	0.040	0.870	0.104	...	...
D301SW-168	5	42	46.21	-67	53	16.2	18.971	0.030	0.066	0.061	...	...
D301NE-167	5	43	57.80	-67	48	40.2	18.972	0.079	0.085	0.120	-0.301	0.209
D301SW-159	5	42	54.26	-67	51	21.8	18.974	0.035	1.034	0.115	...	...
D301SE-176	5	43	27.50	-67	51	55.6	18.975	0.057	0.547	0.095	...	...
D301NW-185	5	42	47.23	-67	48	38.9	18.978	0.037	0.629	0.087	...	...
D301NW-184	5	42	48.69	-67	50	51.6	18.979	0.043	0.819	0.108	...	...
D301SE-175	5	43	29.31	-67	53	25.6	18.981	0.051	0.724	0.128	...	...
D301NW-196	5	43	14.76	-67	50	19.1	18.985	0.039	-0.125	0.068	-0.323	0.157
D301NW-194	5	42	51.72	-67	47	48.8	18.989	0.039	0.105	0.070	...	...

D301SE-183	5	43	36.62	-67	54	47.0	18.990	0.072	-0.084	0.105	-0.218	0.172
D301SW-163	5	43	17.51	-67	53	43.2	18.990	0.027	0.844	0.102	...	...
D301NW-183	5	42	48.41	-67	47	55.8	18.992	0.043	1.252	0.139	...	...
D301NW-197	5	43	04.70	-67	48	32.0	18.994	0.031	0.070	0.061	...	...
D301SW-173	5	43	00.81	-67	51	30.8	18.994	0.039	-0.214	0.064	-0.115	0.179
D301SW-171	5	43	09.49	-67	51	24.2	18.996	0.031	-0.047	0.052	-0.166	0.209
D301NW-187	5	42	47.94	-67	48	11.9	18.997	0.031	0.826	0.096	...	...
D301NW-190	5	42	50.47	-67	48	11.6	18.998	0.033	0.732	0.090	...	...
D301NW-189	5	42	48.54	-67	48	07.5	18.999	0.034	0.798	0.109	...	...
D301SE-181	5	43	24.41	-67	53	44.6	18.999	0.063	0.683	0.116	...	...
D301SW-164	5	43	06.60	-67	54	15.8	18.999	0.035	1.041	0.125	...	...
D301NE-169	5	43	34.52	-67	50	16.9	19.000	0.071	0.496	0.187	...	...
D301NE-173	5	43	27.31	-67	48	26.6	19.002	0.075	0.325	0.134	...	...
D301NW-191	5	42	50.27	-67	47	54.3	19.002	0.048	0.815	0.099	...	...
D301SW-167	5	42	47.72	-67	52	59.6	19.005	0.032	1.050	0.108	...	...
D301SW-174	5	42	47.44	-67	53	37.1	19.005	0.030	0.006	0.055	...	...
D301NE-172	5	43	53.99	-67	50	55.5	19.009	0.079	0.525	0.163	...	...
D301SW-175	5	43	11.94	-67	51	14.4	19.009	0.035	0.044	0.083	-0.403	0.136
D301NE-176	5	43	40.88	-67	49	03.8	19.011	0.076	-0.162	0.113	...	...
D301NW-192	5	43	11.37	-67	47	55.9	19.013	0.035	0.909	0.095	...	...
D301NW-193	5	42	59.78	-67	50	19.5	19.016	0.035	0.804	0.102	...	...
D301SW-169	5	43	22.33	-67	51	36.6	19.016	0.025	0.727	0.084	...	...
D301NW-200	5	42	49.08	-67	48	48.8	19.018	0.029	-0.036	0.056	...	...
D301SE-190	5	43	27.31	-67	51	36.3	19.019	0.057	0.065	0.086	-0.240	0.187
D301SE-184	5	43	25.96	-67	52	51.3	19.027	0.060	0.645	0.120	...	...
D301SW-182	5	43	03.80	-67	53	35.5	19.028	0.040	-0.011	0.066	...	...
D301SW-170	5	43	11.22	-67	51	58.4	19.031	0.034	0.889	0.080	...	...
D301NW-195	5	43	08.29	-67	48	13.9	19.032	0.041	1.009	0.130	...	...
D301SW-184	5	42	55.08	-67	51	33.1	19.039	0.032	0.025	0.058	...	...
D301NW-198	5	43	23.59	-67	47	50.4	19.040	0.060	0.809	0.138	...	...
D301SE-188	5	43	44.42	-67	52	01.9	19.041	0.056	0.660	0.119	...	...
D301NW-199	5	43	08.12	-67	48	25.7	19.042	0.038	0.845	0.098	...	...
D301SW-172	5	42	59.08	-67	52	04.9	19.042	0.054	0.980	0.118	...	...
D301SW-177	5	42	52.76	-67	53	09.1	19.043	0.034	0.789	0.088	...	...
D301SW-178	5	43	07.47	-67	53	37.8	19.046	0.036	0.801	0.093	...	...
D301SW-179	5	43	17.11	-67	53	00.3	19.050	0.034	0.771	0.078	...	...
D301NW-207	5	43	17.17	-67	49	37.2	19.051	0.037	-0.093	0.064	-0.373	0.154
D301SW-180	5	43	11.93	-67	53	04.5	19.051	0.040	0.810	0.102	...	...
D301SE-200	5	43	33.58	-67	51	18.4	19.053	0.057	-0.109	0.095	-0.571	0.153
D301SW-176	5	43	17.54	-67	54	09.5	19.053	0.025	1.046	0.171	...	...
D301SE-191	5	43	45.86	-67	52	00.2	19.056	0.060	0.831	0.139	...	...
D301SW-187	5	43	01.22	-67	52	52.7	19.056	0.039	-0.119	0.066	-0.125	0.177
D301NE-180	5	43	44.07	-67	47	13.0	19.060	0.066	0.585	0.153	...	...
D301NW-209	5	43	07.05	-67	50	39.2	19.061	0.049	-0.098	0.075	-0.585	0.137
D301SE-192	5	43	25.55	-67	51	35.8	19.063	0.049	0.791	0.109	...	...
D301SE-201	5	43	33.85	-67	52	45.6	19.065	0.044	-0.100	0.078	-0.382	0.203
D301SW-188	5	42	54.40	-67	54	32.9	19.066	0.032	0.046	0.052	...	...
D301SW-181	5	42	47.17	-67	53	21.1	19.069	0.043	0.994	0.135	...	...
D301NW-201	5	42	53.77	-67	49	49.6	19.070	0.041	0.895	0.086	...	...
D301SE-202	5	43	33.96	-67	53	35.6	19.071	0.063	-0.031	0.093	-0.056	0.227
D301NW-210	5	42	57.15	-67	50	18.7	19.072	0.034	0.077	0.052	...	...
D301NW-204	5	43	21.16	-67	49	47.7	19.075	0.034	0.777	0.097	...	...
D301SE-206	5	43	34.25	-67	51	22.5	19.075	0.057	-0.058	0.088	-0.162	0.182
D301NE-183	5	43	45.90	-67	50	07.8	19.076	0.086	0.420	0.159	...	...
D301NW-203	5	43	20.48	-67	49	19.5	19.078	0.046	0.939	0.105	...	...
D301SE-193	5	43	25.42	-67	52	45.5	19.081	0.054	1.043	0.143	...	...
D301SE-196	5	43	27.28	-67	52	55.9	19.082	0.066	0.885	0.157	...	...
D301SW-183	5	43	10.68	-67	54	23.4	19.083	0.037	1.049	0.147	...	...
D301NE-195	5	43	54.36	-67	49	20.8	19.085	0.083	0.013	0.131	...	...
D301NW-206	5	42	48.92	-67	50	38.0	19.085	0.041	0.840	0.124	...	...
D301SE-194	5	43	29.36	-67	54	12.5	19.085	0.063	1.098	0.153	...	...
D301NE-191	5	43	46.50	-67	48	02.1	19.087	0.076	0.262	0.153	...	...
D301SE-205	5	43	49.94	-67	54	02.4	19.088	0.048	0.267	0.110	...	...
D301NW-205	5	42	47.26	-67	51	00.3	19.090	0.036	1.069	0.128	...	...
D301NW-214	5	43	19.68	-67	48	11.4	19.091	0.045	0.055	0.078	...	...
D301NW-208	5	43	12.27	-67	47	38.7	19.092	0.049	0.782	0.095	...	...

D301SE-211	5	43	25.50	-67	52	01.0	19.092	0.053	0.013	0.091	-0.429	0.185
D301SW-185	5	42	50.85	-67	53	39.0	19.093	0.031	1.076	0.132	...	...
D301SW-196	5	43	13.87	-67	51	25.3	19.095	0.043	0.024	0.078	...	...
D301NE-197	5	43	57.61	-67	48	58.2	19.098	0.077	-0.052	0.136	...	...
D301SE-207	5	43	47.39	-67	54	12.7	19.098	0.066	0.339	0.124	...	...
D301NE-192	5	43	29.08	-67	50	39.0	19.100	0.082	0.576	0.194	...	...
D301SW-197	5	43	18.27	-67	53	11.4	19.100	0.036	0.070	0.067	...	...
D301SE-209	5	43	27.58	-67	53	12.0	19.101	0.072	0.301	0.142	-0.647	0.219
D301SW-186	5	43	03.92	-67	52	05.6	19.101	0.027	0.970	0.122	...	...
D301NW-212	5	43	09.55	-67	50	26.4	19.103	0.050	0.708	0.106	...	...
D301NW-216	5	43	15.22	-67	47	51.4	19.104	0.051	0.280	0.086	...	...
D301NW-221	5	43	17.72	-67	49	23.4	19.107	0.052	-0.017	0.077	...	...
D301NW-225	5	43	16.55	-67	48	48.9	19.109	0.042	-0.169	0.063	...	...
D301SW-202	5	43	03.92	-67	54	36.7	19.109	0.045	0.000	0.075	-0.142	0.221
D301SE-208	5	43	26.90	-67	53	23.1	19.110	0.054	0.549	0.108	...	...
D301SE-215	5	43	29.27	-67	52	20.1	19.110	0.070	0.133	0.113	...	...
D301SE-212	5	43	35.04	-67	52	47.1	19.111	0.053	0.405	0.106	...	...
D301SW-199	5	42	48.81	-67	54	16.2	19.111	0.042	0.145	0.077	...	...
D301SW-200	5	42	42.66	-67	50	54.3	19.111	0.036	0.105	0.069	...	...
D301SW-189	5	42	50.63	-67	54	30.6	19.112	0.034	0.950	0.135	...	...
D301SW-205	5	42	43.89	-67	51	08.5	19.115	0.037	0.000	0.078	0.030	0.236
D301NW-213	5	43	01.36	-67	49	14.0	19.117	0.036	0.916	0.105	...	...
D301NW-215	5	42	55.74	-67	48	04.8	19.117	0.040	0.665	0.095	...	...
D301SW-190	5	42	50.31	-67	51	21.7	19.117	0.033	0.948	0.094	...	...
D301SE-216	5	43	28.58	-67	53	54.9	19.119	0.058	0.098	0.098	...	...
D301SW-193	5	42	50.45	-67	51	54.3	19.119	0.040	0.705	0.106	...	...
D301NE-205	5	43	46.59	-67	50	51.6	19.124	0.095	-0.145	0.144	-0.724	0.174
D301NE-209	5	43	26.24	-67	48	58.8	19.124	0.077	-0.268	0.115	-0.912	0.122
D301NW-219	5	43	23.02	-67	49	37.8	19.124	0.049	0.671	0.092	...	...
D301SW-192	5	43	12.85	-67	54	07.8	19.124	0.031	0.886	0.098	...	...
D301NW-228	5	43	10.97	-67	48	31.5	19.125	0.044	-0.111	0.072	...	...
D301SW-198	5	42	51.81	-67	53	010.0	19.125	0.042	0.621	0.106	...	...
D301NE-207	5	43	41.84	-67	48	04.1	19.128	0.087	-0.068	0.150	...	...
D301SE-210	5	43	45.90	-67	54	16.2	19.129	0.065	0.858	0.130	...	...
D301SW-195	5	42	54.72	-67	51	55.3	19.129	0.032	0.859	0.118	...	...
D301SW-208	5	43	14.96	-67	51	11.7	19.129	0.102	0.153	0.177	-1.299	0.240
D301NE-204	5	43	52.05	-67	50	49.3	19.131	0.115	0.197	0.188	...	...
D301NW-232	5	43	07.47	-67	48	15.8	19.132	0.046	-0.102	0.072	...	...
D301SW-191	5	43	00.53	-67	54	12.2	19.133	0.040	1.130	0.124	...	...
D301SE-214	5	43	23.32	-67	54	33.7	19.138	0.067	0.782	0.122	...	...
D301NW-220	5	43	07.25	-67	49	59.1	19.141	0.045	0.793	0.103	...	...
D301SE-226	5	43	27.10	-67	51	26.7	19.141	0.072	0.019	0.106	...	...
D301NW-224	5	42	58.37	-67	49	17.2	19.142	0.040	0.659	0.088	...	...
D301NW-236	5	43	02.01	-67	48	36.4	19.142	0.047	-0.025	0.071	...	...
D301SE-219	5	43	25.00	-67	53	26.9	19.143	0.061	0.604	0.106	...	...
D301SE-218	5	43	36.74	-67	51	31.2	19.144	0.093	0.636	0.187	...	...
D301SW-201	5	42	51.48	-67	51	10.6	19.146	0.046	0.881	0.126	...	...
D301SW-213	5	42	46.63	-67	54	38.4	19.146	0.033	0.342	0.072	...	...
D301NE-208	5	43	36.31	-67	49	31.8	19.148	0.079	0.394	0.185	...	...
D301SE-230	5	43	41.64	-67	51	45.0	19.149	0.075	0.046	0.113	...	...
D301SW-215	5	43	12.54	-67	51	19.9	19.149	0.031	0.342	0.053	...	...
D301NW-218	5	43	00.49	-67	49	17.4	19.153	0.042	1.330	0.161	...	...
D301SW-221	5	43	14.75	-67	52	08.9	19.153	0.045	-0.016	0.077	-0.278	0.171
D301NW-240	5	43	10.19	-67	48	30.9	19.155	0.034	-0.126	0.065	...	...
D301SW-220	5	42	43.03	-67	52	01.6	19.155	0.041	0.122	0.082	...	...
D301SE-233	5	43	28.45	-67	52	51.8	19.157	0.060	-0.358	0.086	0.178	0.200
D301SW-209	5	42	55.05	-67	51	55.1	19.157	0.035	0.793	0.114	...	...
D301NW-241	5	43	13.79	-67	51	02.8	19.162	0.039	-0.086	0.068	-0.813	0.167
D301NW-231	5	43	18.50	-67	49	48.1	19.164	0.060	0.695	0.099	...	...
D301NW-235	5	43	14.35	-67	47	31.9	19.164	0.042	0.478	0.108	...	...
D301NW-227	5	42	57.00	-67	51	07.7	19.165	0.044	0.880	0.114	...	...
D301NW-243	5	43	11.22	-67	50	27.0	19.165	0.045	-0.049	0.076	...	...
D301SW-207	5	43	08.51	-67	54	06.7	19.166	0.045	1.071	0.158	...	...
D301SW-203	5	42	46.47	-67	54	03.0	19.167	0.035	1.275	0.169	...	...
D301SW-214	5	42	44.87	-67	52	03.0	19.167	0.039	0.754	0.116	...	...
D301SE-221	5	43	30.62	-67	53	54.7	19.168	0.075	1.003	0.191	...	...

D301NW-230	5	43	05.90	-67	50	30.0	19.169	0.034	0.825	0.086	...	...
D301NW-233	5	42	58.90	-67	49	49.2	19.170	0.036	0.728	0.080	...	...
D301NW-238	5	42	50.61	-67	48	31.0	19.170	0.041	0.564	0.119	...	...
D301NW-246	5	43	00.31	-67	49	56.2	19.170	0.027	0.004	0.057	...	...
D301SE-228	5	43	49.75	-67	52	53.2	19.171	0.071	0.620	0.146	...	...
D301NW-234	5	42	49.07	-67	50	01.3	19.172	0.037	0.787	0.100	...	...
D301SE-222	5	43	43.25	-67	54	12.9	19.176	0.072	1.173	0.211	...	...
D301NW-237	5	43	16.07	-67	49	23.5	19.178	0.040	0.748	0.107	...	...
D301NW-229	5	43	07.84	-67	48	32.2	19.185	0.053	1.189	0.123	...	...
D301SW-219	5	43	04.94	-67	51	30.3	19.186	0.036	0.835	0.084	...	...
D301NW-239	5	43	09.28	-67	50	44.3	19.187	0.043	0.714	0.112	...	...
D301SW-216	5	43	16.21	-67	52	03.3	19.187	0.041	1.120	0.128	...	...
D301SE-236	5	43	27.09	-67	54	15.3	19.188	0.068	-0.120	0.099	-0.244	0.172
D301SW-218	5	42	55.58	-67	54	10.7	19.190	0.042	1.044	0.099	...	...
D301NW-244	5	42	57.88	-67	48	34.8	19.194	0.040	0.604	0.082	...	...
D301SW-225	5	42	48.79	-67	52	05.8	19.196	0.037	0.666	0.087	...	...
D301SW-224	5	42	53.85	-67	53	13.5	19.198	0.051	0.769	0.128	...	...
D301SE-234	5	43	35.74	-67	51	28.5	19.200	0.084	0.366	0.139	...	...
D301SW-223	5	43	17.35	-67	54	19.6	19.204	0.049	0.952	0.104	...	...
D301NW-254	5	42	50.11	-67	47	40.8	19.205	0.042	0.129	0.072	...	...
D301SE-238	5	43	48.84	-67	51	12.4	19.206	0.063	0.142	0.115	-0.139	0.263
D301SE-229	5	43	49.44	-67	54	07.8	19.207	0.060	1.396	0.205	...	...
D301SW-222	5	42	50.30	-67	52	10.9	19.208	0.051	1.090	0.150	...	...
D301SW-231	5	43	12.92	-67	52	18.4	19.209	0.065	0.703	0.162	...	...
D301SW-230	5	42	52.97	-67	52	01.0	19.210	0.043	0.755	0.118	...	...
D301SW-232	5	43	06.87	-67	52	27.2	19.210	0.043	0.730	0.095	...	...
D301SW-227	5	43	20.60	-67	52	25.7	19.211	0.048	0.916	0.113	...	...
D301SW-240	5	42	55.42	-67	53	24.3	19.211	0.042	0.270	0.080	...	...
D301SW-244	5	43	14.33	-67	51	28.8	19.214	0.043	0.031	0.063	...	...
D301SW-245	5	42	50.45	-67	52	48.4	19.215	0.046	0.010	0.081	...	...
D301SW-226	5	42	45.01	-67	54	06.1	19.217	0.036	1.089	0.127	...	...
D301SE-241	5	43	53.83	-67	54	20.7	19.218	0.066	0.348	0.118	...	...
D301NW-250	5	43	17.01	-67	47	59.7	19.221	0.051	0.717	0.111	...	...
D301NW-247	5	42	53.14	-67	47	35.9	19.222	0.051	0.962	0.117	...	...
D301NW-248	5	43	11.27	-67	49	40.5	19.222	0.028	0.870	0.151	...	...
D301SE-243	5	43	49.84	-67	51	50.1	19.223	0.057	0.327	0.107	...	...
D301SE-235	5	43	41.93	-67	52	01.5	19.224	0.067	0.894	0.144	...	...
D301NW-259	5	42	47.87	-67	49	17.6	19.225	0.034	0.013	0.080	...	...
D301SE-246	5	43	27.54	-67	51	33.8	19.225	0.073	-0.131	0.101	...	...
D301SW-239	5	42	53.01	-67	53	14.1	19.225	0.040	0.660	0.099	...	...
D301NW-252	5	43	10.34	-67	48	16.8	19.227	0.049	0.769	0.119	...	...
D301NW-260	5	43	10.68	-67	48	29.2	19.229	0.054	-0.040	0.085	...	...
D301SW-237	5	42	54.51	-67	53	46.1	19.229	0.038	0.870	0.129	...	...
D301NW-262	5	42	48.17	-67	48	22.0	19.230	0.047	-0.158	0.075	...	...
D301SW-241	5	43	21.30	-67	52	48.2	19.230	0.044	0.653	0.094	...	...
D301NW-251	5	42	59.16	-67	48	18.7	19.231	0.053	0.936	0.102	...	...
D301SW-235	5	42	56.52	-67	52	02.6	19.231	0.033	0.993	0.090	...	...
D301NE-232	5	43	35.59	-67	50	38.0	19.234	0.099	-0.264	0.149	...	...
D301SE-245	5	43	47.11	-67	51	49.8	19.234	0.052	0.078	0.101	...	...
D301SW-248	5	42	58.83	-67	52	29.4	19.235	0.033	-0.024	0.071	...	...
D301SE-239	5	43	30.59	-67	54	35.1	19.236	0.057	0.812	0.131	...	...
D301SE-242	5	43	50.37	-67	53	01.8	19.236	0.063	0.729	0.134	...	...
D301SW-228	5	42	44.90	-67	53	45.9	19.236	0.048	1.473	0.209	...	...
D301SW-242	5	42	45.95	-67	51	40.2	19.238	0.066	0.824	0.106	...	...
D301NW-263	5	42	51.59	-67	48	02.0	19.239	0.051	-0.008	0.082	-0.913	0.230
D301SE-240	5	43	28.75	-67	54	40.8	19.240	0.074	0.918	0.168	...	...
D301SW-238	5	42	59.84	-67	52	17.5	19.242	0.037	1.077	0.119	...	...
D301NE-229	5	43	37.99	-67	50	27.2	19.243	0.076	0.110	0.135	...	...
D301SW-251	5	43	08.28	-67	52	10.7	19.249	0.039	0.074	0.074	...	...
D301NW-265	5	43	16.38	-67	51	08.4	19.250	0.091	-0.083	0.164	-1.410	0.252
D301SW-255	5	43	20.20	-67	52	46.3	19.257	0.050	0.127	0.094	...	...
D301NW-268	5	43	00.67	-67	50	02.6	19.262	0.044	-0.070	0.073	...	...
D301NW-269	5	43	22.57	-67	48	02.3	19.266	0.052	-0.025	0.082	...	...
D301NE-234	5	43	36.10	-67	48	44.6	19.267	0.095	0.284	0.181	...	...
D301SW-247	5	43	02.31	-67	53	48.4	19.267	0.032	1.015	0.107	...	...
D301NE-235	5	43	32.89	-67	49	22.2	19.270	0.085	0.361	0.182	...	...

D301NE-236	5	43	31.53	-67	49	45.8	19.270	0.079	0.136	0.155	...	...
D301SW-259	5	43	00.23	-67	53	42.0	19.275	0.039	0.217	0.076	...	...
D301NW-264	5	43	17.53	-67	47	32.0	19.278	0.058	0.627	0.117	...	...
D301SE-248	5	43	47.78	-67	53	58.2	19.278	0.068	0.675	0.142	...	...
D301SW-254	5	42	42.44	-67	53	01.9	19.279	0.075	0.680	0.132	...	...
D301SW-260	5	43	02.62	-67	53	33.9	19.279	0.062	0.181	0.111	...	...
D301NW-277	5	42	56.40	-67	49	52.3	19.280	0.075	-0.472	0.100	...	...
D301SW-250	5	43	11.99	-67	52	07.8	19.283	0.041	0.933	0.118	...	...
D301NE-243	5	43	40.07	-67	48	39.8	19.288	0.102	-0.105	0.154	...	...
D301SW-256	5	43	17.56	-67	51	53.7	19.288	0.038	0.743	0.110	...	...
D301NW-266	5	43	12.12	-67	50	41.1	19.289	0.050	0.645	0.127	...	...
D301NW-276	5	43	23.23	-67	48	13.1	19.290	0.048	-0.090	0.077	...	...
D301SE-250	5	43	30.85	-67	52	09.8	19.293	0.067	0.649	0.164	...	...
D301SE-253	5	43	45.23	-67	54	09.4	19.293	0.068	0.340	0.123	...	...
D301SE-254	5	43	58.19	-67	52	00.9	19.293	0.066	-0.020	0.103	...	...
D301SE-258	5	43	48.75	-67	52	35.2	19.293	0.086	-0.194	0.117	-0.271	0.169
D301SW-264	5	43	03.33	-67	51	21.9	19.295	0.044	0.032	0.088	...	...
D301NW-274	5	42	48.60	-67	48	15.0	19.296	0.053	0.087	0.082	...	...
D301NE-239	5	43	45.80	-67	48	18.1	19.297	0.088	0.575	0.236	...	...
D301NW-278	5	43	19.73	-67	47	48.9	19.297	0.059	-0.148	0.091	...	...
D301NW-271	5	42	51.54	-67	49	18.3	19.306	0.049	0.543	0.145	...	...
D301SW-257	5	42	52.92	-67	53	41.0	19.307	0.044	1.159	0.148	...	...
D301NE-241	5	43	48.02	-67	48	05.0	19.311	0.091	0.653	0.208	...	...
D301SW-271	5	42	53.54	-67	51	38.7	19.311	0.033	-0.021	0.097	...	...
D301NW-280	5	43	04.90	-67	48	17.1	19.312	0.040	-0.002	0.066	...	...
D301SW-266	5	42	55.18	-67	53	56.4	19.313	0.053	0.236	0.094	...	...
D301NW-272	5	43	04.36	-67	48	52.5	19.315	0.053	0.601	0.120	...	...
D301NE-252	5	43	35.45	-67	50	56.6	19.320	0.108	-0.105	0.176	...	...
D301SE-260	5	43	22.56	-67	52	08.3	19.325	0.091	0.382	0.152	...	...
D301NW-285	5	43	11.50	-67	49	17.2	19.326	0.053	-0.043	0.077	...	...
D301SE-256	5	43	36.65	-67	54	39.5	19.327	0.067	0.632	0.141	...	...
D301SW-276	5	43	00.25	-67	51	40.7	19.329	0.048	-0.018	0.090	...	...
D301SW-274	5	43	03.78	-67	52	44.8	19.330	0.043	0.136	0.081	...	...
D301SW-263	5	42	45.23	-67	53	12.0	19.331	0.031	1.127	0.112	...	...
D301NW-275	5	42	54.06	-67	50	11.7	19.334	0.043	0.955	0.148	...	...
D301SW-275	5	42	47.10	-67	52	40.0	19.335	0.051	0.191	0.083	...	...
D301NW-287	5	42	58.15	-67	50	47.5	19.336	0.043	-0.129	0.075	...	...
D301SE-255	5	43	41.42	-67	54	37.4	19.336	0.070	0.940	0.196	...	...
D301NW-288	5	43	03.45	-67	49	57.4	19.338	0.048	-0.110	0.077	...	...
D301NE-254	5	43	35.00	-67	49	04.5	19.342	0.094	-0.042	0.146	...	...
D301NW-283	5	42	57.37	-67	50	11.7	19.344	0.057	0.445	0.107	...	...
D301SE-265	5	43	52.73	-67	54	47.3	19.346	0.098	0.109	0.151	...	...
D301SW-272	5	42	49.17	-67	53	31.5	19.347	0.040	0.825	0.138	...	...
D301SW-265	5	42	45.33	-67	54	17.9	19.350	0.038	1.156	0.161	...	...
D301NW-290	5	43	06.21	-67	49	59.4	19.355	0.049	-0.019	0.096	...	...
D301SE-271	5	43	32.02	-67	51	48.8	19.360	0.076	0.059	0.117	...	...
D301SE-270	5	43	57.37	-67	54	38.1	19.362	0.062	0.128	0.129	...	...
D301NW-289	5	43	12.37	-67	49	16.9	19.363	0.046	0.287	0.092	...	...
D301NW-293	5	42	56.68	-67	48	09.9	19.371	0.053	-0.059	0.096	...	...
D301SW-279	5	43	11.48	-67	53	09.1	19.372	0.045	0.578	0.100	...	...
D301NW-286	5	43	04.16	-67	47	37.3	19.374	0.047	0.922	0.121	...	...
D301SW-288	5	43	11.37	-67	51	37.0	19.374	0.074	-0.100	0.111	...	...
D301SE-263	5	43	30.74	-67	53	30.9	19.377	0.066	1.241	0.220	...	...
D301SW-277	5	42	52.41	-67	53	52.1	19.377	0.039	1.034	0.148	...	...
D301SW-284	5	43	05.07	-67	52	17.7	19.378	0.059	0.278	0.105	...	...
D301SW-287	5	43	06.37	-67	52	46.2	19.379	0.044	0.043	0.091	...	...
D301NW-291	5	42	45.34	-67	47	45.0	19.380	0.048	0.424	0.103	...	...
D301SE-277	5	43	38.77	-67	54	44.7	19.380	0.083	0.028	0.138	...	...
D301SW-280	5	43	05.52	-67	52	15.5	19.384	0.047	0.723	0.122	...	...
D301NE-264	5	43	47.13	-67	47	25.8	19.385	0.092	0.005	0.172	...	...
D301SW-289	5	43	00.62	-67	53	34.9	19.387	0.075	0.138	0.136	...	...
D301NE-262	5	43	30.68	-67	49	36.3	19.389	0.090	0.214	0.183	...	...
D301NW-292	5	43	10.50	-67	48	03.1	19.389	0.038	0.599	0.094	...	...
D301NW-296	5	42	59.47	-67	50	23.0	19.389	0.056	0.055	0.091	...	...
D301NW-297	5	42	48.36	-67	48	56.4	19.394	0.057	0.096	0.099	...	...
D301SE-273	5	43	22.71	-67	52	26.2	19.396	0.064	0.516	0.151	...	...

D301NW-302	5	43	18.11	-67	49	25.6	19.397	0.052	-0.204	0.083	...	...
D301NW-303	5	42	48.43	-67	50	51.8	19.398	0.064	-0.187	0.104	...	...
D301NW-301	5	42	50.15	-67	49	58.3	19.402	0.034	0.040	0.066	...	...
D301NW-304	5	42	54.54	-67	47	54.6	19.407	0.049	-0.045	0.085	...	...
D301SW-285	5	42	53.13	-67	52	01.8	19.408	0.051	0.802	0.142	...	...
D301SW-294	5	43	14.27	-67	53	04.8	19.409	0.046	-0.053	0.086	...	...
D301NW-295	5	43	03.83	-67	48	14.5	19.412	0.048	0.673	0.134	...	...
D301NW-300	5	43	02.50	-67	48	48.3	19.416	0.062	0.385	0.121	...	...
D301SW-299	5	42	45.13	-67	51	49.4	19.422	0.037	0.000	0.068	...	...
D301NW-309	5	43	07.40	-67	49	47.4	19.426	0.058	-0.078	0.092	...	...
D301SE-287	5	43	56.16	-67	52	34.2	19.429	0.070	0.440	0.169	...	...
D301NW-307	5	43	18.91	-67	49	17.0	19.434	0.055	0.280	0.104	...	...
D301SE-294	5	43	23.00	-67	52	22.0	19.434	0.089	-0.004	0.125	...	...
D301SW-298	5	43	19.50	-67	53	36.5	19.436	0.071	0.399	0.134	...	...
D301NW-310	5	43	12.76	-67	49	50.0	19.442	0.045	-0.013	0.083	...	...
D301NE-285	5	43	31.26	-67	48	05.3	19.446	0.104	-0.276	0.160	...	...
D301SE-290	5	43	46.16	-67	52	15.1	19.447	0.082	0.591	0.146	...	...
D301SE-295	5	43	47.91	-67	52	10.2	19.453	0.075	0.085	0.130	-0.489	0.266
D301SW-297	5	43	17.90	-67	54	00.7	19.454	0.052	0.835	0.156	...	...
D301NW-305	5	42	55.52	-67	50	06.4	19.456	0.059	0.858	0.163	...	...
D301NW-314	5	42	58.90	-67	50	37.2	19.456	0.062	-0.190	0.103	...	...
D301SW-295	5	43	02.57	-67	52	16.7	19.461	0.046	1.084	0.171	...	...
D301SW-301	5	43	11.89	-67	53	08.3	19.462	0.054	0.173	0.103	...	...
D301NW-306	5	43	20.04	-67	48	12.3	19.464	0.059	0.979	0.180	...	...
D301NW-315	5	43	19.01	-67	49	06.4	19.466	0.081	0.011	0.130	...	...
D301SW-303	5	43	04.06	-67	51	30.8	19.468	0.068	0.133	0.124	...	...
D301NW-316	5	42	46.05	-67	48	55.7	19.469	0.059	0.092	0.097	...	...
D301SE-299	5	43	33.56	-67	54	17.1	19.470	0.075	-0.128	0.120	...	...
D301SW-300	5	42	44.61	-67	54	00.7	19.472	0.042	0.646	0.123	...	...
D301NW-319	5	43	18.06	-67	51	06.9	19.476	0.058	-0.012	0.108	-0.125	0.329
D301SE-300	5	43	37.23	-67	51	38.5	19.483	0.084	0.171	0.129	...	...
D301NW-321	5	42	58.31	-67	50	24.6	19.484	0.058	0.002	0.097	...	...
D301NW-325	5	43	05.61	-67	50	36.3	19.485	0.055	-0.132	0.086	...	...
D301SE-303	5	43	33.01	-67	51	37.6	19.485	0.092	-0.245	0.124	...	...
D301NW-323	5	42	52.19	-67	50	43.0	19.486	0.055	-0.102	0.099	...	...
D301SE-301	5	43	28.18	-67	54	33.4	19.488	0.119	0.099	0.183	...	...
D301NW-322	5	43	04.37	-67	49	23.3	19.489	0.057	0.037	0.087	...	...
D301NW-324	5	42	58.33	-67	48	03.0	19.489	0.056	-0.031	0.102	...	...
D301NW-318	5	43	12.00	-67	50	44.5	19.494	0.047	0.499	0.170	...	...
D301NE-296	5	43	43.54	-67	49	58.8	19.496	0.105	-0.163	0.167	...	...
D301SW-308	5	43	05.89	-67	51	31.2	19.496	0.054	-0.139	0.087	...	...
D301NW-317	5	42	50.48	-67	47	42.4	19.500	0.052	0.764	0.123	...	...
D301SW-304	5	42	44.29	-67	53	28.1	19.500	0.051	0.847	0.167	...	...
D301SE-302	5	43	52.22	-67	51	51.3	19.507	0.082	0.380	0.157	...	...
D301NW-328	5	42	58.35	-67	48	09.1	19.511	0.060	0.301	0.129	...	...
D301SW-312	5	42	51.59	-67	51	11.8	19.521	0.072	0.019	0.117	...	...
D301NW-329	5	42	58.50	-67	48	05.7	19.522	0.093	0.522	0.215	...	...
D301NW-331	5	43	14.88	-67	50	51.2	19.522	0.058	0.036	0.123	...	...
D301NW-334	5	43	14.27	-67	49	49.4	19.523	0.062	-0.069	0.104	...	...
D301SW-307	5	42	42.49	-67	53	10.8	19.523	0.070	0.505	0.141	...	...
D301NW-327	5	42	50.72	-67	48	58.8	19.524	0.062	0.695	0.130	...	...
D301SW-315	5	42	58.27	-67	51	28.5	19.525	0.047	-0.076	0.086	...	...
D301NE-301	5	43	53.36	-67	47	25.1	19.526	0.121	-0.196	0.196	...	...
D301SE-307	5	43	22.88	-67	52	52.6	19.526	0.085	0.038	0.139	...	...
D301NW-333	5	43	10.74	-67	47	27.6	19.527	0.061	0.129	0.099	...	...
D301SW-306	5	42	49.24	-67	53	41.5	19.527	0.045	0.944	0.154	...	...
D301SE-305	5	43	55.62	-67	51	24.7	19.530	0.077	0.546	0.146	...	...
D301NW-336	5	43	08.76	-67	47	55.4	19.533	0.068	0.098	0.098	...	...
D301SW-314	5	43	01.52	-67	53	26.1	19.537	0.046	0.196	0.083	...	...
D301NW-337	5	43	18.76	-67	49	20.9	19.539	0.068	0.088	0.115	...	...
D301SE-310	5	43	38.94	-67	53	13.7	19.543	0.093	0.107	0.150	...	...
D301NE-304	5	43	40.76	-67	49	15.7	19.546	0.118	-0.016	0.217	...	...
D301NW-339	5	42	51.73	-67	49	31.1	19.546	0.063	-0.043	0.104	...	...
D301SE-309	5	43	51.53	-67	51	43.4	19.548	0.111	0.267	0.173	...	...
D301NW-341	5	43	18.75	-67	49	06.3	19.551	0.088	-0.100	0.135	...	...
D301NW-340	5	43	19.87	-67	49	30.1	19.553	0.054	0.016	0.097	...	...

D301SW-324	5	42	47.30	-67	54	27.7	19.553	0.055	0.087	0.114	...	...
D301NE-309	5	43	53.72	-67	48	47.7	19.555	0.126	-0.282	0.186	...	...
D301SW-328	5	42	49.88	-67	54	40.4	19.557	0.805	-0.348	0.935	...	...
D301SW-321	5	43	01.60	-67	52	58.0	19.558	0.053	0.351	0.117	...	...
D301SW-320	5	42	52.38	-67	53	50.6	19.561	0.040	0.451	0.101	...	...
D301SE-312	5	43	53.68	-67	51	20.7	19.566	0.082	0.331	0.145	...	...
D301SE-315	5	43	41.90	-67	54	32.1	19.566	0.086	-0.061	0.133	...	...
D301SW-326	5	43	00.26	-67	51	10.8	19.568	0.042	0.169	0.099	...	...
D301SW-331	5	42	52.46	-67	54	32.6	19.572	0.053	-0.065	0.103	...	...
D301SW-327	5	42	43.25	-67	50	56.1	19.574	0.047	0.075	0.090	...	...
D301SW-325	5	42	52.26	-67	54	27.9	19.579	0.066	0.617	0.134	...	...
D301NW-343	5	42	50.37	-67	50	21.4	19.582	0.062	0.280	0.118	...	...
D301SE-319	5	43	33.37	-67	52	26.8	19.585	0.099	0.051	0.178	...	...
D301SE-324	5	43	55.65	-67	53	37.3	19.585	0.086	-0.097	0.137	...	...
D301NW-345	5	42	45.39	-67	50	36.7	19.586	0.055	-0.088	0.096	...	...
D301SW-330	5	42	53.16	-67	51	16.9	19.590	0.073	0.369	0.156	...	...
D301SE-314	5	43	42.09	-67	53	12.3	19.592	0.069	0.771	0.207	...	...
D301SW-335	5	42	57.04	-67	54	17.2	19.593	0.050	-0.032	0.108	...	...
D301NW-347	5	42	49.53	-67	50	24.9	19.595	0.056	-0.056	0.109	...	...
D301SE-321	5	43	54.99	-67	51	17.0	19.596	0.077	0.255	0.158	...	...
D301NW-346	5	43	23.85	-67	47	57.7	19.597	0.048	0.105	0.098	...	...
D301NE-314	5	43	50.31	-67	47	42.6	19.598	0.121	0.043	0.204	...	...
D301SE-327	5	43	26.74	-67	54	27.7	19.600	0.079	0.059	0.143	...	...
D301SE-331	5	43	33.90	-67	54	08.2	19.601	0.073	-0.280	0.111	...	...
D301NE-321	5	43	25.57	-67	50	39.5	19.604	0.120	-0.099	0.209	...	...
D301SE-334	5	43	44.79	-67	53	36.5	19.607	0.098	-0.289	0.147	...	...
D301SE-333	5	43	44.62	-67	51	07.0	19.612	0.113	-0.163	0.150	...	...
D301NE-320	5	43	27.09	-67	48	57.2	19.618	0.111	0.248	0.209	...	...
D301NW-344	5	43	15.81	-67	50	40.2	19.624	0.062	0.894	0.158	...	...
D301NW-350	5	42	51.50	-67	47	29.6	19.624	0.056	0.130	0.092	...	...
D301SW-343	5	43	15.46	-67	54	01.1	19.628	0.065	0.270	0.115	...	...
D301SW-340	5	43	16.65	-67	51	37.6	19.630	0.055	0.469	0.130	...	...
D301NW-351	5	42	59.61	-67	50	45.4	19.633	0.063	-0.008	0.108	...	...
D301SW-346	5	43	02.37	-67	51	19.6	19.634	0.053	0.066	0.121	...	...
D301NW-352	5	43	24.89	-67	48	25.9	19.638	0.071	-0.073	0.128	...	...
D301SW-349	5	43	20.40	-67	52	27.6	19.644	0.064	0.170	0.113	...	...
D301NE-327	5	43	25.01	-67	49	19.5	19.646	0.129	0.002	0.232	...	...
D301NW-355	5	43	12.77	-67	50	42.4	19.653	0.075	0.034	0.130	...	...
D301SW-347	5	42	42.80	-67	51	19.5	19.653	0.060	0.425	0.116	...	...
D301NW-358	5	43	08.03	-67	47	30.7	19.655	0.090	-0.022	0.134	...	...
D301SE-343	5	43	26.64	-67	52	18.8	19.660	0.111	-0.141	0.160	...	...
D301SW-352	5	42	53.59	-67	54	06.1	19.663	0.082	0.351	0.136	...	...
D301NW-359	5	43	23.17	-67	50	53.2	19.667	0.070	0.126	0.110	...	...
D301SW-354	5	42	56.98	-67	53	57.2	19.669	0.055	0.309	0.104	...	...
D301NW-353	5	42	58.76	-67	50	12.9	19.673	0.055	0.717	0.181	...	...
D301NW-360	5	43	13.09	-67	48	05.5	19.673	0.057	0.140	0.145	...	...
D301SE-344	5	43	51.33	-67	53	50.2	19.680	0.087	0.254	0.164	...	...
D301NW-361	5	43	18.42	-67	48	03.3	19.682	0.078	0.113	0.139	...	...
D301SW-356	5	43	16.85	-67	51	19.7	19.683	0.054	0.317	0.108	...	...
D301SW-359	5	42	45.69	-67	53	58.1	19.684	0.064	0.250	0.127	...	...
D301NW-364	5	43	16.72	-67	51	05.8	19.686	0.072	-0.025	0.106	...	...
D301SW-364	5	43	17.68	-67	53	06.3	19.687	0.067	-0.134	0.097	...	...
D301NW-363	5	42	49.46	-67	47	38.7	19.688	0.075	0.044	0.130	...	...
D301SW-360	5	43	20.33	-67	52	26.2	19.689	0.070	0.167	0.126	...	...
D301NW-366	5	43	19.11	-67	51	00.0	19.691	0.082	-0.105	0.118	...	...
D301NW-356	5	43	00.30	-67	49	13.6	19.693	0.057	0.943	0.173	...	...
D301NW-357	5	42	51.74	-67	49	37.2	19.693	0.055	0.867	0.136	...	...
D301NW-367	5	42	48.29	-67	48	49.8	19.694	0.068	-0.030	0.107	...	...
D301NW-368	5	43	19.10	-67	50	45.3	19.698	0.092	0.047	0.141	...	...
D301SW-367	5	42	47.22	-67	51	29.7	19.701	0.049	-0.003	0.092	...	...
D301SW-365	5	43	17.35	-67	52	31.5	19.702	0.043	0.171	0.131	...	...
D301SE-349	5	43	33.68	-67	52	35.8	19.704	0.088	0.286	0.198	...	...
D301SW-361	5	43	04.46	-67	53	55.9	19.704	0.057	0.520	0.138	...	...
D301NW-370	5	42	59.42	-67	49	10.2	19.707	0.067	0.172	0.106	...	...
D301NE-340	5	43	32.36	-67	50	47.1	19.709	0.161	-0.078	0.233	...	...
D301SW-369	5	43	11.04	-67	51	12.9	19.718	0.080	-0.066	0.119	-0.255	0.334

D301SE-350	5	43	34.50	-67	52	47.6	19.719	0.084	0.349	0.172	...	...
D301NW-373	5	43	17.77	-67	51	01.5	19.720	0.114	-0.020	0.195	...	...
D301SE-353	5	43	30.66	-67	53	49.7	19.721	0.085	-0.139	0.127	...	...
D301NW-365	5	42	59.22	-67	50	13.0	19.724	0.057	0.693	0.213	...	...
D301SE-352	5	43	32.48	-67	51	54.8	19.725	0.119	0.025	0.175	...	...
D301SW-370	5	43	09.32	-67	51	30.2	19.727	0.056	-0.021	0.110	...	...
D301NW-375	5	42	54.53	-67	47	43.1	19.732	0.064	0.028	0.155	...	...
D301SW-372	5	42	43.54	-67	54	25.9	19.736	0.075	0.008	0.132	...	...
D301NW-377	5	43	07.27	-67	48	46.8	19.742	0.073	0.029	0.135	...	...
D301NW-379	5	43	08.92	-67	49	30.4	19.749	0.068	0.133	0.113	...	...
D301SW-377	5	43	10.07	-67	53	41.5	19.749	0.057	-0.217	0.083	...	...
D301NE-348	5	43	34.64	-67	50	47.4	19.751	0.134	-0.042	0.249	...	...
D301NW-383	5	43	00.01	-67	48	19.3	19.766	0.080	0.089	0.119	...	...
D301SE-361	5	43	39.49	-67	52	25.0	19.767	0.107	0.085	0.175	...	...
D301SE-362	5	43	34.76	-67	53	43.7	19.770	0.071	0.078	0.133	...	...
D301NW-387	5	42	51.46	-67	49	04.1	19.773	0.074	-0.107	0.118	...	...
D301SE-364	5	43	42.59	-67	53	20.0	19.773	0.092	-0.220	0.134	...	...
D301NW-386	5	43	16.83	-67	49	46.6	19.776	0.078	0.020	0.139	...	...
D301NW-389	5	42	50.57	-67	48	27.0	19.777	0.109	-0.215	0.145	...	...
D301NE-351	5	43	51.22	-67	50	17.7	19.779	0.119	-0.270	0.195	...	...
D301SW-378	5	43	13.40	-67	51	55.2	19.783	0.067	0.506	0.171	...	...
D301SW-379	5	42	49.78	-67	53	53.6	19.797	0.047	0.815	0.172	...	...
D301SW-385	5	43	14.99	-67	52	06.7	19.802	0.054	0.076	0.112	...	...
D301SW-384	5	43	11.44	-67	52	38.1	19.804	0.070	0.344	0.147	...	...
D301NW-391	5	43	02.16	-67	50	17.3	19.806	0.121	-0.019	0.172	...	...
D301SW-388	5	43	03.99	-67	54	18.5	19.806	0.080	0.063	0.129	...	...
D301SW-387	5	43	18.01	-67	52	49.1	19.807	0.085	0.100	0.133	...	...
D301SW-389	5	43	13.14	-67	51	50.2	19.810	0.068	0.121	0.147	...	...
D301NW-392	5	43	03.43	-67	48	59.3	19.811	0.079	0.102	0.138	...	...
D301SW-394	5	43	15.50	-67	53	41.0	19.812	0.073	0.008	0.119	...	...
D301SW-396	5	42	57.60	-67	51	23.6	19.813	0.064	-0.008	0.122	...	...
D301SW-391	5	43	08.93	-67	52	23.1	19.817	0.055	0.187	0.116	...	...
D301SE-369	5	43	45.07	-67	51	58.1	19.818	0.100	0.219	0.163	...	...
D301SE-377	5	43	48.02	-67	53	29.3	19.823	0.124	-0.351	0.174	...	...
D301NW-393	5	43	14.86	-67	50	55.8	19.826	0.079	-0.005	0.120	...	...
D301NW-395	5	43	16.52	-67	51	02.8	19.827	0.077	-0.047	0.123	...	...
D301SW-397	5	43	03.73	-67	52	21.6	19.837	0.053	0.264	0.141	...	...
D301SE-380	5	43	51.00	-67	53	23.7	19.839	0.101	-0.143	0.159	...	...
D301SE-385	5	43	46.68	-67	51	17.5	19.850	0.136	-0.253	0.192	...	...
D301NW-399	5	43	17.39	-67	47	59.5	19.855	0.084	0.207	0.139	...	...
D301NW-401	5	43	07.78	-67	49	23.1	19.856	0.058	-0.087	0.103	...	...
D301NW-398	5	42	46.10	-67	49	33.6	19.857	0.070	0.264	0.121	...	...
D301NW-402	5	42	50.43	-67	49	06.2	19.870	0.078	0.134	0.151	...	...
D301NW-408	5	42	50.31	-67	49	45.0	19.871	0.074	-0.320	0.105	...	...
D301SE-387	5	43	47.01	-67	52	16.6	19.872	0.099	-0.038	0.171	...	...
D301NW-404	5	43	07.00	-67	50	50.2	19.873	0.070	0.108	0.140	...	...
D301SW-408	5	43	01.83	-67	51	53.6	19.875	0.077	0.029	0.152	...	...
D301SW-404	5	42	50.22	-67	53	26.3	19.882	0.059	0.371	0.127	...	...
D301SW-409	5	42	52.65	-67	54	15.7	19.885	0.060	0.152	0.182	...	...
D301SE-388	5	43	46.26	-67	53	23.0	19.890	0.129	-0.041	0.195	-0.778	0.248
D301SE-390	5	43	39.12	-67	52	23.9	19.895	0.114	-0.194	0.170	...	...
D301NW-411	5	43	22.60	-67	50	53.1	19.896	0.092	0.036	0.164	...	...
D301SW-416	5	42	44.60	-67	51	28.5	19.897	0.074	-0.220	0.123	...	...
D301SE-392	5	43	57.38	-67	52	31.8	19.908	0.115	-0.132	0.168	...	...
D301NW-409	5	42	48.59	-67	50	35.0	19.910	0.074	0.434	0.168	...	...
D301NW-414	5	43	10.13	-67	48	10.1	19.910	0.106	-0.068	0.147	...	...
D301SW-411	5	42	56.77	-67	54	10.7	19.912	0.063	0.506	0.200	...	...
D301SE-389	5	43	50.27	-67	53	10.5	19.915	0.116	0.281	0.230	...	...
D301SW-422	5	42	52.06	-67	53	11.9	19.917	0.074	-0.214	0.119	...	...
D301NW-420	5	43	21.47	-67	50	47.8	19.920	0.091	-0.254	0.128	...	...
D301NW-416	5	42	50.13	-67	48	01.0	19.921	0.063	0.056	0.137	...	...
D301SE-393	5	43	31.07	-67	51	11.7	19.922	0.122	0.016	0.205	...	...
D301NW-417	5	43	04.84	-67	47	39.3	19.928	0.083	0.105	0.155	...	...
D301NW-421	5	42	48.59	-67	47	30.6	19.929	0.078	-0.052	0.144	...	...
D301NW-412	5	42	47.81	-67	50	51.1	19.930	0.076	0.598	0.175	...	...
D301SW-418	5	43	15.29	-67	53	56.9	19.931	0.080	0.294	0.181	...	...

D301SE-396	5	43	27.67	-67	54	25.7	19.942	0.137	0.118	0.199	...	...
D301NW-429	5	43	21.28	-67	49	50.6	19.944	0.087	-0.200	0.141	...	...
D301NW-425	5	43	20.56	-67	49	38.2	19.948	0.093	0.078	0.162	...	...
D301SE-400	5	43	23.38	-67	52	09.9	19.949	0.097	-0.074	0.171	...	...
D301SW-425	5	42	45.67	-67	53	21.4	19.957	0.053	0.303	0.155	...	...
D301SW-430	5	42	45.86	-67	54	27.9	19.966	0.067	0.105	0.137	...	...
D301NW-431	5	43	05.07	-67	49	04.8	19.969	0.089	-0.021	0.137	...	...
D301NW-435	5	43	23.93	-67	50	19.0	19.972	0.091	-0.146	0.142	...	...
D301SW-439	5	42	51.18	-67	51	22.7	19.973	0.073	-0.075	0.123	...	...
D301SE-403	5	43	41.69	-67	51	38.8	19.975	0.114	0.246	0.211	...	...
D301SW-440	5	43	14.22	-67	53	03.0	19.975	0.060	-0.110	0.122	...	...
D301NW-433	5	42	55.41	-67	48	25.2	19.978	0.087	0.018	0.159	...	...
D301NW-434	5	42	59.99	-67	50	37.3	19.979	0.079	0.016	0.120	...	...
D301SW-442	5	43	04.32	-67	51	22.0	19.992	0.077	0.018	0.121	...	...
D301SW-445	5	43	19.59	-67	51	33.7	19.992	0.075	-0.105	0.127	...	...
D301SE-408	5	43	20.45	-67	54	45.5	20.004	0.124	-0.292	0.181	...	...
D301SW-452	5	42	51.52	-67	51	42.4	20.008	0.080	-0.223	0.125	...	...
D301SW-449	5	42	56.13	-67	53	03.5	20.014	0.087	0.182	0.156	...	...
D301NW-444	5	43	20.57	-67	49	21.8	20.018	0.094	-0.012	0.152	...	...
D301NW-441	5	42	58.82	-67	49	11.8	20.019	0.056	0.217	0.122	...	...
D301SW-454	5	43	09.79	-67	53	57.8	20.026	0.077	0.128	0.121	...	...
D301SW-458	5	43	09.86	-67	52	17.9	20.029	0.096	-0.083	0.169	...	...
D301SW-457	5	42	51.10	-67	51	40.1	20.033	0.059	0.022	0.153	...	...
D301SW-453	5	43	16.43	-67	54	24.9	20.036	0.097	0.355	0.173	...	...
D301NW-448	5	42	46.59	-67	47	25.2	20.039	0.090	0.184	0.166	...	...
D301NW-445	5	42	54.75	-67	48	14.7	20.043	0.136	0.512	0.229	...	...
D301SW-462	5	42	45.46	-67	51	47.3	20.047	0.087	0.094	0.150	...	...
D301SW-460	5	42	44.28	-67	54	04.0	20.050	0.066	0.285	0.147	...	...
D301SW-463	5	42	59.54	-67	54	12.6	20.060	0.074	0.251	0.173	...	...
D301SW-466	5	42	46.05	-67	52	30.8	20.061	0.078	0.162	0.147	...	...
D301SW-468	5	42	46.26	-67	51	28.8	20.072	0.077	0.188	0.142	...	...
D301NW-458	5	42	47.85	-67	50	58.4	20.087	0.092	0.138	0.169	...	...
D301SW-475	5	43	04.74	-67	52	07.4	20.088	0.120	0.051	0.182	...	...
D301NW-459	5	42	53.56	-67	48	18.2	20.090	0.101	-0.083	0.144	...	...
D301SW-478	5	42	47.02	-67	51	48.9	20.106	0.088	0.083	0.160	...	...
D301SW-482	5	43	13.99	-67	53	32.3	20.111	0.080	-0.185	0.121	...	...
D301SE-423	5	43	28.43	-67	54	34.5	20.123	0.213	-0.035	0.312	...	...
D301NW-465	5	43	09.31	-67	50	51.6	20.126	0.130	-0.120	0.191	...	...
D301SW-485	5	43	18.26	-67	51	13.6	20.134	0.059	0.279	0.173	...	...
D301SW-487	5	43	07.03	-67	53	59.3	20.147	0.082	0.372	0.219	...	...
D301SW-490	5	43	12.92	-67	53	46.7	20.147	0.077	0.250	0.179	...	...
D301SW-491	5	43	11.16	-67	54	18.9	20.150	0.096	0.199	0.237	...	...
D301SW-497	5	42	48.65	-67	52	35.4	20.151	0.100	-0.201	0.171	...	...
D301SE-428	5	43	46.76	-67	53	24.5	20.161	0.150	-0.314	0.204	...	...
D301SW-495	5	43	17.40	-67	54	00.7	20.163	0.073	0.243	0.148	...	...
D301NW-478	5	42	59.42	-67	50	43.3	20.197	0.095	-0.118	0.170	...	...
D301SW-508	5	42	58.95	-67	52	00.3	20.208	0.078	0.155	0.150	...	...
D301SW-515	5	42	58.68	-67	52	46.5	20.229	0.060	-0.148	0.133	...	...
D301SW-518	5	42	51.57	-67	53	35.0	20.245	0.118	0.047	0.172	...	...
D301SE-431	5	43	33.00	-67	52	40.8	20.258	0.175	0.060	0.299	...	...
D301SW-527	5	42	48.82	-67	52	07.6	20.258	0.074	-0.274	0.128	...	...
D301SW-520	5	42	58.23	-67	54	13.6	20.260	0.090	0.083	0.163	...	...
D301SW-535	5	42	45.34	-67	53	35.9	20.285	0.115	-0.395	0.189	...	...
D301SW-528	5	42	59.01	-67	52	39.4	20.293	0.064	0.253	0.205	...	...
D301SW-521	5	42	47.75	-67	54	39.7	20.301	0.145	1.027	0.605	...	...
D301NW-488	5	43	17.38	-67	50	15.6	20.311	0.118	0.277	0.254	...	...
D301SW-539	5	42	55.33	-67	54	33.8	20.322	0.104	-0.104	0.190	...	...
D301SW-550	5	43	11.40	-67	54	08.9	20.374	0.071	0.085	0.166	...	...
D301SW-560	5	43	00.58	-67	52	20.0	20.413	0.081	0.076	0.191	...	...
D301SW-562	5	43	12.29	-67	51	11.3	20.415	0.135	0.001	0.219	...	...
D301SW-568	5	42	49.25	-67	51	42.0	20.422	0.117	-0.102	0.202	...	...
D301NW-502	5	43	15.85	-67	49	35.5	20.447	0.130	-0.138	0.200	...	...
D301SW-579	5	43	17.66	-67	51	15.2	20.496	0.146	0.260	0.288	...	...

Table 4i

D10b-1	4	52	23.97	-69	19	59.3	12.497	0.003	0.682	0.009	0.244	0.015
D10b-2	4	52	18.24	-69	20	11.9	12.979	0.004	-0.120	0.006	-0.960	0.007
D10b-3	4	52	09.15	-69	20	35.7	13.681	0.004	-0.152	0.006	-0.996	0.007
D10b-4	4	52	21.33	-69	20	29.7	14.136	0.002	-0.115	0.006	-0.979	0.008
D10b-5	4	52	27.58	-69	21	41.8	14.246	0.056	-0.284	0.067	-0.883	0.070
D10b-6	4	52	12.56	-69	19	59.6	14.284	0.003	-0.120	0.005	-0.984	0.005
D10b-7	4	52	09.57	-69	20	14.2	14.593	0.004	-0.125	0.007	-0.979	0.009
D10b-8	4	52	11.91	-69	20	25.3	14.622	0.004	-0.145	0.007	-0.967	0.009
D10b-9	4	52	15.94	-69	22	03.2	14.713	0.003	-0.151	0.005	-0.981	0.006
D10b-10	4	52	10.36	-69	20	13.2	14.824	0.010	-0.130	0.016	-0.975	0.020
D10b-11	4	52	20.87	-69	20	13.5	14.828	0.004	-0.119	0.008	-0.869	0.009
D10b-12	4	52	02.46	-69	20	33.1	14.970	0.007	-0.170	0.010	-0.946	0.011
D10b-13	4	52	14.80	-69	21	56.5	14.974	0.005	-0.140	0.008	-0.960	0.010
D10b-14	4	52	20.06	-69	20	32.5	15.028	0.005	-0.181	0.009	-1.017	0.011
D10b-15	4	52	05.40	-69	19	59.6	15.051	0.003	-0.148	0.007	-1.005	0.010
D10b-16	4	52	09.63	-69	20	16.5	15.291	0.005	-0.133	0.010	-0.855	0.014
D10b-17	4	52	27.56	-69	20	05.0	15.333	0.005	-0.124	0.009	-0.806	0.013
D10b-18	4	52	05.89	-69	20	26.8	15.437	0.043	-0.243	0.049	-0.648	0.188
D10b-21	4	52	19.30	-69	20	49.5	15.509	0.013	-0.173	0.019	-0.824	0.022
D10b-19	4	52	23.98	-69	21	20.1	15.519	0.006	0.757	0.012	0.509	0.030
D10b-20	4	52	07.02	-69	20	32.7	15.666	0.036	4.048	0.160	...	...
D10b-22	4	52	29.26	-69	21	48.2	15.675	0.007	-0.045	0.012	-0.902	0.017
D10b-23	4	52	00.72	-69	20	49.4	15.682	0.006	0.044	0.010	-0.902	0.015
D10b-24	4	52	09.32	-69	21	00.4	15.774	0.006	0.886	0.015	0.636	0.054
D10b-25	4	52	34.37	-69	19	33.3	15.812	0.005	-0.007	0.010	-0.895	0.014
D10b-26	4	52	22.23	-69	21	36.3	15.822	0.006	-0.128	0.010	-0.830	0.013
D10b-27	4	52	10.75	-69	20	35.0	15.980	0.007	-0.144	0.013	-0.886	0.016
D10b-29	4	52	17.88	-69	20	15.5	16.018	0.012	-0.120	0.021	-0.822	0.024
D10b-28	4	52	27.50	-69	21	42.2	16.035	0.278	1.126	0.486	-1.677	0.796
D10b-30	4	52	09.36	-69	19	59.2	16.088	0.007	-0.153	0.012	-0.925	0.016
D10b-32	4	52	29.66	-69	21	34.7	16.157	0.008	0.646	0.018	0.082	0.036
D10b-33	4	52	00.15	-69	20	14.5	16.191	0.010	-0.085	0.016	-0.633	0.020
D10b-34	4	52	11.10	-69	19	25.9	16.192	0.009	-0.061	0.016	-0.691	0.021
D10b-35	4	52	18.84	-69	20	45.1	16.224	0.011	-0.130	0.022	-0.940	0.026
D10b-36	4	52	25.14	-69	21	39.8	16.402	0.019	1.124	0.033	0.975	0.127
D10b-37	4	52	19.57	-69	20	34.5	16.417	0.011	-0.123	0.016	-0.796	0.020
D10b-38	4	52	30.26	-69	19	41.2	16.455	0.010	0.020	0.017	-0.812	0.021
D10b-39	4	52	01.09	-69	20	22.8	16.494	0.011	-0.157	0.018	-0.884	0.020
D10b-40	4	52	25.84	-69	20	49.5	16.508	0.018	-0.098	0.037	-0.812	0.042
D10b-42	4	52	10.14	-69	20	04.5	16.541	0.015	0.015	0.051	-0.680	0.063
D10b-43	4	52	22.25	-69	20	18.8	16.542	0.010	-0.145	0.017	-0.919	0.022
D10b-41	4	52	06.36	-69	18	56.0	16.566	0.008	0.884	0.021	0.461	0.081
D10b-44	4	52	00.85	-69	20	39.0	16.651	0.008	0.830	0.029	0.389	0.088
D10b-46	4	52	07.35	-69	20	30.0	16.652	0.010	-0.064	0.019	-0.782	0.027
D10b-48	4	52	17.51	-69	19	41.4	16.705	0.008	-0.042	0.016	-0.918	0.024
D10b-45	4	52	38.40	-69	20	14.7	16.722	0.010	1.807	0.073	...	...
D10b-47	4	52	29.28	-69	21	29.9	16.732	0.010	1.367	0.036	...	...
D10b-49	4	52	05.80	-69	20	26.3	16.745	0.139	0.292	0.368	-1.651	0.622
D10b-50	4	52	00.14	-69	20	41.9	16.746	0.011	0.318	0.027	0.217	0.059
D10b-51	4	52	03.02	-69	20	21.3	16.787	0.011	-0.019	0.023	-0.547	0.030
D10b-52	4	52	12.30	-69	19	30.5	16.790	0.115	-0.244	0.134	-0.571	0.099
D10b-53	4	52	24.02	-69	19	31.0	16.817	0.011	-0.100	0.022	-0.812	0.026
D10b-54	4	52	28.78	-69	22	21.2	16.837	0.011	-0.013	0.020	-0.519	0.029
D10b-58	4	52	22.83	-69	20	09.7	16.877	0.011	-0.073	0.022	-0.830	0.028
D10b-60	4	52	09.75	-69	20	40.7	16.879	0.014	-0.055	0.029	-0.905	0.040
D10b-55	4	52	01.11	-69	19	06.2	16.911	0.017	1.513	0.052	...	...
D10b-62	4	52	20.87	-69	20	26.2	16.913	0.019	-0.015	0.033	-0.894	0.040
D10b-56	4	52	32.37	-69	19	26.2	16.914	0.012	1.303	0.039	...	...
D10b-63	4	52	07.33	-69	22	15.8	16.918	0.011	-0.095	0.022	-0.909	0.030
D10b-64	4	52	16.12	-69	22	23.5	16.928	0.009	-0.111	0.022	-0.695	0.033
D10b-66	4	52	06.27	-69	20	40.6	16.928	0.014	-0.159	0.026	-0.842	0.030
D10b-57	4	52	21.98	-69	22	21.1	16.933	0.012	1.613	0.047	...	...
D10b-65	4	52	03.98	-69	21	31.1	16.935	0.015	0.010	0.024	-0.798	0.029
D10b-68	4	52	01.77	-69	20	01.8	16.942	0.014	-0.074	0.024	-0.897	0.032

D10b-69	4	52	17.15	-69	20	54.7	16.949	0.013	-0.099	0.024	-0.915	0.030
D10b-59	4	52	16.51	-69	21	24.4	16.958	0.011	1.765	0.051	...	...
D10b-61	4	52	11.68	-69	21	59.8	16.961	0.012	1.350	0.040	...	...
D10b-78	4	52	07.09	-69	20	33.4	16.974	0.144	-1.933	0.163	-0.633	0.031
D10b-72	4	52	28.83	-69	21	51.9	16.981	0.012	-0.122	0.023	-0.836	0.033
D10b-73	4	51	59.95	-69	21	56.4	16.987	0.013	-0.167	0.021	-0.700	0.031
D10b-67	4	52	23.48	-69	21	05.7	16.993	0.014	1.165	0.038	...	...
D10b-74	4	52	18.17	-69	20	42.9	17.002	0.024	-0.040	0.041	-0.716	0.051
D10b-71	4	52	17.57	-69	19	59.8	17.007	0.012	0.830	0.028	0.399	0.093
D10b-76	4	52	10.71	-69	20	12.8	17.027	0.023	-0.098	0.053	-0.736	0.078
D10b-70	4	52	37.00	-69	20	40.5	17.034	0.015	1.609	0.058	...	...
D10b-77	4	52	05.49	-69	21	41.4	17.048	0.014	0.024	0.023	-0.149	0.042
D10b-75	4	51	56.62	-69	21	16.2	17.095	0.013	1.762	0.062	...	...
D10b-80	4	52	04.00	-69	19	57.4	17.096	0.011	-0.074	0.022	-0.681	0.035
D10b-84	4	52	10.72	-69	21	26.7	17.154	0.012	-0.118	0.022	-0.815	0.035
D10b-81	4	52	16.35	-69	20	38.5	17.163	0.020	1.186	0.079	...	...
D10b-82	4	52	08.25	-69	20	53.4	17.166	0.014	1.236	0.051	...	...
D10b-79	4	52	06.79	-69	19	04.0	17.173	0.014	1.836	0.071	...	...
D10b-83	4	52	00.65	-69	22	19.3	17.179	0.014	1.087	0.053	...	...
D10b-85	4	52	18.36	-69	21	08.4	17.210	0.014	0.951	0.040	0.893	0.159
D10b-87	4	52	16.25	-69	20	17.8	17.219	0.016	-0.070	0.031	-0.689	0.041
D10b-88	4	52	08.46	-69	20	36.1	17.229	0.021	0.023	0.045	-0.778	0.067
D10b-89	4	52	08.96	-69	20	32.0	17.239	0.029	-0.041	0.045	-0.748	0.050
D10b-91	4	52	32.67	-69	21	34.4	17.244	0.029	0.012	0.042	-0.364	0.054
D10b-86	4	51	57.60	-69	19	08.2	17.252	0.011	1.437	0.064	...	...
D10b-93	4	52	25.66	-69	20	48.7	17.256	0.019	-0.150	0.059	-0.508	0.093
D10b-92	4	52	19.25	-69	20	45.8	17.258	0.029	-0.073	0.043	-0.700	0.059
D10b-96	4	52	02.51	-69	20	31.1	17.286	0.023	-0.084	0.038	-0.888	0.051
D10b-95	4	51	58.55	-69	18	58.7	17.292	0.015	0.126	0.030	0.152	0.073
D10b-97	4	52	19.32	-69	20	50.9	17.294	0.075	-0.120	0.107	-0.593	0.099
D10b-90	4	52	16.44	-69	22	28.3	17.300	0.015	1.327	0.051	...	...
D10b-98	4	52	17.66	-69	22	25.2	17.306	0.015	-0.124	0.029	-0.666	0.042
D10b-99	4	52	04.00	-69	20	29.4	17.321	0.014	-0.054	0.032	-0.792	0.042
D10b-100	4	52	28.90	-69	19	40.6	17.330	0.017	0.118	0.036	-0.714	0.047
D10b-94	4	51	57.74	-69	21	16.9	17.345	0.013	1.631	0.072	...	...
D10b-104	4	52	29.99	-69	22	03.7	17.382	0.027	-0.076	0.038	-0.669	0.040
D10b-101	4	52	39.02	-69	21	32.6	17.404	0.015	1.455	0.074	...	...
D10b-102	4	52	04.13	-69	21	59.8	17.405	0.017	1.346	0.054	...	...
D10b-103	4	52	09.42	-69	21	56.7	17.433	0.014	1.165	0.057	...	...
D10b-105	4	52	01.92	-69	20	58.1	17.438	0.023	1.016	0.050	...	...
D10b-107	4	52	15.21	-69	22	40.8	17.449	0.184	-0.249	0.270	-1.829	0.216
D10b-106	4	52	01.15	-69	21	41.2	17.455	0.016	-0.039	0.033	-0.788	0.042
D10b-108	4	52	26.20	-69	21	18.4	17.461	0.025	0.020	0.043	-0.427	0.058
D10b-111	4	52	11.81	-69	20	10.1	17.474	0.017	-0.092	0.031	-0.797	0.041
D10b-112	4	52	36.31	-69	20	19.7	17.495	0.033	0.054	0.057	-0.516	0.067
D10b-109	4	52	11.75	-69	21	00.4	17.512	0.016	1.141	0.071	...	...
D10b-114	4	52	00.43	-69	20	28.3	17.516	0.020	-0.049	0.031	-0.702	0.047
D10b-115	4	52	24.56	-69	21	13.4	17.517	0.015	-0.083	0.033	-0.184	0.067
D10b-110	4	52	33.07	-69	20	58.7	17.532	0.021	1.334	0.077	...	...
D10b-117	4	52	07.44	-69	20	02.2	17.538	0.016	-0.078	0.032	-0.518	0.053
D10b-119	4	52	07.05	-69	20	34.3	17.552	0.123	-0.445	0.142	-0.300	0.107
D10b-113	4	52	01.94	-69	21	53.9	17.556	0.016	1.193	0.064	...	...
D10b-118	4	52	01.52	-69	21	01.2	17.559	0.020	0.239	0.047	-0.766	0.061
D10b-116	4	51	59.95	-69	18	57.3	17.579	0.019	0.876	0.060	-0.398	0.177
D10b-122	4	52	10.78	-69	20	17.3	17.590	0.022	-0.019	0.041	-0.672	0.055
D10b-124	4	52	06.77	-69	20	39.7	17.591	0.030	-0.008	0.049	-0.480	0.057
D10b-125	4	52	23.12	-69	19	23.0	17.596	0.018	0.014	0.036	-0.334	0.061
D10b-120	4	52	21.04	-69	19	46.3	17.600	0.049	0.576	0.076	0.189	0.141
D10b-127	4	52	24.15	-69	19	27.8	17.600	0.017	-0.045	0.028	-0.346	0.050
D10b-128	4	52	16.02	-69	20	11.5	17.605	0.021	-0.106	0.051	-0.740	0.064
D10b-121	4	52	19.58	-69	20	49.8	17.618	0.092	0.693	0.155	-1.486	0.170
D10b-126	4	52	10.38	-69	20	23.2	17.625	0.020	0.613	0.049	-0.348	0.098
D10b-123	4	52	31.19	-69	19	15.8	17.629	0.015	0.883	0.060	...	...
D10b-131	4	52	09.50	-69	20	10.4	17.674	0.028	0.017	0.049	-0.537	0.079
D10b-129	4	52	10.29	-69	18	56.7	17.681	0.022	0.697	0.052	0.091	0.136
D10b-130	4	52	32.11	-69	21	32.6	17.684	0.023	0.326	0.052	0.274	0.157

D10b-133	4	52	38.66	-69	21	31.4	17.684	0.018	-0.059	0.034	-0.510	0.049
D10b-132	4	52	32.66	-69	19	43.4	17.692	0.021	0.178	0.042	-0.604	0.075
D10b-136	4	52	08.15	-69	20	27.6	17.693	0.023	-0.060	0.047	-0.845	0.062
D10b-134	4	52	11.43	-69	20	26.1	17.694	0.024	0.110	0.046	-1.059	0.065
D10b-137	4	52	31.43	-69	21	33.2	17.706	0.026	0.024	0.045	-0.270	0.073
D10b-138	4	52	18.87	-69	20	11.7	17.716	0.055	0.187	0.120	-0.042	0.191
D10b-141	4	52	25.35	-69	20	47.7	17.734	0.036	-0.016	0.068	-0.755	0.081
D10b-135	4	52	33.17	-69	19	33.3	17.745	0.019	1.314	0.069	...	...
D10b-142	4	52	22.40	-69	22	19.9	17.758	0.029	0.114	0.044	-0.654	0.067
D10b-143	4	52	00.34	-69	20	35.2	17.758	0.025	-0.122	0.040	-0.612	0.061
D10b-145	4	52	03.26	-69	21	58.4	17.764	0.023	-0.048	0.044	-0.452	0.078
D10b-148	4	52	12.80	-69	21	51.4	17.764	0.025	-0.114	0.047	-0.734	0.059
D10b-147	4	51	57.61	-69	21	44.8	17.766	0.020	-0.050	0.036	-0.615	0.056
D10b-150	4	52	03.82	-69	20	22.2	17.785	0.023	-0.030	0.044	-0.746	0.069
D10b-139	4	52	21.59	-69	19	30.8	17.786	0.023	1.517	0.095	...	...
D10b-152	4	52	19.53	-69	20	51.4	17.787	0.062	-0.132	0.105	-0.449	0.137
D10b-140	4	52	29.20	-69	21	27.5	17.794	0.022	1.612	0.123	...	...
D10b-144	4	52	12.39	-69	19	29.9	17.802	0.280	0.918	0.368	-1.283	0.249
D10b-149	4	52	32.45	-69	21	25.0	17.807	0.027	0.678	0.062	0.323	0.186
D10b-154	4	52	36.26	-69	20	02.4	17.810	0.024	-0.100	0.045	-0.815	0.063
D10b-159	4	52	26.93	-69	20	45.2	17.818	0.060	-0.125	0.074	-0.660	0.059
D10b-158	4	52	08.39	-69	21	36.5	17.824	0.017	0.016	0.040	-0.766	0.060
D10b-157	4	52	11.60	-69	20	19.7	17.825	0.026	0.103	0.055	-0.750	0.072
D10b-155	4	52	05.65	-69	22	31.7	17.828	0.020	0.307	0.052	-0.137	0.132
D10b-160	4	52	16.44	-69	19	38.0	17.828	0.024	-0.042	0.045	-0.432	0.082
D10b-151	4	52	14.29	-69	20	39.6	17.834	0.028	1.053	0.083	...	...
D10b-146	4	52	00.55	-69	21	06.7	17.836	0.023	1.640	0.088	...	...
D10b-161	4	52	30.32	-69	21	14.0	17.836	0.024	0.065	0.057	-0.400	0.090
D10b-153	4	52	29.77	-69	21	11.8	17.841	0.023	0.906	0.074	...	...
D10b-164	4	52	13.77	-69	21	55.4	17.848	0.028	-0.008	0.049	-0.389	0.085
D10b-163	4	52	18.13	-69	22	25.6	17.853	0.038	0.325	0.061	0.080	0.130
D10b-162	4	52	25.40	-69	20	46.4	17.870	0.040	0.769	0.125	...	...
D10b-156	4	52	15.93	-69	19	32.4	17.873	0.022	1.256	0.101	...	...
D10b-166	4	52	23.29	-69	20	42.3	17.875	0.027	0.125	0.055	-0.293	0.092
D10b-168	4	51	57.18	-69	22	13.3	17.883	0.026	0.080	0.048	-0.178	0.091
D10b-170	4	52	05.79	-69	20	13.6	17.889	0.022	-0.081	0.042	-0.629	0.060
D10b-167	4	52	23.97	-69	20	45.4	17.891	0.025	0.286	0.053	-0.238	0.131
D10b-171	4	52	05.81	-69	19	46.8	17.893	0.026	-0.113	0.049	-0.728	0.074
D10b-169	4	52	22.74	-69	19	36.0	17.896	0.016	0.329	0.051	-0.581	0.089
D10b-176	4	52	10.30	-69	19	36.2	17.913	0.027	-0.031	0.038	-0.758	0.053
D10b-178	4	52	14.28	-69	18	58.1	17.925	0.032	-0.098	0.054	-0.519	0.073
D10b-165	4	52	37.50	-69	21	15.7	17.930	0.027	1.704	0.119	...	...
D10b-172	4	52	30.02	-69	21	34.6	17.932	0.025	0.773	0.143	...	...
D10b-173	4	52	08.55	-69	21	12.6	17.934	0.036	0.795	0.093	...	...
D10b-181	4	52	01.80	-69	20	26.6	17.935	0.035	0.049	0.060	-0.314	0.090
D10b-179	4	52	00.90	-69	22	20.5	17.936	0.027	0.141	0.056	-0.602	0.080
D10b-182	4	52	08.62	-69	21	18.7	17.939	0.024	0.021	0.048	-0.021	0.083
D10b-175	4	52	20.14	-69	19	50.8	17.955	0.029	0.927	0.076	...	...
D10b-177	4	52	23.34	-69	22	35.7	17.959	0.029	0.877	0.068	0.029	0.206
D10b-180	4	52	21.73	-69	22	27.1	17.959	0.029	0.687	0.061	...	...
D10b-174	4	51	58.31	-69	19	05.8	17.981	0.026	1.633	0.132	...	...
D10b-183	4	52	14.92	-69	19	24.7	17.984	0.027	0.852	0.072	...	...
D10b-187	4	52	01.54	-69	20	44.5	17.989	0.032	-0.138	0.055	-0.870	0.068
D10b-190	4	52	19.42	-69	20	47.3	17.994	0.104	-0.457	0.136	-0.276	0.165
D10b-184	4	52	30.19	-69	20	05.6	17.995	0.029	0.720	0.059	0.393	0.215
D10b-189	4	52	13.75	-69	20	13.1	17.997	0.025	-0.094	0.048	-0.818	0.061
D10b-193	4	52	20.73	-69	20	27.4	18.017	0.050	-0.090	0.083	-0.593	0.086
D10b-185	4	52	25.64	-69	22	31.9	18.023	0.027	1.086	0.085	...	...
D10b-186	4	52	33.93	-69	21	25.7	18.025	0.028	0.875	0.075	0.204	0.211
D10b-192	4	52	21.66	-69	20	48.4	18.028	0.026	0.224	0.060	-0.470	0.100
D10b-196	4	51	57.12	-69	20	49.6	18.050	0.024	-0.074	0.047	-0.502	0.068
D10b-198	4	52	09.21	-69	20	15.5	18.058	0.033	-0.019	0.066	-0.752	0.106
D10b-195	4	51	58.54	-69	19	32.0	18.066	0.035	0.644	0.070	...	...
D10b-201	4	52	25.73	-69	21	29.4	18.067	0.024	-0.082	0.056	-0.609	0.098
D10b-194	4	52	28.07	-69	22	07.0	18.069	0.030	1.096	0.100	...	...
D10b-199	4	52	33.32	-69	21	43.1	18.069	0.031	0.084	0.052	0.167	0.107

D10b-197	4	52	36.69	-69	22	17.1	18.070	0.035	0.370	0.067	-0.403	0.139
D10b-188	4	52	38.58	-69	20	24.6	18.074	0.034	1.715	0.126	...	...
D10b-202	4	52	19.52	-69	20	45.9	18.078	0.083	0.116	0.162	-0.927	0.176
D10b-207	4	52	21.15	-69	20	12.1	18.080	0.034	-0.120	0.071	-0.647	0.097
D10b-204	4	51	59.88	-69	19	45.5	18.081	0.027	0.042	0.056	-0.343	0.103
D10b-203	4	52	01.61	-69	20	04.2	18.083	0.052	0.165	0.080	-0.503	0.108
D10b-208	4	52	29.14	-69	21	40.0	18.087	0.031	0.012	0.062	-0.065	0.125
D10b-210	4	52	19.38	-69	21	00.7	18.087	0.024	-0.050	0.045	-0.163	0.091
D10b-211	4	52	13.39	-69	21	47.1	18.098	0.025	0.119	0.051	-0.243	0.089
D10b-212	4	52	20.49	-69	21	58.0	18.100	0.027	0.098	0.054	-0.321	0.100
D10b-216	4	52	05.25	-69	20	13.9	18.112	0.027	-0.153	0.046	-0.615	0.061
D10b-205	4	52	31.45	-69	21	35.8	18.118	0.036	0.833	0.088	...	...
D10b-214	4	52	10.27	-69	20	06.1	18.119	0.030	0.093	0.065	-0.710	0.097
D10b-215	4	52	19.44	-69	20	43.5	18.119	0.068	0.000	0.098	-0.427	0.112
D10b-200	4	52	16.37	-69	20	03.8	18.124	0.027	1.284	0.128	...	...
D10b-206	4	52	24.16	-69	19	55.5	18.137	0.123	1.285	0.227	...	...
D10b-209	4	52	26.92	-69	20	32.6	18.138	0.027	1.177	0.096	...	...
D10b-213	4	52	13.54	-69	20	38.9	18.145	0.027	0.922	0.095	...	...
D10b-217	4	52	09.46	-69	20	38.6	18.146	0.042	0.348	0.093	0.305	0.304
D10b-218	4	52	36.97	-69	21	13.3	18.148	0.031	0.029	0.060	-0.053	0.106
D10b-219	4	52	20.19	-69	20	58.7	18.157	0.046	0.089	0.074	-0.425	0.110
D10b-220	4	52	20.82	-69	20	22.4	18.159	0.050	0.013	0.100	-0.818	0.127
D10b-221	4	52	21.35	-69	21	17.0	18.168	0.035	-0.098	0.058	-0.462	0.094
D10b-224	4	52	05.88	-69	21	21.9	18.187	0.037	-0.071	0.054	-0.475	0.067
D10b-223	4	52	17.86	-69	20	48.6	18.189	0.021	0.234	0.062	-0.486	0.126
D10b-225	4	52	18.09	-69	20	29.1	18.205	0.046	-0.071	0.069	-0.506	0.099
D10b-222	4	52	12.15	-69	19	16.7	18.210	0.030	0.886	0.086	...	...
D10b-226	4	52	33.11	-69	21	36.9	18.211	0.033	0.033	0.056	0.211	0.112
D10b-227	4	52	09.00	-69	20	55.2	18.217	0.034	0.009	0.060	-0.497	0.093
D10b-228	4	52	38.70	-69	20	39.3	18.228	0.033	0.096	0.067	-0.480	0.109
D10b-231	4	52	17.61	-69	19	27.0	18.241	0.037	0.062	0.067	-0.549	0.108
D10b-232	4	52	18.06	-69	19	28.6	18.245	0.033	-0.050	0.061	-0.453	0.122
D10b-233	4	52	10.33	-69	20	15.2	18.255	0.060	0.149	0.173	-0.781	0.235
D10b-236	4	52	14.75	-69	22	07.0	18.262	0.033	0.016	0.052	0.029	0.120
D10b-235	4	52	05.21	-69	20	56.7	18.263	0.034	0.095	0.056	-0.413	0.093
D10b-240	4	52	34.95	-69	19	38.4	18.269	0.030	-0.064	0.056	-0.507	0.095
D10b-229	4	52	35.00	-69	20	58.5	18.270	0.033	1.056	0.118	...	...
D10b-239	4	52	12.47	-69	20	50.5	18.270	0.032	-0.006	0.058	-0.198	0.146
D10b-237	4	51	59.27	-69	19	38.9	18.271	0.032	0.234	0.063	0.031	0.125
D10b-238	4	52	16.03	-69	22	15.9	18.274	0.033	0.117	0.058	-0.347	0.096
D10b-230	4	52	12.32	-69	20	13.4	18.279	0.039	0.955	0.124	...	...
D10b-241	4	52	07.00	-69	19	38.1	18.281	0.033	0.082	0.063	-0.674	0.089
D10b-242	4	52	24.05	-69	20	35.6	18.293	0.032	-0.016	0.057	-0.364	0.106
D10b-243	4	52	12.69	-69	20	22.9	18.299	0.038	-0.118	0.075	-0.585	0.100
D10b-234	4	52	24.07	-69	20	03.2	18.302	0.096	1.168	0.293	...	...
D10b-244	4	52	10.02	-69	20	14.7	18.312	0.068	-0.043	0.141	-0.302	0.205
D10b-245	4	52	17.26	-69	21	59.0	18.318	0.035	0.035	0.060	-0.382	0.121
D10b-248	4	52	27.20	-69	20	46.7	18.321	0.075	-0.087	0.098	-0.725	0.091
D10b-251	4	52	39.40	-69	22	02.1	18.329	0.031	-0.074	0.062	...	...
D10b-247	4	52	20.46	-69	19	43.3	18.331	0.038	0.166	0.073	-0.550	0.115
D10b-254	4	52	08.55	-69	22	20.8	18.347	0.036	0.072	0.063	-0.560	0.111
D10b-258	4	52	16.75	-69	22	30.9	18.352	0.034	-0.030	0.058	-0.668	0.085
D10b-261	4	52	22.11	-69	21	43.0	18.361	0.035	-0.012	0.064	-0.172	0.140
D10b-260	4	52	25.92	-69	20	57.6	18.363	0.045	0.070	0.081	-0.522	0.124
D10b-246	4	52	33.04	-69	22	02.7	18.375	0.039	1.216	0.159	...	...
D10b-249	4	52	33.89	-69	22	28.4	18.375	0.043	1.125	0.152	...	...
D10b-257	4	52	26.55	-69	20	48.0	18.381	0.058	0.686	0.164	...	...
D10b-265	4	52	17.44	-69	20	55.3	18.381	0.042	0.125	0.086	-0.346	0.149
D10b-250	4	52	03.87	-69	19	27.0	18.383	0.032	1.242	0.152	...	...
D10b-255	4	52	17.51	-69	20	26.2	18.388	0.029	1.011	0.113	...	...
D10b-252	4	52	18.54	-69	21	29.2	18.389	0.028	1.270	0.138	...	...
D10b-266	4	52	19.62	-69	19	54.1	18.390	0.035	0.041	0.064	-0.198	0.125
D10b-267	4	52	38.26	-69	18	58.6	18.393	0.026	-0.062	0.061	-0.384	0.120
D10b-264	4	52	28.08	-69	21	14.4	18.397	0.038	0.638	0.103	...	...
D10b-256	4	52	06.10	-69	21	23.8	18.399	0.037	1.241	0.117	...	...
D10b-262	4	52	32.52	-69	21	44.1	18.400	0.049	0.883	0.090	...	...

D10b-253	4	52	14.90	-69	20	32.3	18.401	0.041	1.346	0.149	...	...
D10b-263	4	52	36.22	-69	22	11.2	18.409	0.031	1.035	0.129	...	...
D10b-259	4	52	29.80	-69	18	59.8	18.415	0.029	1.306	0.161	...	...
D10b-273	4	51	58.63	-69	22	10.5	18.416	0.031	-0.144	0.067	-0.001	0.149
D10b-271	4	51	58.12	-69	21	14.6	18.417	0.048	0.092	0.088	-0.423	0.135
D10b-272	4	52	05.06	-69	18	53.6	18.421	0.061	0.019	0.105	...	...
D10b-274	4	52	02.63	-69	18	60.0	18.434	0.037	0.130	0.070	-0.251	0.151
D10b-269	4	52	29.23	-69	21	36.5	18.442	0.036	0.708	0.105	...	...
D10b-270	4	52	26.92	-69	20	39.7	18.449	0.048	0.843	0.122	...	...
D10b-279	4	52	18.03	-69	19	31.3	18.450	0.039	-0.034	0.073	-0.301	0.132
D10b-280	4	51	59.05	-69	21	25.7	18.454	0.043	-0.059	0.083	-0.262	0.124
D10b-268	4	52	29.18	-69	20	01.4	18.456	0.036	1.270	0.119	...	...
D10b-276	4	52	20.13	-69	20	35.6	18.461	0.035	0.689	0.090	...	...
D10b-281	4	52	35.58	-69	19	00.8	18.470	0.044	0.028	0.070	-0.418	0.122
D10b-277	4	52	09.95	-69	20	02.6	18.471	0.039	0.784	0.148	...	...
D10b-293	4	52	07.33	-69	20	33.5	18.472	0.129	-0.675	0.194	-0.530	0.264
D10b-282	4	52	24.46	-69	21	27.5	18.474	0.037	0.015	0.063	-0.377	0.121
D10b-275	4	52	24.34	-69	22	19.7	18.484	0.034	1.242	0.143	...	...
D10b-283	4	52	09.67	-69	19	21.7	18.484	0.042	0.163	0.091	-0.410	0.132
D10b-288	4	52	18.58	-69	21	21.7	18.485	0.037	-0.045	0.056	-0.565	0.087
D10b-278	4	52	22.82	-69	19	04.2	18.486	0.048	0.980	0.101	...	...
D10b-285	4	52	27.01	-69	19	55.7	18.488	0.051	0.102	0.081	-0.361	0.141
D10b-286	4	52	06.43	-69	20	24.7	18.495	0.052	0.241	0.097	-0.108	0.209
D10b-292	4	52	38.17	-69	19	04.1	18.496	0.038	-0.110	0.075	-0.376	0.138
D10b-295	4	52	10.83	-69	21	09.0	18.507	0.043	0.005	0.074	-0.480	0.119
D10b-290	4	52	03.10	-69	22	16.0	18.508	0.039	0.298	0.091	-0.466	0.144
D10b-297	4	52	01.80	-69	19	40.6	18.512	0.052	0.062	0.079	0.046	0.154
D10b-296	4	52	28.16	-69	19	10.4	18.513	0.044	0.098	0.074	-0.472	0.122
D10b-300	4	51	59.09	-69	21	35.2	18.513	0.041	-0.076	0.069	-0.543	0.123
D10b-298	4	52	21.41	-69	20	10.6	18.515	0.039	0.103	0.089	-0.366	0.154
D10b-302	4	52	12.01	-69	20	14.3	18.517	0.053	-0.172	0.089	-0.434	0.145
D10b-294	4	52	18.36	-69	20	15.7	18.518	0.131	0.308	0.221	...	...
D10b-284	4	52	37.51	-69	21	23.9	18.521	0.038	0.939	0.115	...	...
D10b-287	4	52	37.24	-69	19	11.2	18.526	0.053	0.960	0.131	...	...
D10b-303	4	52	13.04	-69	20	23.7	18.533	0.052	0.175	0.109	-0.699	0.149
D10b-307	4	52	10.09	-69	20	12.4	18.539	0.089	-0.208	0.187	-0.423	0.279
D10b-304	4	52	13.66	-69	20	34.7	18.550	0.097	0.520	0.152	...	...
D10b-289	4	52	18.72	-69	20	37.3	18.551	0.047	1.311	0.199	...	...
D10b-305	4	51	58.20	-69	20	14.8	18.554	0.042	0.277	0.097	0.084	0.205
D10b-301	4	52	23.26	-69	19	56.2	18.555	0.120	0.716	0.218	...	...
D10b-309	4	52	37.72	-69	20	41.6	18.555	0.045	0.007	0.079	-0.578	0.136
D10b-306	4	52	28.75	-69	21	22.1	18.558	0.037	0.354	0.089	...	...
D10b-310	4	52	35.29	-69	20	41.9	18.558	0.040	0.082	0.086	-0.665	0.130
D10b-291	4	52	05.77	-69	22	24.5	18.559	0.045	1.452	0.223	...	...
D10b-308	4	52	01.07	-69	20	05.5	18.561	0.051	0.250	0.105	...	...
D10b-314	4	52	07.08	-69	21	21.9	18.566	0.035	-0.098	0.066	-0.297	0.128
D10b-313	4	52	02.48	-69	21	30.2	18.567	0.044	-0.031	0.088	-0.154	0.160
D10b-317	4	52	38.81	-69	20	09.7	18.578	0.043	-0.008	0.083	-0.515	0.137
D10b-312	4	52	35.04	-69	21	20.4	18.598	0.039	0.729	0.157	...	...
D10b-319	4	52	14.06	-69	19	32.4	18.600	0.040	0.068	0.079	-0.434	0.170
D10b-311	4	52	21.01	-69	20	21.5	18.601	0.070	0.939	0.162	...	...
D10b-322	4	52	07.96	-69	22	14.1	18.601	0.050	-0.111	0.077	-0.723	0.112
D10b-327	4	52	31.23	-69	21	15.6	18.615	0.040	-0.068	0.074	-0.203	0.140
D10b-328	4	52	28.22	-69	22	14.0	18.630	0.051	0.140	0.077	-0.308	0.141
D10b-330	4	52	29.87	-69	22	28.7	18.632	0.046	0.027	0.084	-0.402	0.134
D10b-326	4	52	24.57	-69	19	58.8	18.633	0.251	0.483	0.345	...	...
D10b-315	4	51	58.18	-69	20	36.6	18.637	0.044	1.483	0.260	...	...
D10b-332	4	52	22.52	-69	21	29.2	18.638	0.059	0.053	0.089	-0.269	0.141
D10b-334	4	52	37.66	-69	21	02.3	18.640	0.047	0.045	0.088	-0.724	0.163
D10b-333	4	52	13.10	-69	21	51.5	18.643	0.043	0.158	0.106	-0.135	0.231
D10b-324	4	52	37.49	-69	22	26.4	18.646	0.052	0.903	0.128	...	...
D10b-331	4	52	24.67	-69	20	52.8	18.647	0.050	0.288	0.094	...	...
D10b-337	4	52	37.50	-69	21	28.2	18.647	0.111	-0.044	0.142	0.119	0.157
D10b-323	4	52	14.50	-69	19	54.1	18.649	0.055	0.989	0.144	...	...
D10b-335	4	52	00.64	-69	20	58.6	18.649	0.052	0.219	0.094	-0.145	0.208
D10b-339	4	52	11.16	-69	20	49.8	18.649	0.043	-0.129	0.070	-0.519	0.122

D10b-320	4	51	58.32	-69	20	26.2	18.650	0.034	1.189	0.175	...	...
D10b-321	4	51	58.62	-69	20	42.0	18.652	0.045	1.197	0.149	...	...
D10b-329	4	52	05.54	-69	22	14.1	18.654	0.051	0.558	0.113	...	...
D10b-338	4	52	05.79	-69	20	28.7	18.658	0.053	0.135	0.134	-0.846	0.294
D10b-325	4	51	56.86	-69	21	18.3	18.660	0.055	1.139	0.175	...	...
D10b-340	4	52	19.78	-69	20	40.3	18.663	0.087	0.136	0.124	-0.372	0.238
D10b-342	4	52	29.68	-69	20	13.0	18.666	0.042	0.069	0.065	-0.576	0.119
D10b-343	4	52	31.61	-69	21	24.6	18.667	0.056	0.033	0.095	-0.205	0.167
D10b-345	4	52	19.78	-69	20	38.2	18.683	0.055	0.367	0.154	-0.740	0.234
D10b-346	4	52	17.69	-69	21	09.5	18.684	0.057	0.308	0.107	...	...
D10b-348	4	52	29.09	-69	18	54.3	18.685	0.041	0.045	0.080	...	...
D10b-341	4	52	36.56	-69	19	54.1	18.687	0.046	0.627	0.113	...	...
D10b-336	4	52	31.85	-69	21	35.4	18.689	0.053	0.970	0.137	...	...
D10b-353	4	52	09.53	-69	20	36.4	18.692	0.085	-0.185	0.152	-0.676	0.238
D10b-349	4	52	05.02	-69	20	40.9	18.695	0.054	0.160	0.102	...	...
D10b-354	4	52	34.16	-69	21	43.8	18.702	0.054	0.008	0.081	0.040	0.185
D10b-352	4	52	02.61	-69	20	43.9	18.704	0.053	0.124	0.087	-0.529	0.158
D10b-355	4	51	57.88	-69	22	14.8	18.704	0.058	0.050	0.104	-0.556	0.136
D10b-360	4	52	20.23	-69	21	30.3	18.708	0.053	-0.111	0.087	-0.631	0.135
D10b-359	4	52	38.88	-69	22	25.7	18.710	0.044	0.014	0.076	-0.417	0.138
D10b-344	4	52	34.79	-69	21	31.2	18.711	0.041	1.054	0.162	...	...
D10b-350	4	52	22.36	-69	21	12.7	18.717	0.057	0.650	0.122	...	...
D10b-358	4	52	15.94	-69	19	30.6	18.717	0.046	0.177	0.102	-0.093	0.239
D10b-357	4	51	59.43	-69	20	33.7	18.720	0.070	0.337	0.123	...	...
D10b-347	4	52	02.44	-69	20	52.2	18.724	0.052	1.031	0.188	...	...
D10b-351	4	52	15.88	-69	19	54.8	18.727	0.047	0.843	0.124	...	...
D10b-361	4	52	09.16	-69	19	26.8	18.733	0.052	0.177	0.089	-0.600	0.150
D10b-362	4	52	30.00	-69	20	40.0	18.737	0.047	0.223	0.098	...	...
D10b-356	4	52	37.92	-69	21	07.8	18.741	0.055	0.808	0.175	...	...
D10b-363	4	52	16.27	-69	21	00.0	18.745	0.041	0.090	0.086	-0.399	0.171
D10b-371	4	52	14.54	-69	21	34.8	18.761	0.060	0.041	0.098	-0.630	0.139
D10b-367	4	52	09.87	-69	20	17.7	18.771	0.060	0.371	0.201	-0.654	0.307
D10b-373	4	52	29.98	-69	21	38.6	18.771	0.046	0.209	0.100	0.014	0.230
D10b-375	4	52	07.34	-69	20	59.7	18.772	0.077	0.086	0.114	...	...
D10b-378	4	52	07.18	-69	20	12.1	18.772	0.044	0.025	0.079	-0.260	0.185
D10b-379	4	52	28.49	-69	20	09.3	18.776	0.073	0.086	0.105	-0.115	0.159
D10b-372	4	52	17.32	-69	20	13.7	18.783	0.080	0.516	0.246	...	...
D10b-381	4	52	27.64	-69	22	24.3	18.783	0.057	0.202	0.095	...	...
D10b-380	4	52	14.19	-69	20	46.3	18.786	0.045	0.300	0.106	...	...
D10b-366	4	52	28.38	-69	20	43.2	18.791	0.061	0.888	0.147	...	...
D10b-383	4	51	57.32	-69	19	14.0	18.791	0.043	0.214	0.091	...	...
D10b-387	4	52	16.92	-69	20	33.0	18.792	0.053	-0.039	0.098	-0.509	0.149
D10b-386	4	52	19.58	-69	20	41.2	18.795	0.097	0.072	0.201	-0.490	0.302
D10b-364	4	51	58.68	-69	20	51.3	18.796	0.056	1.164	0.191	...	...
D10b-369	4	52	24.49	-69	20	20.7	18.796	0.054	0.942	0.177	...	...
D10b-389	4	52	11.20	-69	20	22.8	18.797	0.077	-0.230	0.118	-0.336	0.154
D10b-368	4	51	57.84	-69	21	40.4	18.799	0.055	1.021	0.182	...	...
D10b-385	4	51	57.80	-69	20	55.1	18.800	0.062	0.209	0.137	-0.428	0.218
D10b-390	4	52	34.57	-69	21	39.2	18.805	0.063	-0.075	0.093	-0.239	0.157
D10b-376	4	52	23.42	-69	21	51.0	18.806	0.048	0.888	0.161	...	...
D10b-370	4	52	24.36	-69	20	44.9	18.809	0.053	1.225	0.204	...	...
D10b-374	4	52	27.42	-69	22	38.5	18.810	0.053	1.036	0.151	...	...
D10b-377	4	52	05.94	-69	22	16.1	18.815	0.048	1.043	0.171	...	...
D10b-392	4	52	18.32	-69	22	18.9	18.820	0.049	0.028	0.086	...	...
D10b-393	4	52	30.27	-69	21	35.1	18.822	0.121	-0.050	0.212	-0.147	0.254
D10b-391	4	52	33.46	-69	19	45.3	18.831	0.040	0.336	0.108	...	...
D10b-394	4	52	07.35	-69	21	53.8	18.833	0.051	0.162	0.107	-0.032	0.240
D10b-397	4	52	11.84	-69	19	33.5	18.838	0.057	0.116	0.112	-0.209	0.193
D10b-399	4	52	11.56	-69	21	48.4	18.838	0.063	-0.026	0.113	-0.228	0.184
D10b-388	4	52	12.23	-69	22	38.3	18.840	0.051	0.955	0.167	...	...
D10b-398	4	52	08.69	-69	20	31.5	18.849	0.095	0.383	0.239	-0.637	0.335
D10b-402	4	52	33.55	-69	20	35.5	18.856	0.053	0.082	0.109	-0.258	0.192
D10b-403	4	52	37.68	-69	22	09.5	18.857	0.059	-0.075	0.092	-0.027	0.149
D10b-396	4	52	28.66	-69	19	11.9	18.858	0.070	0.610	0.162	...	...
D10b-395	4	52	02.11	-69	22	07.0	18.859	0.072	0.776	0.196	...	...
D10b-404	4	52	08.84	-69	20	40.9	18.868	0.075	0.124	0.134	...	...

D10b-400	4	52	03.35	-69	19	18.5	18.869	0.045	0.543	0.100	...	...
D10b-405	4	52	21.18	-69	20	19.6	18.871	0.058	0.159	0.117	-0.583	0.174
D10b-407	4	52	04.86	-69	20	22.8	18.877	0.054	0.071	0.098	-0.293	0.179
D10b-406	4	52	31.94	-69	21	22.1	18.882	0.064	0.220	0.125	...	...
D10b-411	4	52	06.10	-69	19	47.5	18.895	0.060	0.069	0.127	-0.153	0.242
D10b-412	4	52	31.40	-69	21	54.4	18.899	0.044	-0.027	0.094	-0.608	0.181
D10b-408	4	52	19.33	-69	19	44.6	18.906	0.059	0.689	0.147	...	...
D10b-410	4	52	24.24	-69	19	43.9	18.910	0.069	0.517	0.149	...	...
D10b-413	4	52	21.23	-69	19	57.5	18.917	0.058	0.158	0.105	-0.500	0.207
D10b-414	4	52	32.71	-69	20	05.4	18.919	0.045	0.175	0.108	...	...
D10b-415	4	52	29.49	-69	20	36.1	18.919	0.050	0.128	0.109	-0.423	0.209
D10b-409	4	52	33.71	-69	22	05.8	18.923	0.056	0.870	0.152	...	...
D10b-420	4	52	18.78	-69	19	29.2	18.938	0.062	0.048	0.136	...	...
D10b-416	4	52	32.15	-69	20	19.1	18.944	0.060	0.682	0.157	...	...
D10b-422	4	52	20.85	-69	21	53.9	18.950	0.064	0.139	0.113	-0.366	0.213
D10b-424	4	52	30.69	-69	19	28.8	18.950	0.060	-0.025	0.102	-0.013	0.229
D10b-425	4	52	08.29	-69	20	24.6	18.952	0.074	0.021	0.137	-0.253	0.229
D10b-417	4	52	21.98	-69	22	29.1	18.953	0.066	0.673	0.142	...	...
D10b-427	4	52	15.37	-69	21	45.1	18.966	0.044	0.218	0.112	-0.549	0.192
D10b-426	4	52	18.87	-69	20	48.6	18.967	0.090	0.249	0.196	-0.512	0.301
D10b-421	4	52	12.31	-69	21	47.5	18.971	0.072	0.718	0.156	...	...
D10b-419	4	52	29.06	-69	20	13.6	18.981	0.059	1.064	0.172	...	...
D10b-430	4	52	12.15	-69	19	08.7	18.985	0.067	0.440	0.140	...	...
D10b-431	4	52	10.25	-69	20	46.9	18.988	0.064	0.520	0.141	...	...
D10b-442	4	52	37.94	-69	21	16.0	18.995	0.070	-0.032	0.116	-0.463	0.172
D10b-437	4	52	05.29	-69	22	00.4	18.996	0.085	0.233	0.169	...	...
D10b-435	4	52	02.32	-69	20	16.0	18.997	0.072	0.545	0.157	...	...
D10b-446	4	52	14.35	-69	21	39.4	18.997	0.066	-0.189	0.107	...	...
D10b-444	4	52	37.03	-69	19	43.2	19.000	0.050	0.045	0.101	...	...
D10b-440	4	52	01.70	-69	20	50.9	19.006	0.068	0.322	0.129	...	...
D10b-436	4	52	22.91	-69	21	33.1	19.007	0.072	0.579	0.140	...	...
D10b-441	4	51	57.77	-69	20	45.7	19.008	0.078	0.292	0.145	...	...
D10b-448	4	52	07.65	-69	20	34.3	19.012	0.076	0.069	0.137	...	...
D10b-443	4	52	18.76	-69	20	40.0	19.015	0.064	0.400	0.173	...	...
D10b-433	4	52	36.94	-69	22	35.9	19.019	0.064	1.113	0.210	...	...
D10b-449	4	52	08.11	-69	20	26.2	19.019	0.099	0.140	0.209	...	...
D10b-451	4	52	27.51	-69	20	51.7	19.020	0.123	0.000	0.164	...	...
D10b-439	4	51	57.51	-69	19	57.9	19.021	0.069	0.720	0.184	...	...
D10b-456	4	52	32.19	-69	21	12.0	19.027	0.071	-0.067	0.124	...	...
D10b-463	4	52	10.23	-69	20	03.5	19.027	0.146	-0.411	0.373	...	...
D10b-457	4	52	04.91	-69	20	44.4	19.031	0.113	0.023	0.165	-1.260	0.183
D10b-458	4	52	15.00	-69	20	40.9	19.036	0.055	0.089	0.123	...	...
D10b-455	4	52	02.49	-69	21	34.6	19.037	0.063	0.283	0.149	-0.900	0.233
D10b-460	4	52	25.35	-69	21	46.3	19.045	0.070	0.210	0.143	-0.204	0.294
D10b-452	4	52	35.15	-69	18	58.6	19.050	0.056	0.683	0.183	...	...
D10b-464	4	52	20.60	-69	21	14.2	19.052	0.066	0.026	0.116	-0.370	0.220
D10b-445	4	52	22.60	-69	21	02.2	19.055	0.058	1.265	0.260	...	...
D10b-461	4	52	34.64	-69	21	20.8	19.055	0.059	0.444	0.172	...	...
D10b-467	4	52	14.76	-69	20	18.6	19.055	0.094	-0.016	0.149	-0.327	0.209
D10b-450	4	52	04.66	-69	20	44.9	19.060	0.111	0.932	0.255	...	...
D10b-466	4	52	10.30	-69	20	00.5	19.060	0.057	0.141	0.126	0.016	0.312
D10b-447	4	52	28.35	-69	22	21.9	19.061	0.079	1.315	0.308	...	...
D10b-459	4	52	28.81	-69	22	28.5	19.061	0.068	0.624	0.157	...	...
D10b-462	4	52	12.73	-69	19	23.8	19.062	0.047	0.545	0.160	...	...
D10b-469	4	52	31.19	-69	21	49.3	19.067	0.076	0.120	0.122	-0.791	0.168
D10b-468	4	52	09.92	-69	22	14.2	19.070	0.069	0.245	0.148	-0.836	0.215
D10b-474	4	52	02.53	-69	20	13.7	19.070	0.074	-0.186	0.124	-0.576	0.172
D10b-471	4	52	39.03	-69	21	19.3	19.071	0.074	0.140	0.130	...	...
D10b-475	4	52	11.64	-69	20	42.3	19.092	0.083	0.222	0.129	...	...
D10b-482	4	52	23.59	-69	22	01.2	19.092	0.085	-0.077	0.116	-0.570	0.172
D10b-486	4	52	12.02	-69	20	57.3	19.092	0.074	-0.281	0.109	-0.139	0.201
D10b-485	4	52	34.60	-69	22	30.1	19.093	0.056	-0.197	0.099	0.069	0.240
D10b-477	4	52	04.53	-69	20	35.1	19.095	0.065	0.182	0.130	-0.319	0.225
D10b-470	4	52	07.01	-69	21	58.4	19.096	0.061	0.743	0.185	...	...
D10b-479	4	52	08.56	-69	21	09.0	19.096	0.090	0.166	0.163	...	...
D10b-484	4	52	17.77	-69	21	16.5	19.100	0.086	0.054	0.136	...	...

D10b-481	4	52	10.13	-69	20	53.8	19.101	0.059	0.149	0.129	-0.141	0.307
D10b-478	4	52	28.98	-69	21	26.4	19.103	0.069	0.346	0.162	...	...
D10b-473	4	52	36.83	-69	22	04.9	19.109	0.064	0.809	0.177	...	...
D10b-480	4	52	11.95	-69	22	09.8	19.110	0.075	0.408	0.154	...	...
D10b-487	4	52	10.78	-69	20	02.5	19.112	0.082	0.196	0.157	-0.848	0.205
D10b-491	4	52	10.47	-69	20	38.4	19.114	0.061	-0.081	0.125	-0.281	0.243
D10b-476	4	52	25.56	-69	20	04.7	19.116	0.079	0.730	0.195	...	...
D10b-501	4	52	07.64	-69	20	32.4	19.122	0.083	-0.370	0.140	-0.375	0.192
D10b-492	4	52	31.24	-69	22	04.8	19.125	0.071	0.131	0.138	-0.744	0.200
D10b-490	4	52	13.97	-69	20	01.9	19.127	0.070	0.218	0.135	-0.285	0.324
D10b-489	4	52	09.32	-69	20	32.1	19.130	0.116	0.278	0.236	...	...
D10b-497	4	52	09.76	-69	22	27.4	19.136	0.069	0.026	0.124	...	...
D10b-504	4	52	01.19	-69	20	50.3	19.139	0.077	-0.040	0.130	-1.105	0.177
D10b-499	4	51	56.71	-69	22	010.0	19.142	0.042	0.114	0.117	-0.497	0.257
D10b-500	4	52	01.43	-69	18	56.0	19.142	0.075	0.111	0.154	-0.679	0.236
D10b-496	4	52	31.34	-69	20	43.0	19.147	0.065	0.283	0.137	...	...
D10b-506	4	52	30.36	-69	20	32.1	19.149	0.062	0.125	0.129	...	...
D10b-505	4	52	33.89	-69	21	16.2	19.152	0.059	0.249	0.113	...	...
D10b-509	4	52	07.47	-69	20	38.3	19.154	0.070	0.148	0.161	...	...
D10b-493	4	52	26.82	-69	21	05.6	19.156	0.070	0.762	0.197	...	...
D10b-498	4	52	32.81	-69	20	27.1	19.161	0.100	0.579	0.182	...	...
D10b-494	4	52	07.18	-69	19	40.5	19.165	0.132	0.922	0.257	...	...
D10b-510	4	52	01.82	-69	20	08.2	19.165	0.074	0.375	0.135	...	...
D10b-517	4	52	03.19	-69	20	19.6	19.173	0.079	0.145	0.188	...	...
D10b-520	4	52	29.35	-69	21	51.8	19.177	0.081	0.107	0.164	-0.612	0.253
D10b-523	4	52	30.30	-69	21	15.5	19.180	0.079	0.119	0.195	...	...
D10b-522	4	52	26.41	-69	19	25.6	19.184	0.068	0.256	0.124	...	...
D10b-508	4	52	26.26	-69	20	28.2	19.185	0.100	0.887	0.245	...	...
D10b-524	4	52	04.77	-69	21	15.9	19.193	0.077	0.331	0.134	...	...
D10b-530	4	52	01.71	-69	19	11.1	19.199	0.063	0.219	0.126	...	...
D10b-536	4	52	31.65	-69	21	08.7	19.199	0.068	-0.082	0.119	...	...
D10b-516	4	52	14.89	-69	19	56.0	19.200	0.079	0.785	0.233	...	...
D10b-525	4	52	23.51	-69	21	41.6	19.203	0.059	0.514	0.161	...	...
D10b-526	4	52	28.07	-69	21	58.1	19.205	0.059	0.535	0.157	...	...
D10b-534	4	52	32.78	-69	19	50.2	19.205	0.067	0.076	0.129	-0.120	0.266
D10b-537	4	52	14.93	-69	21	19.0	19.205	0.074	-0.039	0.119	...	...
D10b-540	4	52	08.97	-69	20	44.0	19.206	0.068	-0.144	0.117	...	...
D10b-531	4	52	15.41	-69	22	19.3	19.208	0.079	0.380	0.180	...	...
D10b-538	4	52	30.30	-69	21	41.8	19.208	0.083	0.007	0.143	-0.403	0.228
D10b-543	4	52	23.02	-69	19	10.7	19.210	0.070	-0.078	0.110	...	...
D10b-544	4	52	14.94	-69	19	31.2	19.223	0.076	0.082	0.139	...	...
D10b-547	4	52	31.66	-69	22	31.5	19.236	0.074	-0.017	0.121	-0.614	0.197
D10b-541	4	51	59.75	-69	20	09.3	19.238	0.063	0.605	0.193	...	...
D10b-550	4	52	29.72	-69	20	00.7	19.239	0.072	-0.054	0.129	...	...
D10b-548	4	52	34.77	-69	21	12.0	19.249	0.069	0.245	0.162	...	...
D10b-556	4	52	36.33	-69	20	20.8	19.258	0.093	0.126	0.241	...	...
D10b-555	4	52	28.51	-69	22	36.1	19.259	0.087	0.267	0.169	...	...
D10b-558	4	52	23.83	-69	22	25.0	19.262	0.085	0.134	0.163	...	...
D10b-551	4	52	04.00	-69	19	41.7	19.264	0.080	0.489	0.173	...	...
D10b-564	4	52	36.95	-69	20	05.8	19.265	0.084	-0.077	0.127	-0.620	0.191
D10b-565	4	52	35.44	-69	21	57.9	19.269	0.083	-0.027	0.145	...	...
D10b-563	4	52	18.75	-69	19	44.8	19.271	0.063	0.146	0.139	...	...
D10b-552	4	52	38.94	-69	22	23.5	19.275	0.070	0.731	0.182	...	...
D10b-570	4	51	56.85	-69	20	40.9	19.279	0.075	-0.095	0.136	...	...
D10b-569	4	52	12.89	-69	20	35.8	19.280	0.078	-0.035	0.134	...	...
D10b-566	4	52	29.63	-69	22	11.1	19.281	0.079	0.182	0.166	...	...
D10b-572	4	52	23.46	-69	22	30.3	19.283	0.099	-0.031	0.151	...	...
D10b-571	4	52	09.13	-69	20	13.5	19.292	0.083	0.161	0.215	...	...
D10b-568	4	52	03.49	-69	21	21.3	19.296	0.107	0.350	0.215	...	...
D10b-573	4	51	57.63	-69	20	50.9	19.300	0.085	0.111	0.162	...	...
D10b-574	4	52	31.51	-69	19	58.2	19.302	0.077	-0.021	0.142	...	...
D10b-577	4	52	15.88	-69	21	28.2	19.304	0.092	-0.031	0.145	...	...
D10b-579	4	52	29.52	-69	19	30.3	19.318	0.075	0.279	0.151	...	...
D10b-593	4	52	13.78	-69	21	44.7	19.320	0.089	-0.114	0.138	-0.026	0.233
D10b-582	4	51	59.03	-69	20	14.4	19.321	0.092	0.249	0.183	...	...
D10b-589	4	52	29.47	-69	21	49.4	19.324	0.102	0.103	0.211	-1.073	0.322

D10b-599	4	52	16.49	-69	20	39.6	19.326	0.145	-0.180	0.194	-0.709	0.181
D10b-597	4	52	31.21	-69	21	31.6	19.327	0.108	-0.100	0.173	...	...
D10b-592	4	52	11.33	-69	21	23.3	19.337	0.065	0.328	0.153	...	...
D10b-607	4	52	12.59	-69	19	14.3	19.344	0.088	-0.066	0.146	...	...
D10b-611	4	52	14.00	-69	20	16.9	19.344	0.096	-0.253	0.136	...	...
D10b-633	4	52	27.51	-69	21	36.4	19.354	0.163	-0.633	0.219	-0.015	0.224
D10b-623	4	52	11.06	-69	19	44.7	19.361	0.073	-0.187	0.124	-0.277	0.238
D10b-616	4	52	29.41	-69	22	02.7	19.363	0.091	-0.064	0.160	...	...
D10b-619	4	52	27.38	-69	19	57.1	19.364	0.093	-0.067	0.145	...	...
D10b-609	4	52	07.57	-69	21	10.2	19.365	0.088	0.352	0.181	...	...
D10b-614	4	52	06.94	-69	19	40.6	19.370	0.163	0.163	0.272	...	...
D10b-632	4	52	22.31	-69	21	17.1	19.372	0.106	-0.166	0.154	-0.261	0.247
D10b-612	4	52	36.76	-69	21	07.9	19.374	0.081	0.390	0.200	-1.062	0.299
D10b-624	4	51	59.81	-69	20	17.0	19.374	0.125	0.109	0.181	...	...
D10b-631	4	52	03.08	-69	21	10.8	19.377	0.133	0.072	0.200	...	...
D10b-634	4	51	58.72	-69	21	19.4	19.377	0.087	-0.137	0.148	-0.409	0.234
D10b-613	4	52	29.43	-69	22	15.8	19.384	0.101	0.584	0.240	...	...
D10b-618	4	51	58.49	-69	20	53.1	19.385	0.088	0.433	0.194	...	...
D10b-620	4	52	24.48	-69	21	22.7	19.385	0.090	0.423	0.202	...	...
D10b-625	4	52	19.75	-69	21	58.6	19.385	0.071	0.326	0.174	...	...
D10b-638	4	52	16.87	-69	22	28.7	19.385	0.087	-0.173	0.136	...	...
D10b-635	4	52	10.72	-69	18	58.4	19.391	0.095	0.123	0.168	-0.749	0.251
D10b-636	4	52	06.99	-69	21	09.3	19.392	0.088	0.103	0.171	...	...
D10b-637	4	52	05.61	-69	20	41.5	19.393	0.080	0.021	0.164	...	...
D10b-642	4	52	17.19	-69	20	40.9	19.398	0.079	0.091	0.155	...	...
D10b-645	4	52	16.34	-69	21	10.6	19.402	0.095	0.049	0.145	...	...
D10b-648	4	52	16.73	-69	19	12.2	19.403	0.074	-0.046	0.124	...	...
D10b-646	4	52	14.29	-69	20	27.2	19.412	0.110	0.272	0.185	...	...
D10b-643	4	52	09.00	-69	20	19.1	19.413	0.134	0.448	0.228	...	...
D10b-626	4	52	19.91	-69	20	21.0	19.419	0.118	1.118	0.412	...	...
D10b-663	4	52	22.53	-69	20	21.3	19.421	0.096	-0.013	0.168	...	...
D10b-649	4	52	26.78	-69	20	26.1	19.423	0.069	0.404	0.184	...	...
D10b-662	4	52	32.36	-69	21	49.3	19.424	0.124	0.061	0.191	...	...
D10b-654	4	52	07.63	-69	20	36.4	19.425	0.114	0.279	0.222	...	...
D10b-667	4	52	07.18	-69	20	25.4	19.426	0.112	-0.018	0.180	...	...
D10b-676	4	52	06.15	-69	22	32.8	19.426	0.082	-0.203	0.149	...	...
D10b-655	4	52	27.66	-69	20	02.3	19.427	0.104	0.332	0.245	...	...
D10b-661	4	52	09.30	-69	20	07.2	19.427	0.084	0.142	0.186	...	...
D10b-651	4	52	21.28	-69	20	02.4	19.429	0.094	0.468	0.244	...	...
D10b-652	4	52	06.45	-69	20	07.6	19.431	0.084	0.514	0.237	...	...
D10b-674	4	52	16.05	-69	22	07.2	19.435	0.059	0.042	0.119	...	...
D10b-656	4	52	03.03	-69	20	42.5	19.438	0.097	0.554	0.198	...	...
D10b-671	4	52	15.16	-69	20	16.9	19.440	0.173	0.269	0.238	...	...
D10b-677	4	52	26.10	-69	20	47.5	19.440	0.107	-0.047	0.210	-0.968	0.268
D10b-668	4	52	24.61	-69	20	24.4	19.447	0.089	0.438	0.227	...	...
D10b-664	4	52	07.14	-69	19	05.2	19.451	0.099	0.666	0.240	...	...
D10b-702	4	52	00.48	-69	22	32.1	19.453	0.086	-0.599	0.136	...	...
D10b-679	4	52	34.15	-69	19	42.7	19.455	0.086	0.190	0.152	...	...
D10b-682	4	52	35.92	-69	20	26.4	19.455	0.092	0.026	0.161	...	...
D10b-690	4	52	13.94	-69	20	55.9	19.457	0.131	-0.133	0.192	...	...
D10b-678	4	52	14.25	-69	21	57.4	19.458	0.070	0.278	0.191	-0.811	0.328
D10b-688	4	52	29.28	-69	19	57.5	19.459	0.117	-0.020	0.179	...	...
D10b-693	4	52	28.00	-69	21	40.2	19.460	0.124	-0.144	0.217	...	...
D10b-680	4	52	14.96	-69	20	14.5	19.463	0.174	0.306	0.231	...	...
D10b-685	4	52	25.34	-69	21	33.1	19.463	0.077	0.170	0.167	...	...
D10b-696	4	52	33.58	-69	22	27.5	19.470	0.125	0.024	0.207	...	...
D10b-691	4	52	29.87	-69	20	08.4	19.481	0.094	0.388	0.192	...	...
D10b-694	4	52	25.57	-69	20	29.8	19.486	0.076	0.440	0.184	...	...
D10b-699	4	52	19.11	-69	22	18.8	19.486	0.098	0.312	0.219	...	...
D10b-712	4	52	31.57	-69	22	11.1	19.492	0.110	-0.208	0.159	-0.590	0.196
D10b-707	4	52	18.36	-69	22	21.8	19.495	0.091	0.106	0.163	...	...
D10b-708	4	52	35.90	-69	22	31.9	19.495	0.103	0.068	0.191	...	...
D10b-705	4	52	12.09	-69	20	18.4	19.500	0.105	0.373	0.238	-0.758	0.376
D10b-704	4	52	28.04	-69	22	21.1	19.502	0.113	0.460	0.250	...	...
D10b-709	4	52	05.19	-69	20	06.0	19.511	0.095	0.355	0.182	...	...
D10b-706	4	52	03.27	-69	21	32.2	19.512	0.078	0.513	0.221	...	...

D10b-715	4	52	00.35	-69	21	01.4	19.512	0.078	0.122	0.174	...	...
D10b-725	4	51	58.10	-69	20	55.6	19.512	0.105	-0.198	0.199	...	...
D10b-711	4	52	37.55	-69	22	34.7	19.514	0.124	0.336	0.247	...	...
D10b-716	4	52	14.08	-69	19	43.8	19.518	0.119	0.264	0.197	...	...
D10b-727	4	52	10.16	-69	22	31.4	19.519	0.089	-0.090	0.159	...	...
D10b-726	4	52	18.57	-69	20	00.9	19.521	0.097	-0.019	0.198	...	...
D10b-720	4	52	04.94	-69	22	31.8	19.524	0.088	0.284	0.201	...	...
D10b-722	4	52	23.49	-69	20	08.3	19.528	0.103	0.273	0.205	...	...
D10b-733	4	52	10.29	-69	20	44.8	19.530	0.101	-0.116	0.160	...	...
D10b-738	4	52	16.02	-69	20	27.0	19.539	0.105	-0.203	0.156	...	...
D10b-734	4	52	28.01	-69	20	40.8	19.542	0.078	0.065	0.163	...	...
D10b-745	4	52	04.28	-69	19	37.3	19.545	0.102	-0.352	0.177	...	...
D10b-743	4	52	15.35	-69	20	57.8	19.549	0.117	-0.194	0.162	...	...
D10b-740	4	52	25.16	-69	19	49.0	19.550	0.090	-0.044	0.162	...	...
D10b-732	4	52	31.90	-69	21	28.9	19.552	0.114	0.439	0.258	...	...
D10b-749	4	52	37.31	-69	22	35.8	19.555	0.132	-0.187	0.197	...	...
D10b-741	4	52	23.13	-69	21	02.5	19.563	0.094	0.229	0.200	...	...
D10b-746	4	52	11.64	-69	20	02.7	19.567	0.096	0.133	0.160	-0.364	0.286
D10b-747	4	52	05.65	-69	21	37.4	19.571	0.098	0.218	0.233	...	...
D10b-748	4	52	07.41	-69	20	19.8	19.574	0.105	0.262	0.250	...	...
D10b-752	4	52	33.66	-69	21	19.6	19.578	0.125	0.103	0.190	...	...
D10b-757	4	52	08.29	-69	22	00.2	19.590	0.085	0.140	0.213	-0.303	0.481
D10b-759	4	52	09.27	-69	20	27.4	19.590	0.137	-0.086	0.209	...	...
D10b-768	4	52	36.66	-69	22	31.4	19.592	0.121	-0.308	0.180	...	...
D10b-758	4	52	33.56	-69	19	06.1	19.595	0.125	0.131	0.239	...	...
D10b-774	4	52	33.67	-69	21	30.8	19.598	0.096	-0.408	0.191	...	...
D10b-764	4	52	06.53	-69	20	56.7	19.603	0.095	0.030	0.166	...	...
D10b-765	4	52	30.34	-69	19	38.1	19.605	0.079	0.070	0.208	...	...
D10b-766	4	52	08.47	-69	21	31.7	19.615	0.099	0.284	0.183	...	...
D10b-771	4	52	15.63	-69	20	11.4	19.627	0.104	0.333	0.266	...	...
D10b-782	4	52	34.56	-69	21	28.8	19.629	0.102	-0.131	0.216	...	...
D10b-778	4	52	07.42	-69	21	13.2	19.633	0.109	0.166	0.186	...	...
D10b-780	4	52	28.54	-69	20	18.4	19.635	0.094	0.160	0.244	...	...
D10b-789	4	52	11.14	-69	22	04.4	19.665	0.092	0.062	0.178	...	...
D10b-796	4	52	22.03	-69	21	54.5	19.671	0.135	-0.197	0.207	-0.646	0.226
D10b-790	4	52	19.10	-69	22	08.7	19.674	0.112	0.258	0.227	...	...
D10b-787	4	52	24.31	-69	21	11.8	19.675	0.098	0.336	0.245	...	...
D10b-806	4	52	17.90	-69	21	01.9	19.690	0.112	-0.374	0.173	...	...
D10b-801	4	52	22.54	-69	22	30.9	19.691	0.108	0.023	0.193	...	...
D10b-807	4	52	20.23	-69	18	55.8	19.697	0.131	-0.219	0.239	...	...
D10b-799	4	52	28.89	-69	22	02.6	19.702	0.119	0.313	0.250	...	...
D10b-802	4	52	32.06	-69	21	24.4	19.710	0.146	0.448	0.299	...	...
D10b-821	4	52	21.75	-69	21	22.6	19.722	0.133	-0.268	0.190	...	...
D10b-813	4	52	08.22	-69	22	02.0	19.723	0.107	0.220	0.238	...	...
D10b-815	4	52	18.73	-69	20	42.8	19.729	0.167	0.152	0.326	...	...
D10b-814	4	52	33.54	-69	21	06.7	19.731	0.091	0.203	0.214	...	...
D10b-825	4	52	23.69	-69	21	29.0	19.732	0.101	-0.147	0.185	...	...
D10b-831	4	52	27.68	-69	21	47.4	19.732	0.163	-0.494	0.228	...	...
D10b-827	4	52	34.47	-69	21	24.3	19.742	0.136	-0.078	0.202	...	...
D10b-833	4	52	27.67	-69	21	45.7	19.742	0.169	-0.339	0.259	...	...
D10b-826	4	52	21.82	-69	21	10.1	19.748	0.098	0.224	0.232	...	...
D10b-830	4	52	13.28	-69	21	35.2	19.749	0.122	-0.087	0.218	...	...
D10b-829	4	52	02.60	-69	20	41.7	19.753	0.135	0.069	0.195	...	...
D10b-848	4	52	02.03	-69	20	40.3	19.801	0.101	-0.240	0.169	...	...
D10b-850	4	52	35.03	-69	20	19.3	19.816	0.119	-0.071	0.191	...	...
D10b-852	4	52	38.16	-69	22	24.5	19.820	0.125	-0.072	0.204	...	...
D10b-856	4	52	22.80	-69	21	47.8	19.828	0.128	-0.056	0.202	...	...
D10b-863	4	51	59.67	-69	20	40.3	19.829	0.138	-0.666	0.193	...	...
D10b-857	4	52	12.68	-69	20	03.2	19.840	0.091	0.161	0.181	...	...
D10b-865	4	52	16.31	-69	20	12.3	19.847	0.148	-0.375	0.318	...	...
D10b-860	4	52	32.98	-69	20	34.4	19.853	0.158	0.241	0.262	...	...
D10b-869	4	52	17.62	-69	20	36.1	19.869	0.121	0.077	0.209	...	...
D10b-870	4	51	58.63	-69	21	21.9	19.872	0.126	0.089	0.289	...	...
D10b-881	4	52	26.29	-69	21	28.2	19.881	0.102	-0.238	0.213	...	...
D10b-877	4	52	30.76	-69	19	13.0	19.883	0.128	0.005	0.235	...	...
D10b-880	4	52	38.71	-69	22	31.4	19.897	0.140	0.170	0.255	...	...

D10b-888	4	52	17.02	-69	21	28.4	19.929	0.126	-0.336	0.213	...	...
D10b-889	4	52	39.13	-69	20	23.5	19.931	0.134	-0.372	0.198	...	...
D10b-884	4	52	10.65	-69	20	22.0	19.940	0.154	0.146	0.263	...	...
D10b-897	4	52	27.82	-69	22	19.8	19.957	0.173	-0.127	0.240	...	...
D10b-896	4	52	13.30	-69	20	09.8	19.977	0.132	0.424	0.340	...	...
D10b-913	4	52	18.83	-69	20	52.8	20.021	0.158	-0.203	0.244	...	...
D10b-927	4	52	20.67	-69	20	49.5	20.056	0.186	-0.580	0.261	...	...
D10b-922	4	52	31.96	-69	21	17.9	20.059	0.172	-0.029	0.310	...	...
D10b-939	4	52	11.64	-69	22	02.5	20.103	0.179	-0.302	0.283	...	...
D10b-944	4	52	06.56	-69	22	18.1	20.142	0.152	-0.105	0.305	...	...
D10b-948	4	52	07.89	-69	20	22.8	20.150	0.217	-0.145	0.331	...	...
D10b-952	4	52	14.29	-69	20	04.1	20.177	0.217	0.054	0.349	...	...
D10b-979	4	52	03.65	-69	20	39.9	20.281	0.225	-0.472	0.308	...	...
D10b-982	4	52	38.27	-69	22	27.9	20.310	0.238	0.055	0.388	...	...
D10b-997	4	52	21.27	-69	19	54.6	20.522	0.236	-0.761	0.314	...	...
D10b-1007	4	52	11.76	-69	20	04.8	20.891	0.340	-0.666	0.435	-0.490	0.495

Table 4j

D66-1	5	05	15.10	-68	02	14.8	11.720	0.006	-0.046	0.008	-0.798	0.010
D66-2	5	04	42.35	-68	04	34.8	13.187	0.005	-0.179	0.008	-0.983	0.009
D66-3	5	05	00.53	-68	01	21.9	13.439	0.011	0.849	0.021	0.663	0.033
D66-5	5	05	05.58	-68	01	20.1	13.789	0.002	-0.103	0.004	-0.920	0.005
D66-4	5	04	53.94	-68	01	58.9	13.808	0.003	1.471	0.006	0.877	0.056
D66-6	5	04	57.99	-68	03	36.7	13.923	0.006	0.013	0.008	-0.991	0.062
D66-7	5	04	57.71	-68	03	19.7	14.469	0.004	-0.127	0.009	-0.950	0.012
D66-8	5	05	01.69	-68	03	33.7	14.733	0.004	-0.084	0.007	-0.936	0.009
D66-9	5	04	57.42	-68	03	10.4	15.184	0.006	-0.015	0.014	-0.894	0.019
D66-11	5	04	49.23	-68	03	40.0	15.340	0.006	-0.080	0.009	-0.845	0.014
D66-10	5	05	13.22	-68	03	29.8	15.365	0.004	0.647	0.009	0.182	0.031
D66-12	5	04	54.77	-68	04	32.6	15.484	0.008	1.779	0.016	1.802	0.148
D66-13	5	04	58.02	-68	03	36.1	15.574	0.020	-0.364	0.163	-0.580	0.338
D66-14	5	05	06.68	-68	02	37.2	15.752	0.007	1.350	0.014	1.298	0.082
D66-15	5	04	39.65	-68	03	30.3	15.825	0.006	0.698	0.013	0.077	0.027
D66-16	5	04	43.99	-68	01	50.4	15.832	0.006	0.779	0.012	0.432	0.036
D66-17	5	04	38.98	-68	02	38.7	16.046	0.006	1.785	0.015	...	...
D66-18	5	04	57.82	-68	03	16.5	16.046	0.008	-0.068	0.011	-0.801	0.017
D66-20	5	04	39.08	-68	04	21.0	16.200	0.008	-0.139	0.012	-0.812	0.018
D66-21	5	05	15.71	-68	04	53.5	16.205	0.009	-0.071	0.015	-0.583	0.038
D66-23	5	04	55.23	-68	03	24.1	16.239	0.008	-0.123	0.011	-0.925	0.015
D66-24	5	05	00.44	-68	01	31.7	16.251	0.008	-0.107	0.013	-0.774	0.019
D66-19	5	04	52.83	-68	01	23.5	16.262	0.008	1.392	0.020	1.539	0.153
D66-22	5	04	45.99	-68	02	15.1	16.304	0.007	1.587	0.036	1.567	0.238
D66-26	5	05	02.44	-68	01	58.5	16.318	0.009	-0.150	0.014	-0.769	0.021
D66-25	5	05	10.73	-68	03	49.4	16.331	0.009	1.658	0.033	0.910	0.150
D66-27	5	05	15.44	-68	04	55.2	16.361	0.014	0.765	0.030	0.448	0.081
D66-28	5	05	05.56	-68	04	56.0	16.388	0.192	0.512	0.440	-0.031	0.481
D66-30	5	04	56.22	-68	03	23.4	16.460	0.007	-0.026	0.015	-0.746	0.024
D66-31	5	04	44.48	-68	02	14.6	16.463	0.008	-0.146	0.012	-0.833	0.017
D66-32	5	05	00.54	-68	01	21.0	16.465	0.036	-0.185	0.046	-1.036	0.161
D66-33	5	04	43.63	-68	03	27.7	16.528	0.082	-0.054	0.093	0.190	0.035
D66-29	5	05	15.02	-68	02	58.0	16.534	0.009	1.720	0.029	...	...
D66-34	5	04	55.16	-68	02	05.8	16.547	0.009	-0.132	0.014	-0.831	0.021
D66-35	5	05	00.60	-68	03	26.5	16.560	0.011	-0.064	0.018	-0.793	0.028
D66-36	5	05	16.27	-68	03	27.9	16.628	0.010	-0.154	0.014	-0.764	0.018
D66-38	5	04	52.68	-68	03	43.9	16.684	0.010	-0.165	0.015	-0.835	0.021
D66-39	5	04	56.60	-68	03	15.5	16.692	0.010	-0.055	0.016	-0.814	0.025
D66-41	5	04	55.70	-68	03	05.2	16.748	0.009	-0.019	0.013	-0.713	0.021
D66-42	5	04	47.43	-68	03	11.4	16.748	0.011	-0.064	0.018	-0.724	0.026
D66-37	5	05	10.42	-68	02	55.5	16.760	0.011	1.740	0.033	...	...
D66-40	5	05	00.69	-68	01	22.8	16.770	0.034	0.904	0.061	-0.220	0.121
D66-44	5	04	46.51	-68	04	48.7	16.814	0.010	1.152	0.024	1.346	0.223
D66-43	5	05	13.72	-68	02	46.5	16.827	0.010	1.666	0.032	...	...
D66-45	5	04	57.27	-68	04	14.6	16.835	0.010	1.462	0.028	...	...
D66-46	5	05	02.72	-68	04	51.7	16.916	0.028	0.944	0.103	0.574	0.154
D66-47	5	04	51.36	-68	04	52.6	16.938	0.011	1.370	0.029	...	...
D66-48	5	05	15.21	-68	02	11.7	16.939	0.064	-0.148	0.091	-0.914	0.136
D66-50	5	04	59.90	-68	03	26.7	16.965	0.011	0.002	0.018	-0.725	0.032
D66-51	5	05	02.14	-68	01	39.6	16.981	0.009	-0.102	0.015	-0.695	0.027
D66-53	5	04	52.43	-68	03	37.0	16.991	0.011	-0.078	0.017	-0.775	0.026
D66-49	5	04	58.05	-68	04	26.5	17.015	0.010	1.558	0.050	...	...
D66-52	5	04	56.71	-68	01	17.4	17.025	0.011	0.766	0.023	0.400	0.101
D66-58	5	05	05.71	-68	03	20.0	17.049	0.012	0.013	0.020	-0.715	0.029
D66-57	5	05	14.33	-68	03	54.5	17.063	0.012	0.673	0.027	0.326	0.090
D66-54	5	05	03.79	-68	02	16.0	17.067	0.010	1.331	0.029	...	...
D66-59	5	05	06.95	-68	02	44.5	17.071	0.011	-0.067	0.018	-0.643	0.026
D66-55	5	04	47.31	-68	04	43.3	17.081	0.012	1.416	0.030	...	...
D66-56	5	04	52.21	-68	03	07.3	17.096	0.011	1.487	0.032	...	...
D66-61	5	04	58.84	-68	02	39.6	17.125	0.011	-0.067	0.018	-0.889	0.029
D66-60	5	05	07.09	-68	02	21.6	17.165	0.012	1.487	0.046	...	...
D66-63	5	04	59.12	-68	03	19.6	17.182	0.014	-0.123	0.021	-0.773	0.030
D66-64	5	04	45.47	-68	03	58.9	17.186	0.011	-0.118	0.017	-0.689	0.028
D66-65	5	04	58.94	-68	03	54.3	17.187	0.015	-0.178	0.021	-0.897	0.025

D66-66	5	04	51.35	-68	03	34.7	17.203	0.016	-0.131	0.025	-0.714	0.036
D66-67	5	05	05.74	-68	04	12.1	17.224	0.013	-0.062	0.022	-0.507	0.038
D66-68	5	04	55.56	-68	03	33.7	17.224	0.013	-0.088	0.021	-0.714	0.035
D66-62	5	04	38.75	-68	02	10.2	17.228	0.038	1.280	0.094	...	...
D66-69	5	05	02.16	-68	01	29.7	17.280	0.020	-0.154	0.031	-0.676	0.059
D66-71	5	05	00.26	-68	03	19.5	17.302	0.018	-0.036	0.030	-0.674	0.044
D66-72	5	05	04.15	-68	03	32.9	17.325	0.015	0.169	0.025	-0.594	0.042
D66-70	5	05	01.36	-68	03	01.4	17.344	0.012	1.202	0.035	...	...
D66-73	5	04	46.63	-68	02	13.4	17.387	0.022	1.398	0.058	0.982	0.335
D66-74	5	04	49.20	-68	02	25.8	17.394	0.012	1.331	0.035	...	...
D66-75	5	04	43.90	-68	01	38.6	17.400	0.014	1.450	0.044	...	...
D66-76	5	04	39.20	-68	02	26.3	17.471	0.012	1.346	0.038	...	...
D66-80	5	05	05.52	-68	04	29.1	17.471	0.018	-0.112	0.027	-0.643	0.041
D66-77	5	04	50.56	-68	04	41.6	17.481	0.014	1.504	0.045	...	...
D66-78	5	05	13.47	-68	03	54.5	17.484	0.021	1.323	0.065	...	...
D66-79	5	05	02.60	-68	01	46.9	17.498	0.013	1.074	0.042	...	...
D66-82	5	04	46.29	-68	04	50.2	17.506	0.017	-0.110	0.025	-0.693	0.042
D66-84	5	04	49.12	-68	03	41.7	17.514	0.025	-0.141	0.035	-0.686	0.064
D66-85	5	04	58.28	-68	03	36.4	17.523	0.039	-0.001	0.078	-0.901	0.282
D66-81	5	05	13.48	-68	04	10.7	17.557	0.013	1.237	0.038	...	...
D66-83	5	04	39.14	-68	02	42.3	17.569	0.014	1.307	0.041	...	...
D66-87	5	04	57.15	-68	03	53.2	17.571	0.013	0.713	0.038	0.408	0.101
D66-91	5	05	10.97	-68	01	14.0	17.581	0.013	-0.051	0.020	-0.551	0.035
D66-86	5	04	57.12	-68	04	37.2	17.589	0.014	1.354	0.052	...	...
D66-89	5	04	57.61	-68	02	58.4	17.604	0.016	1.184	0.052	...	...
D66-88	5	04	59.68	-68	03	43.5	17.610	0.015	1.346	0.050	...	...
D66-90	5	04	43.88	-68	02	55.4	17.621	0.016	1.258	0.056	...	...
D66-93	5	04	50.18	-68	03	56.9	17.629	0.013	-0.054	0.024	-0.581	0.040
D66-94	5	04	58.10	-68	03	38.1	17.642	0.046	0.108	0.068	-0.799	0.212
D66-92	5	05	03.17	-68	02	04.2	17.651	0.018	1.148	0.043	...	...
D66-96	5	04	40.98	-68	02	03.0	17.660	0.014	-0.085	0.024	-0.609	0.047
D66-97	5	04	58.38	-68	03	12.1	17.670	0.016	-0.020	0.027	-0.637	0.044
D66-95	5	05	10.25	-68	01	26.9	17.700	0.014	1.240	0.041	...	...
D66-100	5	05	02.06	-68	04	23.7	17.724	0.017	-0.074	0.026	-0.368	0.054
D66-101	5	04	46.95	-68	04	08.7	17.725	0.016	-0.286	0.026	-0.762	0.039
D66-99	5	04	59.90	-68	03	47.7	17.727	0.033	0.176	0.063	-0.412	0.149
D66-102	5	04	52.92	-68	03	21.3	17.737	0.021	-0.022	0.035	-0.734	0.047
D66-103	5	04	54.40	-68	02	38.5	17.742	0.019	-0.020	0.031	-0.474	0.051
D66-107	5	04	59.75	-68	03	46.7	17.771	0.021	0.234	0.061	0.110	0.231
D66-108	5	05	00.49	-68	03	15.2	17.796	0.031	0.029	0.045	-0.749	0.056
D66-105	5	05	14.06	-68	02	36.5	17.797	0.017	1.228	0.051	...	...
D66-109	5	04	46.72	-68	03	41.0	17.800	0.020	-0.071	0.027	-0.538	0.047
D66-106	5	05	10.58	-68	02	31.8	17.818	0.017	1.337	0.053	...	...
D66-110	5	05	04.03	-68	04	09.2	17.818	0.022	0.017	0.047	-0.338	0.079
D66-112	5	05	02.40	-68	01	30.7	17.835	0.031	-0.090	0.048	-0.593	0.100
D66-113	5	04	49.06	-68	03	38.5	17.863	0.033	-0.169	0.047	-0.692	0.071
D66-111	5	04	52.72	-68	01	17.6	17.882	0.017	1.318	0.051	...	...
D66-114	5	04	58.95	-68	03	26.8	17.946	0.046	1.209	0.081	...	...
D66-116	5	05	04.65	-68	02	35.5	17.952	0.023	0.601	0.044	0.389	0.169
D66-115	5	04	53.54	-68	01	13.0	17.954	0.016	1.244	0.063	...	...
D66-118	5	05	02.27	-68	01	37.0	17.958	0.027	-0.102	0.038	-0.530	0.081
D66-117	5	05	09.47	-68	02	29.4	17.994	0.020	0.717	0.047	-0.032	0.161
D66-120	5	05	01.13	-68	03	15.2	18.000	0.014	0.111	0.032	-0.514	0.065
D66-124	5	05	00.35	-68	03	27.1	18.046	0.037	-0.055	0.054	-0.582	0.078
D66-123	5	04	55.11	-68	02	57.3	18.049	0.021	0.092	0.034	-0.688	0.059
D66-119	5	04	55.07	-68	04	28.6	18.059	0.019	1.924	0.092	...	...
D66-121	5	05	07.85	-68	04	35.6	18.062	0.031	0.917	0.058	...	...
D66-125	5	04	54.24	-68	01	55.5	18.064	0.033	-0.136	0.043	-0.573	0.050
D66-122	5	04	59.13	-68	04	32.0	18.087	0.031	1.041	0.072	...	...
D66-130	5	04	48.96	-68	02	01.6	18.099	0.024	-0.154	0.037	-0.393	0.062
D66-133	5	04	46.86	-68	02	42.5	18.108	0.019	-0.044	0.032	-0.431	0.077
D66-129	5	05	03.40	-68	04	50.8	18.109	0.067	0.155	0.164	...	...
D66-126	5	04	47.68	-68	01	12.7	18.124	0.019	1.072	0.059	...	...
D66-135	5	04	56.29	-68	03	37.4	18.144	0.028	-0.020	0.052	-0.651	0.076
D66-128	5	04	43.74	-68	04	41.8	18.149	0.015	1.097	0.065	...	...
D66-127	5	05	14.96	-68	01	18.8	18.150	0.020	1.585	0.091	...	...

D66-136	5	04	40.69	-68	04	18.9	18.151	0.022	-0.086	0.035	-0.241	0.081
D66-132	5	05	01.47	-68	02	14.0	18.155	0.039	1.070	0.069	...	...
D66-131	5	04	43.36	-68	03	24.6	18.158	0.020	1.174	0.046	...	...
D66-134	5	04	50.13	-68	02	24.5	18.170	0.024	0.796	0.060	0.392	0.209
D66-137	5	04	46.16	-68	04	04.0	18.204	0.020	1.025	0.049	...	...
D66-139	5	05	16.04	-68	04	01.0	18.213	0.026	0.735	0.053	...	...
D66-148	5	05	07.56	-68	02	43.8	18.217	0.031	0.008	0.041	-0.391	0.073
D66-138	5	04	53.64	-68	03	29.4	18.224	0.046	1.137	0.101	...	...
D66-150	5	05	02.10	-68	03	42.3	18.230	0.020	-0.122	0.031	-0.510	0.060
D66-145	5	04	46.20	-68	02	31.5	18.233	0.022	0.657	0.053	...	...
D66-144	5	04	38.17	-68	03	46.0	18.237	0.030	0.768	0.064	...	...
D66-141	5	04	38.27	-68	01	14.7	18.238	0.025	1.000	0.076	...	...
D66-140	5	05	15.80	-68	03	04.1	18.239	0.022	1.120	0.066	...	...
D66-146	5	04	51.25	-68	01	30.5	18.239	0.025	0.801	0.058	...	...
D66-142	5	04	60.00	-68	02	15.6	18.244	0.033	1.033	0.069	...	...
D66-143	5	04	39.30	-68	04	22.7	18.254	0.026	1.234	0.090	...	...
D66-147	5	04	53.28	-68	04	06.1	18.257	0.026	1.015	0.062	...	...
D66-149	5	05	00.74	-68	04	06.3	18.285	0.028	1.284	0.084	...	...
D66-152	5	04	41.01	-68	04	32.9	18.286	0.024	1.002	0.057	...	...
D66-156	5	05	13.18	-68	01	39.9	18.290	0.029	0.081	0.042	0.064	0.094
D66-151	5	04	54.66	-68	02	49.4	18.294	0.025	1.195	0.074	...	...
D66-153	5	04	54.85	-68	03	17.2	18.302	0.027	1.179	0.080	...	...
D66-157	5	04	44.75	-68	01	36.4	18.306	0.029	0.398	0.056	0.098	0.150
D66-162	5	04	42.63	-68	03	51.6	18.313	0.029	-0.123	0.043	-0.294	0.074
D66-158	5	04	59.94	-68	02	56.3	18.327	0.033	0.868	0.090	...	...
D66-155	5	04	52.59	-68	03	02.9	18.329	0.020	1.134	0.070	...	...
D66-154	5	04	47.11	-68	03	23.2	18.330	0.033	1.349	0.105	...	...
D66-159	5	04	53.08	-68	02	49.9	18.342	0.029	0.929	0.070	...	...
D66-160	5	05	14.14	-68	04	17.2	18.349	0.026	0.781	0.058	-0.151	0.209
D66-166	5	05	16.80	-68	02	01.3	18.353	0.026	0.056	0.050	0.193	0.155
D66-161	5	04	40.61	-68	02	31.3	18.359	0.026	0.978	0.069	...	...
D66-168	5	05	14.45	-68	04	50.5	18.365	0.032	-0.008	0.058	-0.360	0.102
D66-163	5	04	51.91	-68	02	26.5	18.370	0.033	1.178	0.083	...	...
D66-164	5	05	15.91	-68	01	47.6	18.370	0.025	1.161	0.075	...	...
D66-167	5	05	11.94	-68	03	22.2	18.383	0.030	0.437	0.055	0.389	0.189
D66-165	5	04	57.69	-68	03	23.2	18.384	0.022	0.952	0.074	...	...
D66-172	5	04	48.31	-68	03	47.7	18.399	0.031	-0.079	0.048	-0.414	0.089
D66-169	5	05	10.06	-68	04	00.6	18.404	0.025	0.850	0.062	...	...
D66-170	5	05	06.03	-68	03	03.2	18.416	0.026	0.940	0.082	...	...
D66-175	5	05	14.69	-68	03	56.1	18.421	0.033	0.094	0.062	-0.160	0.131
D66-179	5	04	45.43	-68	04	17.4	18.424	0.030	-0.127	0.044	-0.307	0.083
D66-174	5	04	46.20	-68	02	13.8	18.426	0.073	0.419	0.107	0.037	0.194
D66-171	5	04	58.32	-68	01	28.2	18.427	0.032	1.132	0.084	...	...
D66-176	5	05	07.79	-68	04	49.2	18.427	0.089	0.202	0.146	...	...
D66-173	5	05	09.90	-68	02	14.4	18.434	0.031	0.662	0.057	...	...
D66-178	5	05	00.84	-68	04	39.6	18.457	0.035	0.690	0.070	...	...
D66-177	5	05	13.15	-68	04	19.7	18.464	0.028	1.016	0.110	...	...
D66-185	5	04	49.54	-68	02	28.2	18.466	0.030	-0.074	0.046	-0.658	0.089
D66-188	5	05	16.13	-68	04	06.8	18.481	0.030	-0.011	0.048	-0.387	0.107
D66-186	5	05	13.61	-68	02	03.9	18.484	0.026	0.211	0.048	-0.454	0.119
D66-181	5	04	36.92	-68	03	53.4	18.490	0.157	0.967	0.189	...	...
D66-180	5	04	54.34	-68	04	31.3	18.491	0.038	0.995	0.080	...	...
D66-183	5	04	57.70	-68	02	47.5	18.498	0.030	1.004	0.083	...	...
D66-190	5	04	55.41	-68	04	50.0	18.500	0.051	0.220	0.092	-0.033	0.166
D66-184	5	05	14.95	-68	02	40.6	18.502	0.030	0.883	0.063	...	...
D66-182	5	04	49.15	-68	03	54.9	18.505	0.035	1.206	0.090	...	...
D66-192	5	04	50.54	-68	02	19.8	18.509	0.033	-0.076	0.046	-0.314	0.098
D66-187	5	05	15.50	-68	03	35.9	18.515	0.037	0.931	0.073	...	...
D66-194	5	05	00.57	-68	03	30.9	18.519	0.037	0.111	0.064	-0.037	0.119
D66-191	5	04	45.47	-68	04	19.7	18.520	0.035	0.519	0.063	0.162	0.213
D66-198	5	04	46.36	-68	03	55.4	18.523	0.032	-0.041	0.053	-0.451	0.097
D66-189	5	05	09.90	-68	02	22.3	18.527	0.032	0.903	0.080	...	...
D66-199	5	05	11.14	-68	03	50.3	18.528	0.036	-0.006	0.061	-0.276	0.115
D66-200	5	05	14.96	-68	04	49.4	18.532	0.033	0.065	0.062	0.035	0.154
D66-202	5	04	50.40	-68	02	11.4	18.537	0.027	-0.063	0.046	-0.502	0.101
D66-195	5	05	08.32	-68	01	10.6	18.542	0.179	0.562	0.210	...	...

D66-193	5	04	47.73	-68	01	15.5	18.557	0.026	1.026	0.077	...	...
D66-197	5	04	45.28	-68	03	09.2	18.563	0.029	1.006	0.092	...	...
D66-201	5	04	42.03	-68	03	39.6	18.569	0.028	0.696	0.069	...	...
D66-208	5	04	49.39	-68	02	32.7	18.571	0.031	-0.098	0.048	-0.521	0.080
D66-209	5	04	48.44	-68	01	56.6	18.576	0.034	-0.049	0.053	-0.111	0.119
D66-196	5	04	39.34	-68	01	26.9	18.578	0.025	1.376	0.102	...	...
D66-210	5	05	00.10	-68	01	23.9	18.581	0.061	0.026	0.088	-0.221	0.149
D66-204	5	04	56.96	-68	03	06.7	18.589	0.032	0.878	0.092	...	...
D66-211	5	04	48.08	-68	01	14.5	18.591	0.029	0.209	0.054	-0.229	0.120
D66-203	5	04	38.62	-68	01	39.2	18.592	0.025	1.152	0.085	...	...
D66-207	5	04	49.53	-68	03	37.2	18.598	0.035	0.620	0.078	...	...
D66-205	5	05	00.11	-68	02	04.7	18.599	0.027	0.784	0.078	...	...
D66-215	5	04	58.45	-68	04	53.2	18.619	0.043	0.082	0.071	0.505	0.238
D66-213	5	04	56.13	-68	04	38.6	18.628	0.030	0.997	0.079	...	...
D66-216	5	04	52.45	-68	02	43.4	18.628	0.039	0.062	0.062	-0.089	0.171
D66-212	5	05	10.15	-68	01	37.3	18.629	0.029	1.043	0.082	...	...
D66-221	5	05	03.46	-68	03	02.1	18.632	0.029	-0.121	0.052	-0.181	0.093
D66-214	5	04	57.62	-68	01	23.7	18.637	0.033	0.951	0.072	...	...
D66-218	5	05	06.23	-68	03	18.4	18.645	0.027	0.355	0.054	...	...
D66-222	5	05	15.10	-68	03	34.3	18.661	0.038	-0.141	0.048	-0.371	0.086
D66-224	5	04	57.62	-68	03	11.0	18.668	0.117	-0.054	0.165	...	...
D66-223	5	04	55.47	-68	01	16.3	18.669	0.031	-0.022	0.063	-0.585	0.104
D66-227	5	04	58.94	-68	03	08.9	18.670	0.044	-0.082	0.069	-0.268	0.111
D66-226	5	04	56.57	-68	02	11.0	18.672	0.077	-0.019	0.103	-0.714	0.104
D66-217	5	04	39.44	-68	02	22.0	18.680	0.028	1.181	0.096	...	...
D66-229	5	04	44.21	-68	01	55.9	18.680	0.033	-0.015	0.055	0.126	0.151
D66-219	5	04	41.67	-68	01	52.4	18.682	0.034	1.118	0.081	...	...
D66-230	5	04	49.29	-68	03	18.9	18.688	0.035	0.050	0.058	-0.631	0.094
D66-220	5	04	58.48	-68	01	56.2	18.691	0.030	1.287	0.089	...	...
D66-234	5	04	48.96	-68	04	13.2	18.691	0.036	-0.155	0.052	-0.272	0.095
D66-236	5	04	44.54	-68	01	30.9	18.704	0.038	0.036	0.067	-0.084	0.140
D66-242	5	05	00.43	-68	02	15.9	18.706	0.055	-0.196	0.081	-0.751	0.095
D66-228	5	05	01.66	-68	04	14.9	18.707	0.032	0.780	0.083	...	...
D66-225	5	04	52.72	-68	04	18.3	18.708	0.037	0.833	0.077	...	...
D66-239	5	05	16.82	-68	02	30.4	18.712	0.035	0.023	0.059	...	...
D66-251	5	04	42.12	-68	04	35.2	18.714	0.274	-0.956	0.338	0.541	0.348
D66-240	5	04	50.10	-68	01	22.8	18.717	0.033	0.120	0.061	0.360	0.240
D66-231	5	04	51.03	-68	03	32.8	18.719	0.055	0.696	0.111	...	...
D66-244	5	04	57.38	-68	03	38.9	18.719	0.054	-0.141	0.085	-0.621	0.111
D66-237	5	05	11.06	-68	04	24.9	18.724	0.038	0.375	0.078	0.182	0.231
D66-232	5	05	04.39	-68	02	21.2	18.728	0.033	0.886	0.090	...	...
D66-246	5	05	12.84	-68	02	09.1	18.736	0.037	0.120	0.063	-0.209	0.169
D66-233	5	04	41.40	-68	01	59.6	18.739	0.036	1.101	0.100	...	...
D66-245	5	04	53.93	-68	03	29.8	18.739	0.074	0.261	0.110	-0.405	0.160
D66-235	5	05	06.23	-68	03	46.4	18.747	0.028	1.030	0.086	...	...
D66-238	5	04	54.61	-68	01	40.9	18.753	0.031	1.030	0.106	...	...
D66-243	5	04	50.09	-68	01	44.7	18.756	0.026	0.842	0.079	...	...
D66-253	5	04	38.19	-68	04	12.1	18.758	0.027	-0.048	0.047	-0.495	0.122
D66-257	5	04	43.76	-68	04	53.9	18.766	0.034	-0.086	0.056	-0.581	0.092
D66-261	5	04	44.27	-68	03	51.5	18.780	0.031	-0.051	0.047	-0.150	0.168
D66-249	5	04	39.36	-68	04	16.5	18.782	0.055	0.676	0.104	...	...
D66-247	5	04	49.72	-68	03	01.2	18.790	0.033	1.148	0.093	...	...
D66-265	5	05	01.89	-68	01	31.6	18.793	0.042	0.018	0.066	...	...
D66-255	5	05	09.37	-68	02	36.4	18.795	0.039	0.768	0.094	...	...
D66-250	5	04	38.95	-68	02	10.5	18.796	0.057	0.958	0.276	...	...
D66-248	5	04	43.71	-68	02	10.6	18.799	0.031	1.129	0.101	...	...
D66-258	5	04	54.67	-68	02	46.0	18.799	0.034	0.664	0.080	...	...
D66-252	5	04	49.54	-68	03	06.8	18.801	0.056	0.967	0.088	...	...
D66-256	5	04	49.95	-68	04	46.8	18.801	0.036	0.805	0.104	...	...
D66-254	5	05	00.40	-68	03	08.9	18.806	0.037	1.072	0.117	...	...
D66-259	5	05	06.65	-68	01	43.3	18.806	0.034	0.683	0.095	...	...
D66-268	5	05	15.68	-68	04	55.1	18.809	0.088	0.004	0.128	-1.114	0.132
D66-260	5	04	55.97	-68	04	46.7	18.813	0.029	0.840	0.064	...	...
D66-269	5	05	07.49	-68	02	12.8	18.819	0.034	-0.050	0.056	-0.608	0.108
D66-262	5	04	39.22	-68	01	45.4	18.821	0.036	0.748	0.071	...	...
D66-264	5	04	42.56	-68	02	47.7	18.827	0.042	0.868	0.112	...	...

D66-263	5	05	05.35	-68	03	38.1	18.832	0.035	0.979	0.097	...	...
D66-266	5	04	47.12	-68	01	47.2	18.846	0.041	0.900	0.091	...	...
D66-267	5	04	55.42	-68	04	03.7	18.861	0.042	1.226	0.116	...	...
D66-271	5	04	41.43	-68	03	26.9	18.861	0.039	0.917	0.106	...	...
D66-286	5	05	01.93	-68	02	44.6	18.861	0.055	-0.121	0.074	-0.513	0.130
D66-282	5	04	55.27	-68	01	29.8	18.862	0.055	0.031	0.080	-0.435	0.139
D66-281	5	04	54.23	-68	03	18.4	18.863	0.040	0.108	0.073	-0.562	0.167
D66-285	5	04	52.59	-68	03	27.9	18.864	0.037	0.023	0.065	-0.542	0.133
D66-273	5	04	43.82	-68	03	22.8	18.865	0.035	0.688	0.082	...	...
D66-276	5	04	52.51	-68	01	49.5	18.866	0.054	0.512	0.079	...	...
D66-272	5	04	39.60	-68	02	39.8	18.873	0.034	0.895	0.092	...	...
D66-278	5	05	05.74	-68	03	55.5	18.875	0.045	0.690	0.107	...	...
D66-290	5	05	10.80	-68	04	27.6	18.875	0.044	0.060	0.080	-0.526	0.135
D66-274	5	05	11.98	-68	02	42.6	18.876	0.036	0.919	0.102	...	...
D66-275	5	04	43.17	-68	01	54.8	18.876	0.042	0.876	0.107	...	...
D66-295	5	04	57.29	-68	01	40.5	18.878	0.047	-0.092	0.070	...	...
D66-279	5	05	02.51	-68	03	36.9	18.884	0.038	0.873	0.097	...	...
D66-297	5	05	09.07	-68	01	32.8	18.887	0.032	-0.109	0.050	-0.224	0.170
D66-284	5	05	02.29	-68	01	48.1	18.888	0.042	0.616	0.113	...	...
D66-280	5	04	41.62	-68	01	37.1	18.889	0.041	0.924	0.097	...	...
D66-294	5	05	02.49	-68	01	36.4	18.892	0.062	0.313	0.144	-0.779	0.197
D66-277	5	04	45.55	-68	02	16.4	18.898	0.040	1.229	0.139	...	...
D66-302	5	04	47.66	-68	03	34.7	18.901	0.035	-0.049	0.064	-0.588	0.121
D66-283	5	04	59.84	-68	01	49.6	18.902	0.034	0.936	0.084	...	...
D66-287	5	04	45.96	-68	03	23.8	18.904	0.042	0.890	0.108	...	...
D66-300	5	05	01.91	-68	04	46.6	18.904	0.061	0.101	0.126	...	...
D66-292	5	04	41.32	-68	04	45.7	18.907	0.035	0.764	0.094	...	...
D66-305	5	04	54.99	-68	04	01.9	18.907	0.057	0.033	0.093	-0.522	0.123
D66-306	5	05	00.22	-68	01	39.6	18.907	0.046	-0.060	0.069	-0.347	0.137
D66-288	5	05	12.19	-68	02	37.4	18.910	0.046	0.920	0.107	...	...
D66-289	5	05	16.03	-68	02	40.9	18.910	0.039	0.907	0.112	...	...
D66-298	5	05	08.21	-68	04	30.1	18.914	0.044	0.451	0.101	...	...
D66-291	5	05	01.85	-68	04	43.5	18.918	0.057	1.045	0.164	...	...
D66-296	5	05	07.67	-68	01	45.3	18.921	0.039	0.722	0.106	...	...
D66-307	5	05	08.16	-68	02	16.2	18.923	0.042	0.182	0.076	0.008	0.175
D66-308	5	04	58.95	-68	03	25.5	18.923	0.116	0.105	0.188	-0.217	0.215
D66-293	5	04	44.24	-68	02	52.0	18.931	0.036	1.287	0.119	...	...
D66-301	5	05	01.30	-68	02	03.4	18.936	0.036	0.801	0.091	...	...
D66-303	5	05	11.07	-68	04	04.7	18.936	0.032	0.759	0.081	...	...
D66-312	5	04	49.07	-68	01	16.4	18.941	0.035	0.105	0.058	...	...
D66-314	5	05	01.10	-68	03	45.3	18.944	0.034	0.095	0.062	...	...
D66-299	5	05	10.81	-68	02	17.0	18.946	0.047	1.147	0.121	...	...
D66-304	5	05	14.48	-68	01	15.1	18.946	0.044	0.977	0.112	...	...
D66-309	5	04	53.01	-68	03	43.1	18.955	0.048	0.658	0.107	...	...
D66-310	5	04	44.27	-68	01	47.9	18.963	0.045	0.783	0.105	...	...
D66-320	5	05	06.30	-68	01	43.5	18.974	0.051	0.394	0.114	...	...
D66-313	5	05	00.71	-68	04	44.1	18.977	0.061	0.880	0.123	...	...
D66-326	5	05	10.63	-68	03	14.0	18.982	0.051	0.115	0.085	-0.429	0.162
D66-327	5	04	57.25	-68	04	08.8	18.985	0.048	0.181	0.084	...	...
D66-336	5	05	11.66	-68	03	35.6	18.985	0.047	-0.218	0.074	-0.746	0.104
D66-334	5	05	15.63	-68	01	21.8	18.992	0.050	-0.032	0.075	-0.243	0.139
D66-315	5	05	12.51	-68	01	51.0	18.994	0.040	1.091	0.134	...	...
D66-317	5	04	42.21	-68	03	17.7	18.997	0.037	0.981	0.116	...	...
D66-319	5	04	56.94	-68	01	57.5	18.999	0.034	0.989	0.095	...	...
D66-324	5	05	16.37	-68	04	12.1	19.000	0.050	0.626	0.090	...	...
D66-340	5	04	59.58	-68	01	40.6	19.000	0.049	-0.071	0.071	-0.085	0.182
D66-318	5	04	42.41	-68	02	43.4	19.002	0.044	1.068	0.118	...	...
D66-325	5	05	00.81	-68	04	33.8	19.002	0.053	0.626	0.108	...	...
D66-330	5	05	13.42	-68	01	35.5	19.007	0.048	0.574	0.093	...	...
D66-323	5	05	00.31	-68	04	13.4	19.008	0.052	0.815	0.133	...	...
D66-328	5	04	43.20	-68	01	50.5	19.013	0.041	0.751	0.077	...	...
D66-329	5	04	50.01	-68	03	47.6	19.023	0.048	0.948	0.120	...	...
D66-346	5	04	51.58	-68	03	07.7	19.023	0.033	0.224	0.093	-0.477	0.196
D66-331	5	04	52.24	-68	03	52.0	19.025	0.037	0.896	0.091	...	...
D66-358	5	04	54.79	-68	01	17.1	19.030	0.045	0.108	0.078	...	...
D66-359	5	05	01.55	-68	01	22.3	19.033	0.043	0.153	0.075	...	...

D66-337	5	04	44.00	-68	04	27.1	19.035	0.043	0.912	0.108	...	...
D66-342	5	04	59.59	-68	01	19.5	19.036	0.044	0.725	0.086	...	...
D66-333	5	04	57.46	-68	02	27.9	19.040	0.057	1.173	0.110	...	...
D66-338	5	04	47.26	-68	02	18.8	19.040	0.042	0.948	0.125	...	...
D66-365	5	04	47.55	-68	01	52.8	19.043	0.051	0.115	0.087	...	...
D66-374	5	05	06.02	-68	03	15.6	19.046	0.039	-0.174	0.059	-0.656	0.109
D66-370	5	04	56.40	-68	04	19.6	19.048	0.055	-0.002	0.106	-0.713	0.153
D66-343	5	04	40.20	-68	01	20.7	19.049	0.041	0.933	0.110	...	...
D66-335	5	04	53.52	-68	04	32.5	19.050	0.039	1.311	0.146	...	...
D66-356	5	04	43.92	-68	04	34.5	19.050	0.048	0.637	0.102	...	...
D66-368	5	05	08.72	-68	02	24.3	19.050	0.045	0.168	0.091	...	...
D66-347	5	04	46.24	-68	03	25.7	19.051	0.052	0.863	0.117	...	...
D66-341	5	05	10.29	-68	03	14.3	19.052	0.051	1.112	0.148	...	...
D66-344	5	04	45.81	-68	01	29.2	19.054	0.038	0.991	0.127	...	...
D66-345	5	05	03.42	-68	03	31.9	19.056	0.051	1.002	0.139	...	...
D66-357	5	05	02.67	-68	02	37.1	19.060	0.040	0.815	0.112	...	...
D66-361	5	05	06.45	-68	03	27.5	19.060	0.038	0.684	0.105	...	...
D66-373	5	05	12.04	-68	03	59.4	19.060	0.074	0.167	0.098	...	...
D66-362	5	05	17.01	-68	03	15.5	19.061	0.104	0.652	0.200	...	...
D66-363	5	04	41.59	-68	04	37.3	19.061	0.067	0.648	0.149	...	...
D66-352	5	05	00.71	-68	02	35.1	19.062	0.043	0.983	0.109	...	...
D66-348	5	05	08.50	-68	02	25.9	19.063	0.044	1.044	0.132	...	...
D66-351	5	04	46.03	-68	01	21.8	19.063	0.050	1.018	0.110	...	...
D66-339	5	04	44.96	-68	03	59.5	19.067	0.041	1.507	0.147	...	...
D66-355	5	04	59.76	-68	04	49.3	19.067	0.062	1.023	0.172	...	...
D66-354	5	05	13.46	-68	04	18.9	19.071	0.045	1.172	0.203	...	...
D66-360	5	04	47.75	-68	04	31.2	19.071	0.041	0.990	0.110	...	...
D66-366	5	05	03.69	-68	02	07.8	19.071	0.044	0.761	0.103	...	...
D66-367	5	04	38.50	-68	01	42.8	19.076	0.047	0.824	0.095	...	...
D66-364	5	04	42.30	-68	02	17.7	19.079	0.106	0.993	0.157	...	...
D66-372	5	04	40.45	-68	04	28.5	19.083	0.040	0.769	0.100	...	...
D66-385	5	05	03.07	-68	01	31.4	19.085	0.054	0.023	0.089	-0.608	0.145
D66-388	5	04	43.77	-68	04	36.9	19.090	0.059	-0.014	0.089	...	...
D66-369	5	04	42.95	-68	03	06.9	19.091	0.057	1.126	0.128	...	...
D66-377	5	05	02.62	-68	04	25.9	19.093	0.053	0.692	0.129	...	...
D66-378	5	04	38.36	-68	04	54.7	19.094	0.054	0.727	0.102	...	...
D66-375	5	04	52.19	-68	04	10.6	19.099	0.044	1.003	0.128	...	...
D66-382	5	04	52.11	-68	04	31.5	19.100	0.049	0.638	0.109	...	...
D66-390	5	04	54.83	-68	01	56.1	19.105	0.055	0.057	0.082	-0.539	0.149
D66-381	5	05	07.81	-68	02	48.1	19.106	0.038	0.823	0.125	...	...
D66-380	5	04	46.66	-68	01	46.0	19.107	0.050	0.854	0.110	...	...
D66-402	5	05	02.85	-68	03	26.9	19.108	0.045	-0.371	0.080	-0.419	0.147
D66-379	5	04	57.67	-68	02	52.0	19.110	0.044	0.967	0.135	...	...
D66-389	5	04	52.27	-68	03	41.3	19.110	0.048	0.329	0.077	-0.055	0.327
D66-395	5	05	08.64	-68	03	38.3	19.118	0.048	0.054	0.079	...	...
D66-413	5	04	37.29	-68	03	37.9	19.118	0.074	-0.505	0.090	-0.306	0.112
D66-384	5	04	43.63	-68	04	03.5	19.122	0.046	0.989	0.139	...	...
D66-386	5	05	08.53	-68	02	09.2	19.126	0.037	0.950	0.113	...	...
D66-404	5	05	00.39	-68	03	18.0	19.136	0.072	0.129	0.121	...	...
D66-391	5	04	49.34	-68	04	24.7	19.138	0.055	0.795	0.122	...	...
D66-392	5	05	07.10	-68	03	35.0	19.139	0.035	0.819	0.101	...	...
D66-416	5	04	45.16	-68	04	42.5	19.139	0.055	-0.157	0.089	-0.218	0.146
D66-414	5	05	14.38	-68	02	50.0	19.140	0.043	-0.063	0.073	...	...
D66-420	5	05	16.93	-68	02	52.0	19.144	0.063	-0.127	0.085	...	...
D66-396	5	05	06.71	-68	02	30.7	19.149	0.042	0.769	0.126	...	...
D66-394	5	04	44.79	-68	04	48.4	19.153	0.049	1.006	0.124	...	...
D66-403	5	05	01.92	-68	04	19.3	19.160	0.039	0.800	0.137	...	...
D66-398	5	04	57.08	-68	02	04.7	19.161	0.045	1.062	0.170	...	...
D66-423	5	05	01.65	-68	04	37.7	19.162	0.151	0.154	0.198	...	...
D66-408	5	05	14.21	-68	02	03.7	19.163	0.041	0.689	0.122	...	...
D66-410	5	05	11.43	-68	04	00.9	19.163	0.052	0.631	0.129	...	...
D66-412	5	04	37.09	-68	04	39.3	19.164	0.069	0.654	0.118	...	...
D66-417	5	05	08.07	-68	04	19.2	19.166	0.054	0.444	0.111	...	...
D66-409	5	04	51.11	-68	04	55.1	19.169	0.056	0.797	0.116	...	...
D66-427	5	05	08.38	-68	03	50.5	19.172	0.049	0.071	0.083	...	...
D66-419	5	05	12.89	-68	04	38.2	19.173	0.060	0.572	0.101	...	...

D66-401	5	05	07.09	-68	04	22.1	19.174	0.057	1.189	0.169	...	...
D66-406	5	04	47.52	-68	04	27.1	19.174	0.046	0.954	0.114	...	...
D66-407	5	05	07.67	-68	01	57.9	19.175	0.041	0.957	0.124	...	...
D66-415	5	04	46.88	-68	03	55.7	19.175	0.055	0.711	0.134	...	...
D66-411	5	05	10.37	-68	03	30.8	19.176	0.053	0.945	0.131	...	...
D66-424	5	04	56.43	-68	03	04.3	19.180	0.061	0.500	0.112	...	...
D66-433	5	04	42.65	-68	02	02.6	19.182	0.053	0.113	0.088	...	...
D66-421	5	04	57.33	-68	02	15.6	19.189	0.054	0.801	0.106	...	...
D66-436	5	04	42.80	-68	03	38.3	19.189	0.053	0.019	0.085	...	...
D66-418	5	04	44.60	-68	02	23.0	19.192	0.057	1.007	0.135	...	...
D66-443	5	05	15.19	-68	04	47.2	19.192	0.065	-0.172	0.092	0.095	0.211
D66-430	5	05	09.63	-68	04	24.3	19.198	0.060	0.561	0.121	...	...
D66-425	5	04	51.04	-68	03	18.0	19.201	0.050	0.947	0.131	...	...
D66-422	5	04	56.56	-68	04	21.2	19.203	0.057	1.112	0.170	...	...
D66-437	5	04	55.13	-68	03	30.6	19.204	0.060	0.321	0.126	-0.523	0.202
D66-450	5	05	00.97	-68	01	33.9	19.208	0.035	-0.021	0.070	-0.607	0.178
D66-426	5	04	58.17	-68	04	34.8	19.210	0.059	1.132	0.216	...	...
D66-431	5	05	08.91	-68	03	41.8	19.211	0.045	0.831	0.118	...	...
D66-428	5	04	50.15	-68	03	18.8	19.216	0.059	1.065	0.159	...	...
D66-453	5	04	46.95	-68	03	39.5	19.216	0.063	0.077	0.087	-0.324	0.209
D66-456	5	05	11.85	-68	02	28.2	19.218	0.060	0.105	0.104	...	...
D66-429	5	04	54.60	-68	02	16.5	19.219	0.049	1.142	0.181	...	...
D66-440	5	04	41.85	-68	04	01.3	19.220	0.046	0.609	0.099	...	...
D66-435	5	04	56.72	-68	02	10.1	19.221	0.128	0.924	0.214	...	...
D66-451	5	05	03.11	-68	01	15.7	19.221	0.047	0.231	0.083	...	...
D66-442	5	04	44.42	-68	01	42.3	19.225	0.047	0.644	0.099	...	...
D66-439	5	04	37.09	-68	01	41.3	19.226	0.075	0.785	0.123	...	...
D66-461	5	04	51.55	-68	01	47.5	19.227	0.058	0.043	0.088	-0.306	0.172
D66-459	5	04	55.90	-68	04	15.5	19.228	0.056	0.171	0.096	-1.032	0.161
D66-464	5	04	48.61	-68	04	30.4	19.229	0.053	-0.076	0.084	-0.425	0.184
D66-441	5	05	03.45	-68	02	44.0	19.230	0.049	0.747	0.129	...	...
D66-454	5	04	51.21	-68	02	23.5	19.235	0.056	0.518	0.095	...	...
D66-438	5	04	45.49	-68	01	16.8	19.236	0.047	1.048	0.109	...	...
D66-434	5	04	41.78	-68	04	31.0	19.238	0.065	1.332	0.314	...	...
D66-444	5	04	56.79	-68	02	19.3	19.238	0.048	0.893	0.138	...	...
D66-452	5	04	55.20	-68	03	32.6	19.243	0.060	0.752	0.169	...	...
D66-473	5	05	15.72	-68	04	08.3	19.243	0.055	-0.150	0.088	...	...
D66-447	5	05	12.87	-68	01	56.7	19.244	0.055	0.854	0.106	...	...
D66-448	5	05	12.97	-68	03	39.3	19.244	0.052	0.841	0.115	...	...
D66-474	5	04	48.70	-68	04	08.4	19.249	0.093	-0.038	0.131	...	...
D66-458	5	04	59.11	-68	04	02.7	19.250	0.056	0.693	0.128	...	...
D66-445	5	04	49.09	-68	03	15.1	19.251	0.047	1.099	0.174	...	...
D66-469	5	05	05.10	-68	04	13.3	19.257	0.074	0.266	0.112	...	...
D66-479	5	04	52.17	-68	04	40.8	19.259	0.055	-0.082	0.091	-0.651	0.154
D66-463	5	05	01.26	-68	04	33.2	19.270	0.061	0.900	0.157	...	...
D66-468	5	05	09.37	-68	03	58.7	19.270	0.054	0.628	0.108	...	...
D66-462	5	04	59.49	-68	04	03.0	19.273	0.057	1.008	0.170	...	...
D66-490	5	05	07.66	-68	04	27.7	19.278	0.056	-0.219	0.077	...	...
D66-486	5	04	57.52	-68	04	37.7	19.283	0.053	0.203	0.104	...	...
D66-472	5	04	51.20	-68	01	32.7	19.285	0.055	0.811	0.131	...	...
D66-467	5	04	46.25	-68	03	48.3	19.286	0.044	1.068	0.171	...	...
D66-471	5	04	54.42	-68	01	43.4	19.288	0.049	0.897	0.147	...	...
D66-475	5	04	38.52	-68	03	35.7	19.288	0.055	0.820	0.120	...	...
D66-466	5	04	57.12	-68	03	43.2	19.289	0.065	1.165	0.201	...	...
D66-476	5	04	42.62	-68	04	08.7	19.294	0.053	0.859	0.142	...	...
D66-477	5	05	08.04	-68	01	20.4	19.296	0.055	0.853	0.145	...	...
D66-480	5	05	10.54	-68	02	42.0	19.298	0.064	0.805	0.130	...	...
D66-482	5	05	03.53	-68	03	56.0	19.299	0.048	0.720	0.135	...	...
D66-483	5	04	44.32	-68	01	28.8	19.302	0.060	0.778	0.141	...	...
D66-488	5	04	41.66	-68	04	26.7	19.303	0.054	0.602	0.122	...	...
D66-499	5	04	45.30	-68	03	49.0	19.305	0.068	-0.017	0.102	-0.412	0.214
D66-500	5	05	03.88	-68	04	18.6	19.305	0.077	-0.046	0.111	...	...
D66-501	5	04	56.20	-68	02	37.3	19.305	0.065	-0.051	0.101	-0.230	0.187
D66-484	5	04	37.93	-68	01	33.6	19.307	0.072	0.861	0.153	...	...
D66-487	5	05	10.91	-68	01	19.4	19.307	0.050	0.750	0.143	...	...
D66-496	5	05	05.59	-68	01	26.3	19.307	0.044	0.178	0.110	...	...

D66-485	5	05	15.42	-68	03	51.2	19.314	0.043	0.986	0.161	...	...
D66-504	5	05	13.04	-68	04	25.7	19.322	0.060	0.226	0.120	...	...
D66-489	5	04	53.87	-68	03	53.5	19.323	0.053	0.887	0.139	...	...
D66-509	5	05	09.32	-68	02	17.0	19.324	0.051	0.040	0.078	...	...
D66-516	5	05	11.61	-68	04	36.5	19.324	0.088	-0.307	0.121	...	...
D66-495	5	04	49.81	-68	03	19.5	19.333	0.059	0.825	0.166	...	...
D66-498	5	04	45.09	-68	01	56.8	19.335	0.060	0.708	0.128	...	...
D66-492	5	04	39.26	-68	02	59.2	19.336	0.059	1.077	0.170	...	...
D66-493	5	05	09.42	-68	03	53.4	19.336	0.057	1.055	0.165	...	...
D66-502	5	04	45.20	-68	02	15.8	19.336	0.047	0.589	0.134	...	...
D66-491	5	04	54.28	-68	02	07.0	19.338	0.065	1.157	0.195	...	...
D66-497	5	05	11.04	-68	01	30.0	19.339	0.059	0.877	0.159	...	...
D66-512	5	04	39.10	-68	01	57.3	19.340	0.059	0.144	0.093	...	...
D66-514	5	05	16.93	-68	04	21.5	19.340	0.071	0.071	0.105	...	...
D66-532	5	05	12.20	-68	04	34.7	19.346	0.076	-0.395	0.099	...	...
D66-522	5	04	47.18	-68	01	51.0	19.349	0.055	0.145	0.100	...	...
D66-508	5	04	46.90	-68	02	24.8	19.350	0.047	0.707	0.127	...	...
D66-519	5	04	47.07	-68	03	50.2	19.352	0.051	0.336	0.109	...	...
D66-523	5	04	47.95	-68	03	20.3	19.352	0.064	0.194	0.104	...	...
D66-503	5	05	04.63	-68	03	31.3	19.353	0.063	0.960	0.176	...	...
D66-507	5	04	58.08	-68	02	26.8	19.354	0.057	0.822	0.145	...	...
D66-530	5	04	46.04	-68	03	39.3	19.354	0.075	-0.164	0.104	-0.239	0.193
D66-529	5	04	59.41	-68	02	18.2	19.355	0.051	-0.112	0.083	...	...
D66-525	5	04	54.85	-68	03	14.5	19.356	0.064	0.250	0.116	...	...
D66-537	5	04	57.98	-68	02	09.1	19.359	0.050	-0.112	0.093	...	...
D66-534	5	04	48.14	-68	01	49.4	19.362	0.052	-0.044	0.096	...	...
D66-513	5	04	46.44	-68	03	09.3	19.365	0.053	0.729	0.137	...	...
D66-531	5	05	06.82	-68	02	09.1	19.366	0.065	0.095	0.116	...	...
D66-511	5	05	01.40	-68	02	08.3	19.370	0.050	0.940	0.137	...	...
D66-517	5	05	07.29	-68	01	20.4	19.371	0.064	0.791	0.153	...	...
D66-518	5	05	12.72	-68	02	54.0	19.376	0.043	0.898	0.152	...	...
D66-526	5	04	40.16	-68	04	31.6	19.378	0.067	0.660	0.137	...	...
D66-524	5	05	11.23	-68	01	28.2	19.380	0.058	0.826	0.153	...	...
D66-521	5	04	42.60	-68	01	55.7	19.382	0.055	0.966	0.173	...	...
D66-540	5	04	41.07	-68	04	30.9	19.382	0.066	0.119	0.100	...	...
D66-544	5	04	44.08	-68	03	03.2	19.384	0.053	-0.084	0.083	-0.122	0.170
D66-520	5	04	48.84	-68	02	30.3	19.387	0.053	1.077	0.167	...	...
D66-527	5	05	00.78	-68	04	47.9	19.394	0.079	0.906	0.189	...	...
D66-542	5	04	55.78	-68	03	49.5	19.401	0.050	0.499	0.145	...	...
D66-554	5	05	05.03	-68	03	34.5	19.402	0.054	0.046	0.096	...	...
D66-556	5	04	47.03	-68	02	02.1	19.404	0.044	0.058	0.089	...	...
D66-528	5	04	59.20	-68	02	30.4	19.406	0.058	1.176	0.200	...	...
D66-535	5	05	07.78	-68	03	26.9	19.407	0.063	1.011	0.135	...	...
D66-567	5	05	15.16	-68	03	58.5	19.408	0.101	-0.273	0.137	...	...
D66-555	5	05	07.72	-68	02	22.8	19.409	0.065	0.162	0.103	...	...
D66-560	5	04	40.68	-68	04	42.6	19.410	0.059	-0.013	0.095	...	...
D66-568	5	05	01.73	-68	01	29.8	19.411	0.072	-0.204	0.103	-0.680	0.182
D66-546	5	04	47.48	-68	04	13.8	19.413	0.065	0.575	0.124	...	...
D66-561	5	04	59.69	-68	03	18.0	19.413	0.082	0.018	0.122	...	...
D66-538	5	05	09.18	-68	01	39.6	19.420	0.059	1.157	0.197	...	...
D66-545	5	04	49.64	-68	01	25.1	19.421	0.053	0.779	0.161	...	...
D66-562	5	04	57.20	-68	04	01.2	19.421	0.056	0.153	0.097	...	...
D66-541	5	05	01.75	-68	02	23.3	19.422	0.060	1.008	0.175	...	...
D66-550	5	05	05.14	-68	03	45.1	19.425	0.072	0.714	0.165	...	...
D66-570	5	04	49.87	-68	03	34.4	19.428	0.064	0.049	0.106	...	...
D66-563	5	05	13.69	-68	03	54.8	19.429	0.121	0.334	0.209	-0.886	0.279
D66-547	5	05	03.83	-68	02	30.6	19.430	0.055	0.905	0.175	...	...
D66-574	5	04	48.49	-68	03	56.9	19.430	0.064	-0.111	0.106	-0.520	0.210
D66-572	5	04	51.85	-68	04	46.8	19.431	0.076	-0.007	0.121	...	...
D66-573	5	04	51.21	-68	02	20.0	19.431	0.058	-0.043	0.098	...	...
D66-548	5	05	03.54	-68	02	38.0	19.432	0.057	0.901	0.161	...	...
D66-569	5	04	54.54	-68	01	58.3	19.434	0.093	0.275	0.133	...	...
D66-553	5	05	10.07	-68	04	23.3	19.435	0.064	0.835	0.172	...	...
D66-559	5	05	06.11	-68	02	57.3	19.440	0.065	0.754	0.128	...	...
D66-552	5	05	00.41	-68	04	32.6	19.441	0.077	1.016	0.184	...	...
D66-558	5	05	12.75	-68	02	04.5	19.447	0.059	0.923	0.143	...	...

D66-557	5	04	52.66	-68	04	27.6	19.449	0.061	0.959	0.192	...	...
D66-580	5	05	10.58	-68	03	16.0	19.452	0.077	0.137	0.124	...	...
D66-584	5	05	01.12	-68	04	50.7	19.453	0.079	-0.068	0.134	-0.403	0.219
D66-579	5	05	12.13	-68	02	01.5	19.455	0.067	0.242	0.112	...	...
D66-576	5	04	37.78	-68	04	23.6	19.458	0.081	0.372	0.153	...	...
D66-571	5	05	08.53	-68	01	18.8	19.462	0.062	0.792	0.141	...	...
D66-577	5	04	59.78	-68	01	32.5	19.463	0.078	0.467	0.156	...	...
D66-575	5	04	39.05	-68	02	57.1	19.471	0.062	0.780	0.139	...	...
D66-594	5	04	39.36	-68	02	33.9	19.472	0.073	-0.086	0.099	...	...
D66-592	5	04	55.79	-68	04	02.0	19.480	0.069	0.223	0.114	...	...
D66-593	5	04	49.31	-68	01	26.6	19.482	0.056	0.184	0.108	...	...
D66-601	5	04	55.52	-68	01	26.9	19.484	0.054	0.003	0.104	...	...
D66-581	5	05	07.58	-68	02	37.0	19.485	0.059	0.825	0.162	...	...
D66-590	5	05	16.43	-68	03	20.2	19.490	0.055	0.484	0.113	...	...
D66-591	5	04	51.36	-68	04	07.3	19.490	0.053	0.475	0.126	...	...
D66-589	5	05	00.24	-68	02	14.8	19.491	0.096	0.530	0.229	...	...
D66-605	5	05	11.29	-68	02	41.4	19.492	0.067	-0.017	0.118	...	...
D66-583	5	04	55.56	-68	04	23.0	19.495	0.069	0.921	0.191	...	...
D66-609	5	04	47.39	-68	02	50.4	19.495	0.050	-0.196	0.085	...	...
D66-582	5	04	54.17	-68	03	47.4	19.497	0.059	1.041	0.226	...	...
D66-597	5	04	48.51	-68	02	50.5	19.499	0.064	0.476	0.123	...	...
D66-610	5	05	00.59	-68	02	10.2	19.505	0.065	-0.085	0.100	...	...
D66-599	5	04	55.83	-68	01	17.8	19.506	0.069	0.561	0.155	...	...
D66-606	5	04	39.35	-68	02	52.4	19.508	0.061	0.123	0.122	...	...
D66-598	5	04	53.82	-68	04	41.9	19.513	0.064	0.801	0.131	...	...
D66-615	5	05	05.67	-68	02	48.3	19.515	0.075	0.078	0.114	...	...
D66-602	5	04	53.67	-68	03	46.7	19.519	0.058	0.751	0.159	...	...
D66-617	5	05	13.20	-68	01	16.1	19.523	0.070	0.166	0.114	...	...
D66-616	5	04	49.08	-68	03	26.2	19.525	0.056	0.206	0.105	...	...
D66-621	5	04	58.65	-68	01	25.5	19.528	0.071	0.045	0.112	...	...
D66-624	5	05	03.10	-68	03	25.6	19.528	0.056	-0.130	0.122	...	...
D66-626	5	04	48.70	-68	04	53.0	19.531	0.072	-0.093	0.111	...	...
D66-619	5	05	00.98	-68	03	35.7	19.535	0.076	0.372	0.120	...	...
D66-627	5	05	05.44	-68	01	33.4	19.539	0.060	0.103	0.112	...	...
D66-629	5	04	50.95	-68	02	32.2	19.540	0.064	0.020	0.111	...	...
D66-623	5	04	39.06	-68	01	21.4	19.541	0.069	0.245	0.126	...	...
D66-613	5	04	57.15	-68	02	34.5	19.544	0.063	0.777	0.175	...	...
D66-633	5	04	38.36	-68	01	55.1	19.549	0.107	-0.113	0.148	...	...
D66-625	5	04	37.35	-68	02	22.5	19.550	0.059	0.384	0.120	...	...
D66-634	5	04	56.22	-68	03	38.9	19.550	0.094	-0.166	0.137	...	...
D66-618	5	05	16.16	-68	02	29.0	19.552	0.063	0.772	0.162	...	...
D66-612	5	04	57.89	-68	03	47.1	19.559	0.072	1.117	0.236	...	...
D66-622	5	05	13.15	-68	03	52.1	19.560	0.070	0.697	0.167	...	...
D66-636	5	04	45.68	-68	02	41.1	19.565	0.091	0.156	0.140	...	...
D66-637	5	05	01.17	-68	03	26.8	19.572	0.087	0.051	0.138	...	...
D66-620	5	04	57.68	-68	02	14.0	19.577	0.077	1.181	0.180	...	...
D66-631	5	04	46.72	-68	03	21.7	19.577	0.079	0.698	0.175	...	...
D66-640	5	05	05.05	-68	03	04.4	19.582	0.071	0.112	0.124	...	...
D66-650	5	05	03.89	-68	04	07.9	19.582	0.101	-0.193	0.198	...	...
D66-643	5	05	01.52	-68	03	05.6	19.584	0.080	0.083	0.128	...	...
D66-632	5	05	10.00	-68	02	01.7	19.585	0.046	0.876	0.199	...	...
D66-642	5	04	50.64	-68	01	14.8	19.585	0.067	0.144	0.104	...	...
D66-639	5	05	05.03	-68	01	45.7	19.591	0.075	0.398	0.127	...	...
D66-654	5	04	43.10	-68	04	18.8	19.591	0.070	-0.163	0.104	-0.389	0.208
D66-653	5	04	58.65	-68	04	16.2	19.592	0.064	-0.126	0.110	...	...
D66-645	5	04	59.42	-68	04	11.2	19.593	0.063	0.264	0.126	...	...
D66-655	5	04	55.21	-68	04	50.7	19.595	0.073	-0.081	0.174	...	...
D66-656	5	05	05.52	-68	04	26.4	19.595	0.095	-0.096	0.138	-0.324	0.258
D66-648	5	05	09.79	-68	01	52.3	19.597	0.083	0.192	0.143	...	...
D66-649	5	04	55.06	-68	02	23.1	19.597	0.070	0.174	0.127	...	...
D66-641	5	05	06.36	-68	02	23.7	19.606	0.066	0.629	0.153	...	...
D66-660	5	04	50.99	-68	04	26.8	19.626	0.077	0.072	0.118	...	...
D66-652	5	04	39.04	-68	03	20.6	19.627	0.076	0.772	0.161	...	...
D66-668	5	05	04.14	-68	03	34.8	19.633	0.121	-0.201	0.160	...	...
D66-658	5	04	52.31	-68	04	53.1	19.635	0.085	0.799	0.246	...	...
D66-659	5	05	02.80	-68	04	34.5	19.635	0.086	0.319	0.187	...	...

D66-665	5	05	02.68	-68	01	59.5	19.642	0.092	0.245	0.227	...	...
D66-664	5	05	15.83	-68	01	27.8	19.644	0.081	0.345	0.121	...	...
D66-671	5	05	01.93	-68	01	37.2	19.648	0.075	-0.026	0.134	...	...
D66-666	5	05	01.45	-68	03	09.1	19.654	0.071	0.417	0.134	...	...
D66-670	5	04	56.72	-68	02	08.3	19.657	0.105	0.180	0.159	...	...
D66-663	5	05	13.06	-68	03	35.8	19.665	0.071	0.896	0.212	...	...
D66-679	5	05	03.16	-68	03	41.2	19.665	0.079	-0.133	0.128	...	...
D66-677	5	04	51.62	-68	03	13.5	19.667	0.075	0.000	0.131	...	...
D66-667	5	05	10.97	-68	02	00.9	19.671	0.076	0.674	0.178	...	...
D66-676	5	04	58.59	-68	03	39.4	19.673	0.096	0.152	0.178	...	...
D66-678	5	05	16.79	-68	04	12.4	19.680	0.087	0.231	0.136	...	...
D66-686	5	05	08.35	-68	01	44.1	19.691	0.085	0.122	0.144	...	...
D66-682	5	04	45.64	-68	03	22.4	19.693	0.068	0.459	0.156	...	...
D66-683	5	04	46.17	-68	04	38.9	19.694	0.081	0.318	0.155	...	...
D66-691	5	04	42.39	-68	04	39.6	19.694	0.128	-0.135	0.190	...	...
D66-688	5	04	48.39	-68	03	00.3	19.695	0.070	0.150	0.129	...	...
D66-687	5	05	11.97	-68	02	55.6	19.697	0.100	0.208	0.164	...	...
D66-693	5	04	56.10	-68	02	52.7	19.705	0.078	-0.033	0.118	...	...
D66-698	5	04	58.13	-68	02	35.9	19.725	0.087	0.236	0.166	...	...
D66-708	5	05	13.86	-68	04	24.7	19.727	0.076	-0.375	0.117	...	...
D66-692	5	04	54.68	-68	03	51.7	19.729	0.066	0.609	0.156	...	...
D66-701	5	05	02.29	-68	02	43.5	19.737	0.095	0.252	0.149	...	...
D66-694	5	05	04.09	-68	02	13.7	19.740	0.072	0.748	0.194	...	...
D66-710	5	04	54.15	-68	03	40.3	19.748	0.095	0.056	0.152	...	...
D66-711	5	04	43.84	-68	04	05.0	19.750	0.086	0.082	0.142	...	...
D66-705	5	04	45.98	-68	04	22.0	19.754	0.098	0.320	0.201	...	...
D66-712	5	04	59.31	-68	03	32.6	19.758	0.077	0.144	0.165	...	...
D66-702	5	05	06.66	-68	01	52.7	19.759	0.078	0.608	0.153	...	...
D66-713	5	05	13.56	-68	04	14.3	19.767	0.090	0.212	0.153	...	...
D66-716	5	04	46.15	-68	04	54.8	19.779	0.085	0.333	0.146	...	...
D66-717	5	04	55.30	-68	03	15.9	19.780	0.107	0.325	0.180	...	...
D66-724	5	04	47.41	-68	03	26.9	19.786	0.108	0.166	0.169	...	...
D66-720	5	04	39.09	-68	01	16.4	19.790	0.107	0.326	0.193	...	...
D66-725	5	04	39.82	-68	04	23.0	19.792	0.084	0.169	0.148	...	...
D66-728	5	05	16.36	-68	03	01.2	19.792	0.071	-0.009	0.118	...	...
D66-722	5	04	51.86	-68	04	53.4	19.793	0.112	0.348	0.175	...	...
D66-723	5	04	54.65	-68	02	01.5	19.795	0.095	0.396	0.173	...	...
D66-729	5	05	11.21	-68	04	12.1	19.796	0.086	0.050	0.150	...	...
D66-726	5	04	49.79	-68	04	10.4	19.797	0.098	0.254	0.174	...	...
D66-721	5	04	50.35	-68	04	01.8	19.798	0.083	0.471	0.179	...	...
D66-740	5	04	37.87	-68	04	25.0	19.799	0.135	-0.310	0.183	...	...
D66-730	5	05	09.22	-68	02	54.9	19.809	0.089	0.319	0.180	...	...
D66-736	5	04	45.54	-68	03	41.7	19.813	0.098	0.225	0.170	...	...
D66-719	5	05	04.76	-68	01	11.4	19.816	0.080	0.942	0.203	...	...
D66-733	5	05	13.16	-68	01	22.7	19.819	0.093	0.398	0.196	...	...
D66-745	5	04	52.91	-68	02	18.2	19.820	0.085	-0.024	0.151	...	...
D66-748	5	04	53.02	-68	01	21.4	19.821	0.102	-0.138	0.149	...	...
D66-741	5	04	47.62	-68	02	35.0	19.826	0.104	0.299	0.176	...	...
D66-744	5	04	56.72	-68	03	29.0	19.826	0.098	0.192	0.172	...	...
D66-735	5	04	39.69	-68	01	57.1	19.832	0.086	0.674	0.197	...	...
D66-751	5	05	15.00	-68	01	12.1	19.834	0.080	0.018	0.133	...	...
D66-743	5	05	14.83	-68	04	38.9	19.836	0.075	0.438	0.154	...	...
D66-750	5	04	56.99	-68	04	20.0	19.837	0.092	0.114	0.170	...	...
D66-738	5	04	38.77	-68	04	26.6	19.848	0.097	0.943	0.260	...	...
D66-752	5	05	10.76	-68	03	43.8	19.848	0.095	0.332	0.147	...	...
D66-747	5	05	04.54	-68	01	22.1	19.849	0.087	0.507	0.204	...	...
D66-757	5	04	38.69	-68	02	45.7	19.860	0.096	0.137	0.140	...	...
D66-758	5	04	40.61	-68	02	57.4	19.866	0.076	0.113	0.123	...	...
D66-755	5	04	40.30	-68	02	12.0	19.867	0.087	0.378	0.155	...	...
D66-761	5	04	55.31	-68	01	44.0	19.874	0.085	0.147	0.152	...	...
D66-766	5	04	50.98	-68	04	02.0	19.899	0.077	0.426	0.176	...	...
D66-769	5	04	55.88	-68	03	52.9	19.899	0.106	0.032	0.171	...	...
D66-768	5	04	53.15	-68	03	49.2	19.901	0.079	0.216	0.141	...	...
D66-763	5	05	06.84	-68	01	31.1	19.903	0.067	0.626	0.179	...	...
D66-775	5	04	44.57	-68	04	42.6	19.906	0.089	-0.022	0.161	...	...
D66-774	5	05	03.16	-68	02	14.2	19.910	0.115	0.090	0.162	...	...

D66-778	5	05	12.71	-68	01	23.6	19.911	0.104	-0.053	0.156	...	...
D66-781	5	04	58.73	-68	03	24.6	19.915	0.129	-0.147	0.187	...	...
D66-776	5	04	57.32	-68	03	29.2	19.920	0.113	0.315	0.210	...	...
D66-773	5	04	44.71	-68	03	43.8	19.925	0.096	0.449	0.171	...	...
D66-784	5	04	54.12	-68	02	47.3	19.928	0.095	0.127	0.172	...	...
D66-782	5	05	06.49	-68	04	19.1	19.930	0.117	0.197	0.192	...	...
D66-787	5	04	56.30	-68	03	21.9	19.932	0.094	0.020	0.198	...	...
D66-791	5	05	02.85	-68	01	55.2	19.939	0.093	0.128	0.163	...	...
D66-800	5	04	44.21	-68	01	19.7	19.941	0.088	-0.259	0.139	...	...
D66-794	5	04	47.43	-68	04	33.6	19.951	0.082	0.141	0.152	...	...
D66-802	5	04	47.76	-68	03	27.6	19.952	0.116	0.007	0.178	...	...
D66-792	5	04	44.90	-68	01	22.4	19.959	0.123	0.353	0.191	...	...
D66-795	5	05	11.77	-68	01	12.4	19.961	0.100	0.327	0.178	...	...
D66-798	5	04	40.81	-68	02	60.0	19.961	0.095	0.248	0.157	...	...
D66-789	5	04	58.09	-68	02	32.4	19.979	0.097	1.108	0.341	...	...
D66-821	5	05	07.68	-68	04	33.0	19.985	0.157	-0.220	0.207	...	...
D66-808	5	04	59.66	-68	02	43.5	19.988	0.112	0.377	0.191	...	...
D66-814	5	05	05.22	-68	04	09.5	19.992	0.091	0.339	0.227	...	...
D66-826	5	05	08.99	-68	02	11.9	20.011	0.087	-0.094	0.161	...	...
D66-823	5	04	56.18	-68	04	20.8	20.015	0.110	0.363	0.227	...	...
D66-824	5	04	38.14	-68	01	28.7	20.017	0.097	0.238	0.189	...	...
D66-833	5	05	06.29	-68	04	13.9	20.026	0.099	-0.164	0.148	...	...
D66-829	5	04	55.56	-68	04	09.0	20.035	0.087	0.355	0.173	...	...
D66-818	5	05	07.16	-68	01	16.1	20.036	0.110	1.172	0.290	...	...
D66-831	5	04	43.35	-68	03	21.1	20.037	0.094	0.228	0.166	...	...
D66-834	5	05	01.20	-68	04	48.2	20.042	0.136	0.201	0.234	...	...
D66-836	5	05	08.33	-68	04	25.7	20.045	0.132	0.128	0.208	...	...
D66-843	5	04	40.36	-68	04	03.4	20.048	0.131	-0.085	0.178	...	...
D66-832	5	05	16.68	-68	01	49.7	20.051	0.110	0.508	0.237	...	...
D66-842	5	05	14.09	-68	04	50.2	20.063	0.133	0.282	0.281	...	...
D66-845	5	05	02.90	-68	02	16.7	20.066	0.135	0.070	0.179	...	...
D66-847	5	04	42.32	-68	02	14.6	20.075	0.115	0.233	0.195	...	...
D66-844	5	04	40.44	-68	03	28.6	20.082	0.095	0.436	0.202	...	...
D66-849	5	04	47.10	-68	04	34.6	20.097	0.101	0.226	0.186	...	...
D66-850	5	05	06.29	-68	02	40.1	20.100	0.110	0.117	0.175	...	...
D66-830	5	04	58.63	-68	03	33.2	20.120	0.153	2.189	1.080	...	...
D66-854	5	05	05.23	-68	02	34.8	20.127	0.111	0.068	0.183	...	...
D66-858	5	04	45.02	-68	04	39.1	20.132	0.131	-0.110	0.195	...	...
D66-853	5	05	04.02	-68	01	28.2	20.135	0.105	0.266	0.200	...	...
D66-870	5	05	12.92	-68	01	18.1	20.185	0.125	-0.291	0.174	...	...
D66-865	5	05	16.26	-68	02	31.7	20.186	0.110	0.319	0.218	...	...
D66-862	5	04	58.33	-68	03	48.5	20.189	0.119	0.443	0.269	...	...
D66-871	5	05	15.94	-68	02	42.9	20.203	0.112	0.060	0.205	...	...
D66-872	5	05	15.11	-68	02	43.3	20.214	0.122	0.248	0.197	...	...
D66-874	5	05	12.71	-68	02	01.1	20.248	0.158	-0.145	0.213	...	...
D66-879	5	05	13.95	-68	02	44.2	20.315	0.145	0.214	0.268	...	...
D66-883	5	04	55.07	-68	03	20.0	20.317	0.154	-0.253	0.222	...	...
D66-884	5	04	51.61	-68	03	47.8	20.340	0.128	-0.044	0.210	...	...
D66-887	5	05	08.48	-68	02	15.2	20.351	0.146	-0.378	0.205	...	...
D66-889	5	04	46.89	-68	04	47.4	20.413	0.118	0.388	0.268	...	...

Table 4k

D197-1	5	26	35.66	-69	16	20.7	12.817	0.006	-0.135	0.008	-0.951	0.017
D197-2	5	26	49.03	-69	19	01.8	12.990	0.006	-0.192	0.008	-1.027	0.008
D197-3	5	26	27.65	-69	18	46.2	13.273	0.004	-0.206	0.007	-1.019	0.009
D197-4	5	26	29.35	-69	19	06.2	13.853	0.005	-0.190	0.008	-0.997	0.010
D197-5	5	26	22.44	-69	18	08.0	13.979	0.002	0.025	0.004	-1.002	0.005
D197-6	5	26	21.76	-69	18	42.7	14.056	0.003	-0.112	0.005	-0.978	0.006
D197-7	5	26	48.19	-69	19	30.9	14.212	0.004	-0.142	0.005	-0.926	0.006
D197-8	5	26	26.80	-69	18	60.0	14.666	0.008	-0.206	0.010	-0.970	0.010
D197-9	5	26	28.60	-69	18	47.9	14.765	0.005	-0.211	0.008	-0.984	0.010
D197-10	5	26	36.57	-69	17	49.5	14.871	0.005	0.640	0.009	0.099	0.021
D197-11	5	26	37.43	-69	19	20.9	15.136	0.005	0.662	0.008	-0.315	0.016
D197-12	5	26	30.72	-69	19	54.3	15.238	0.005	-0.185	0.008	-0.986	0.012
D197-13	5	26	11.60	-69	19	21.0	15.267	0.005	-0.011	0.008	-0.925	0.010
D197-15	5	26	35.52	-69	18	12.6	15.578	0.007	-0.193	0.010	-0.984	0.013
D197-14	5	26	10.39	-69	18	28.7	15.625	0.009	1.673	0.018	...	...
D197-16	5	26	25.13	-69	18	54.2	15.679	0.011	-0.083	0.028	-0.892	0.033
D197-17	5	26	32.67	-69	18	23.5	15.688	0.011	-0.044	0.024	-0.770	0.037
D197-18	5	26	14.41	-69	19	28.8	15.716	0.025	-0.069	0.029	-0.879	0.015
D197-19	5	26	30.60	-69	18	27.5	16.070	0.009	-0.192	0.015	-0.869	0.024
D197-20	5	26	25.95	-69	18	25.8	16.121	0.008	-0.167	0.011	-0.853	0.014
D197-21	5	26	30.65	-69	19	07.6	16.159	0.011	-0.124	0.016	-0.824	0.019
D197-24	5	26	49.51	-69	20	04.9	16.202	0.010	-0.147	0.014	-0.677	0.020
D197-25	5	26	32.75	-69	18	40.0	16.203	0.010	-0.204	0.015	-0.895	0.018
D197-22	5	26	07.05	-69	19	01.8	16.221	0.009	0.830	0.017	0.519	0.053
D197-28	5	26	29.97	-69	17	44.6	16.264	0.010	-0.166	0.013	-0.916	0.014
D197-23	5	26	30.15	-69	18	32.3	16.283	0.138	1.788	0.234	-2.620	0.350
D197-27	5	26	34.19	-69	18	53.2	16.305	0.009	1.364	0.018	1.469	0.235
D197-26	5	26	15.02	-69	16	58.9	16.309	0.010	1.506	0.024	1.640	0.249
D197-29	5	26	29.06	-69	18	16.4	16.332	0.010	-0.097	0.017	-0.864	0.027
D197-30	5	26	32.16	-69	18	00.6	16.377	0.010	0.652	0.015	0.131	0.057
D197-32	5	26	28.45	-69	17	42.8	16.387	0.011	-0.173	0.018	-0.851	0.024
D197-31	5	26	23.70	-69	18	56.1	16.435	0.011	1.123	0.022	0.114	0.062
D197-34	5	26	45.60	-69	18	33.8	16.481	0.011	-0.189	0.015	-0.885	0.021
D197-33	5	26	10.13	-69	18	54.6	16.503	0.010	0.953	0.019	0.848	0.093
D197-35	5	26	15.89	-69	17	24.9	16.538	0.009	0.918	0.109	0.558	0.152
D197-37	5	26	28.39	-69	19	12.8	16.560	0.018	-0.232	0.023	-0.916	0.023
D197-36	5	26	42.01	-69	17	35.5	16.577	0.012	1.647	0.036	...	...
D197-41	5	26	30.11	-69	18	31.7	16.630	0.214	-1.108	0.243	-0.341	0.164
D197-38	5	26	08.65	-69	18	24.4	16.660	0.016	1.394	0.047	1.495	0.287
D197-39	5	26	11.91	-69	19	52.4	16.686	0.012	1.805	0.037	...	...
D197-40	5	26	26.45	-69	19	48.4	16.695	0.014	1.481	0.032	...	...
D197-49	5	26	29.60	-69	19	04.5	16.728	0.024	-0.304	0.040	-0.667	0.057
D197-42	5	26	19.99	-69	19	52.5	16.743	0.012	1.478	0.038	0.902	0.219
D197-45	5	26	13.14	-69	17	58.2	16.751	0.020	1.047	0.032	1.100	0.169
D197-46	5	26	11.31	-69	18	09.1	16.756	0.011	0.914	0.024	0.749	0.107
D197-43	5	26	26.95	-69	17	02.8	16.763	0.015	1.742	0.060	...	...
D197-55	5	26	37.40	-69	18	57.4	16.771	0.015	-0.139	0.027	-0.428	0.086
D197-44	5	26	19.83	-69	16	21.6	16.779	0.013	1.726	0.040	...	...
D197-50	5	26	08.92	-69	17	12.2	16.779	0.012	0.890	0.024	0.527	0.105
D197-47	5	26	47.12	-69	19	19.9	16.789	0.013	1.633	0.036	...	...
D197-48	5	26	36.86	-69	17	21.1	16.811	0.013	1.622	0.033	...	...
D197-58	5	26	21.35	-69	19	40.6	16.814	0.019	-0.162	0.024	-0.679	0.023
D197-52	5	26	43.66	-69	18	11.9	16.821	0.011	1.653	0.030	...	...
D197-51	5	26	47.08	-69	19	16.8	16.823	0.036	1.830	0.118	...	...
D197-56	5	26	28.57	-69	17	56.0	16.828	0.036	0.311	0.069	-0.781	0.083
D197-53	5	26	31.26	-69	19	50.7	16.836	0.010	1.653	0.035	...	...
D197-54	5	26	35.31	-69	17	22.9	16.851	0.013	1.736	0.042	...	...
D197-62	5	26	42.54	-69	19	07.5	16.853	0.010	-0.158	0.013	-0.684	0.022
D197-63	5	26	26.67	-69	19	01.8	16.855	0.031	-0.127	0.042	-0.718	0.040
D197-57	5	26	31.33	-69	19	04.6	16.860	0.044	0.922	0.056	-0.212	0.077
D197-61	5	26	12.19	-69	19	41.0	16.875	0.015	0.527	0.024	0.302	0.067
D197-66	5	26	22.22	-69	19	01.3	16.889	0.014	-0.077	0.020	-0.587	0.027
D197-59	5	26	22.97	-69	18	31.9	16.903	0.013	1.509	0.029	...	...
D197-60	5	26	33.54	-69	16	40.0	16.909	0.012	1.561	0.035	...	...

D197-72	5	26	26.23	-69	19	03.0	16.932	0.013	-0.123	0.021	-0.794	0.030
D197-65	5	26	38.07	-69	16	32.8	16.943	0.013	1.431	0.036	...	...
D197-64	5	26	17.26	-69	20	04.5	16.957	0.013	1.790	0.041	...	...
D197-68	5	26	20.19	-69	17	44.6	16.972	0.015	1.510	0.039	...	...
D197-67	5	26	07.93	-69	16	22.8	16.973	0.017	1.563	0.035	...	...
D197-69	5	26	41.38	-69	17	33.3	16.978	0.014	1.351	0.027	...	...
D197-71	5	26	14.29	-69	19	21.1	16.986	0.011	1.172	0.024	...	...
D197-70	5	26	37.72	-69	19	56.9	16.998	0.012	1.742	0.041	...	...
D197-75	5	26	10.87	-69	19	25.4	17.015	0.012	0.666	0.028	0.347	0.084
D197-73	5	26	22.28	-69	16	40.7	17.017	0.013	1.135	0.026	...	...
D197-74	5	26	34.33	-69	19	34.1	17.041	0.013	1.443	0.033	...	...
D197-76	5	26	20.20	-69	17	35.4	17.056	0.014	1.541	0.043	...	...
D197-84	5	26	38.27	-69	18	01.5	17.058	0.035	-0.124	0.042	-0.571	0.032
D197-80	5	26	13.35	-69	18	54.9	17.061	0.013	0.226	0.021	0.204	0.054
D197-88	5	26	46.59	-69	19	58.2	17.087	0.012	-0.024	0.021	-0.510	0.035
D197-77	5	26	33.21	-69	17	40.0	17.091	0.017	1.384	0.035	...	...
D197-78	5	26	34.97	-69	19	44.2	17.102	0.015	1.633	0.037	...	...
D197-83	5	26	29.78	-69	18	58.3	17.104	0.017	1.032	0.039	0.931	0.215
D197-79	5	26	31.77	-69	17	17.9	17.112	0.014	1.762	0.049	...	...
D197-82	5	26	41.39	-69	19	24.5	17.126	0.014	1.542	0.039	...	...
D197-86	5	26	24.73	-69	16	47.2	17.127	0.014	1.371	0.047	...	...
D197-81	5	26	48.53	-69	17	46.2	17.132	0.013	1.730	0.042	...	...
D197-87	5	26	11.11	-69	17	23.2	17.137	0.014	1.395	0.039	...	...
D197-93	5	26	30.32	-69	18	11.6	17.138	0.015	-0.195	0.024	-0.712	0.034
D197-85	5	26	44.66	-69	19	23.5	17.139	0.015	1.655	0.049	...	...
D197-89	5	26	18.69	-69	17	47.6	17.146	0.011	1.169	0.028	...	...
D197-90	5	26	48.61	-69	19	07.8	17.167	0.016	1.099	0.045	0.632	0.186
D197-94	5	26	25.51	-69	16	31.8	17.167	0.014	-0.016	0.021	-0.738	0.035
D197-92	5	26	11.58	-69	16	27.7	17.187	0.020	1.308	0.054	...	...
D197-91	5	26	07.39	-69	18	56.7	17.195	0.017	1.502	0.061	...	...
D197-98	5	26	13.01	-69	17	43.9	17.235	0.021	0.941	0.040	...	...
D197-95	5	26	22.63	-69	18	19.1	17.238	0.015	1.444	0.037	...	...
D197-96	5	26	36.29	-69	17	26.2	17.242	0.012	1.447	0.036	...	...
D197-97	5	26	26.74	-69	19	49.0	17.246	0.032	1.522	0.070	...	...
D197-99	5	26	35.34	-69	16	42.8	17.284	0.017	1.643	0.054	...	...
D197-102	5	26	08.52	-69	18	48.9	17.293	0.016	1.296	0.035	...	...
D197-103	5	26	10.88	-69	16	51.3	17.293	0.018	0.975	0.040	...	...
D197-100	5	26	21.33	-69	18	13.9	17.298	0.015	1.754	0.056	...	...
D197-110	5	26	32.00	-69	18	32.6	17.309	0.021	-0.176	0.038	-0.727	0.044
D197-104	5	26	22.64	-69	18	11.3	17.324	0.011	1.550	0.036	0.678	0.222
D197-111	5	26	07.24	-69	19	13.4	17.325	0.015	0.152	0.025	-0.149	0.055
D197-105	5	26	46.86	-69	18	33.3	17.326	0.015	1.264	0.037	...	...
D197-107	5	26	25.53	-69	16	23.1	17.335	0.025	1.096	0.048	0.472	0.144
D197-116	5	26	26.42	-69	19	06.7	17.335	0.032	0.047	0.040	-0.611	0.039
D197-108	5	26	25.40	-69	16	38.0	17.346	0.022	1.253	0.043	0.724	0.288
D197-109	5	26	29.80	-69	17	38.3	17.348	0.017	1.153	0.037	...	...
D197-106	5	26	24.11	-69	17	13.3	17.350	0.013	1.526	0.046	...	...
D197-120	5	26	25.54	-69	16	43.9	17.368	0.023	-0.196	0.030	-0.693	0.034
D197-121	5	26	11.98	-69	17	36.0	17.373	0.016	-0.066	0.024	-0.643	0.040
D197-115	5	26	44.33	-69	19	46.7	17.380	0.021	1.278	0.051	...	...
D197-113	5	26	29.89	-69	16	39.0	17.381	0.019	1.385	0.069	...	...
D197-114	5	26	36.95	-69	19	56.3	17.390	0.016	1.541	0.042	...	...
D197-112	5	26	44.99	-69	18	22.7	17.393	0.023	1.682	0.058	...	...
D197-125	5	26	17.65	-69	18	05.4	17.398	0.019	-0.154	0.027	-0.679	0.038
D197-117	5	26	45.23	-69	17	18.6	17.403	0.018	1.359	0.047	...	...
D197-119	5	26	33.85	-69	19	25.8	17.408	0.021	1.310	0.045	...	...
D197-127	5	26	28.77	-69	17	29.3	17.408	0.023	-0.086	0.037	-0.536	0.051
D197-118	5	26	35.91	-69	19	43.8	17.416	0.015	1.485	0.052	...	...
D197-122	5	26	46.40	-69	18	21.9	17.441	0.020	1.483	0.053	...	...
D197-123	5	26	24.05	-69	19	34.7	17.444	0.026	1.412	0.055	...	...
D197-124	5	26	24.68	-69	16	42.1	17.446	0.017	1.025	0.036	0.892	0.261
D197-131	5	26	19.86	-69	18	52.1	17.449	0.021	0.048	0.029	-0.236	0.053
D197-134	5	26	34.59	-69	19	39.2	17.455	0.021	-0.079	0.030	-0.517	0.041
D197-135	5	26	45.03	-69	17	10.2	17.457	0.017	-0.183	0.024	-0.677	0.038
D197-126	5	26	43.97	-69	19	51.8	17.459	0.019	1.159	0.060	0.077	0.212
D197-128	5	26	27.94	-69	18	41.1	17.477	0.032	1.260	0.081	0.432	0.266

D197-129	5	26	36.39	-69	19	28.7	17.482	0.016	1.098	0.045	0.540	0.270
D197-130	5	26	16.22	-69	16	27.1	17.486	0.021	1.143	0.047	...	...
D197-138	5	26	43.91	-69	17	25.2	17.497	0.013	0.385	0.028	0.257	0.090
D197-132	5	26	31.37	-69	18	03.8	17.507	0.023	1.318	0.059	...	...
D197-133	5	26	26.39	-69	17	38.2	17.516	0.015	1.429	0.050	...	...
D197-144	5	26	27.88	-69	19	02.6	17.517	0.091	-0.265	0.105	-0.213	0.054
D197-139	5	26	42.77	-69	16	19.5	17.524	0.025	0.984	0.066	...	...
D197-136	5	26	24.99	-69	16	47.2	17.525	0.115	1.313	0.143	...	...
D197-147	5	26	46.72	-69	18	20.5	17.525	0.033	-0.181	0.044	-0.547	0.052
D197-140	5	26	35.09	-69	19	52.4	17.537	0.026	1.180	0.057	...	...
D197-149	5	26	28.45	-69	17	59.8	17.544	0.053	-0.068	0.088	-0.839	0.097
D197-141	5	26	30.18	-69	16	45.1	17.551	0.019	1.377	0.051	...	...
D197-137	5	26	20.92	-69	19	44.8	17.552	0.031	1.921	0.110	...	...
D197-151	5	26	29.32	-69	17	15.8	17.559	0.022	-0.002	0.031	-0.384	0.054
D197-152	5	26	39.89	-69	17	14.7	17.565	0.019	-0.095	0.030	-0.553	0.051
D197-153	5	26	47.96	-69	17	49.6	17.568	0.019	-0.097	0.028	-0.434	0.038
D197-142	5	26	26.02	-69	20	01.1	17.573	0.019	1.489	0.052	...	...
D197-146	5	26	11.31	-69	16	59.9	17.578	0.019	1.109	0.049	...	...
D197-154	5	26	38.21	-69	18	10.5	17.578	0.020	-0.096	0.031	-0.645	0.054
D197-145	5	26	37.19	-69	18	12.7	17.590	0.018	1.443	0.053	...	...
D197-155	5	26	29.10	-69	17	54.9	17.590	0.040	-0.009	0.061	-0.745	0.065
D197-143	5	26	20.08	-69	18	31.6	17.594	0.019	1.550	0.055	...	...
D197-148	5	26	27.99	-69	17	26.6	17.596	0.022	1.430	0.064	...	...
D197-157	5	26	23.26	-69	16	25.5	17.600	0.031	-0.014	0.042	-0.631	0.048
D197-159	5	26	40.38	-69	19	17.0	17.608	0.025	-0.094	0.037	-0.405	0.092
D197-150	5	26	43.72	-69	18	58.6	17.609	0.021	1.165	0.049	...	...
D197-163	5	26	15.09	-69	17	43.2	17.615	0.023	-0.168	0.030	-0.660	0.042
D197-165	5	26	12.23	-69	16	50.9	17.629	0.018	-0.168	0.027	-0.719	0.047
D197-156	5	26	45.76	-69	18	01.1	17.642	0.022	0.947	0.039	...	...
D197-158	5	26	24.56	-69	18	35.9	17.653	0.028	1.197	0.394	...	...
D197-161	5	26	29.37	-69	19	53.8	17.654	0.024	0.940	0.064	0.785	0.268
D197-168	5	26	23.51	-69	17	18.6	17.658	0.021	-0.093	0.030	-0.538	0.054
D197-162	5	26	36.81	-69	17	16.9	17.669	0.027	1.236	0.059	...	...
D197-167	5	26	29.41	-69	17	54.1	17.674	0.046	0.376	0.088	0.000	0.150
D197-160	5	26	48.16	-69	19	56.5	17.678	0.020	1.508	0.054	...	...
D197-164	5	26	08.74	-69	19	08.2	17.685	0.019	1.359	0.074	...	...
D197-171	5	26	24.66	-69	18	36.9	17.689	0.060	0.096	0.180	-0.658	0.213
D197-177	5	26	19.43	-69	20	02.5	17.693	0.024	-0.170	0.034	-0.688	0.047
D197-174	5	26	45.05	-69	19	01.1	17.699	0.026	0.047	0.037	-0.114	0.058
D197-169	5	26	23.20	-69	18	16.5	17.703	0.019	0.960	0.048	0.600	0.229
D197-166	5	26	20.09	-69	16	40.5	17.708	0.024	1.294	0.057	...	...
D197-170	5	26	34.00	-69	19	01.9	17.715	0.018	0.968	0.049	0.306	0.255
D197-173	5	26	16.57	-69	18	24.8	17.743	0.022	1.156	0.059	...	...
D197-175	5	26	23.34	-69	16	21.3	17.743	0.023	1.055	0.054	...	...
D197-176	5	26	36.86	-69	17	07.0	17.748	0.020	1.157	0.055	...	...
D197-172	5	26	41.72	-69	18	00.0	17.749	0.018	1.337	0.063	...	...
D197-178	5	26	23.80	-69	19	32.6	17.776	0.035	1.138	0.071	...	...
D197-190	5	26	40.34	-69	19	15.4	17.786	0.031	0.042	0.041	0.016	0.158
D197-179	5	26	09.34	-69	17	38.2	17.788	0.020	0.879	0.042	...	...
D197-181	5	26	23.14	-69	16	53.7	17.796	0.021	1.023	0.050	...	...
D197-180	5	26	46.31	-69	17	30.6	17.797	0.020	1.065	0.060	...	...
D197-182	5	26	38.54	-69	19	25.8	17.803	0.038	1.038	0.058	...	...
D197-184	5	26	47.29	-69	16	20.2	17.804	0.022	0.859	0.048	...	...
D197-196	5	26	12.76	-69	17	21.8	17.806	0.026	-0.065	0.036	-0.339	0.055
D197-186	5	26	44.13	-69	16	36.3	17.808	0.022	0.770	0.047	...	...
D197-183	5	26	40.92	-69	18	04.0	17.811	0.022	1.140	0.052	...	...
D197-185	5	26	25.90	-69	17	01.1	17.812	0.024	0.908	0.047	...	...
D197-200	5	26	25.91	-69	16	25.7	17.821	0.064	-0.113	0.076	-0.464	0.055
D197-189	5	26	46.62	-69	18	19.1	17.832	0.030	1.122	0.089	...	...
D197-188	5	26	33.49	-69	18	03.0	17.833	0.021	1.190	0.062	...	...
D197-191	5	26	19.03	-69	16	49.7	17.840	0.026	1.193	0.061	...	...
D197-204	5	26	27.72	-69	18	33.3	17.841	0.029	-0.044	0.038	-0.554	0.065
D197-192	5	26	47.81	-69	17	12.4	17.842	0.026	1.094	0.058	...	...
D197-187	5	26	26.40	-69	18	08.5	17.843	0.022	1.525	0.092	...	...
D197-193	5	26	49.36	-69	17	00.0	17.852	0.027	1.153	0.078	...	...
D197-194	5	26	24.80	-69	18	20.5	17.856	0.023	1.224	0.062	...	...

D197-195	5	26	47.29	-69	19	42.3	17.856	0.022	1.139	0.051	...	...
D197-198	5	26	42.34	-69	18	03.3	17.858	0.028	0.784	0.050	...	...
D197-197	5	26	41.27	-69	18	06.6	17.861	0.022	1.126	0.053	...	...
D197-214	5	26	30.65	-69	18	32.8	17.865	0.147	-0.336	0.168	-0.543	0.107
D197-205	5	26	17.85	-69	17	01.9	17.867	0.027	0.459	0.042	0.020	0.107
D197-207	5	26	26.54	-69	17	20.5	17.867	0.027	0.006	0.040	-0.443	0.068
D197-199	5	26	21.68	-69	17	29.5	17.874	0.021	1.135	0.068	...	...
D197-201	5	26	07.44	-69	16	40.8	17.888	0.025	1.353	0.131	...	...
D197-202	5	26	37.04	-69	18	59.8	17.890	0.029	1.264	0.070	...	...
D197-203	5	26	17.21	-69	18	26.5	17.894	0.039	1.273	0.132	-0.411	0.240
D197-213	5	26	30.20	-69	19	10.6	17.894	0.040	0.355	0.184	-0.940	0.232
D197-222	5	26	11.71	-69	19	17.9	17.902	0.030	-0.142	0.042	-0.492	0.075
D197-208	5	26	22.41	-69	19	24.2	17.904	0.021	0.818	0.046	...	...
D197-226	5	26	28.72	-69	17	59.2	17.907	0.054	-0.195	0.078	-0.505	0.081
D197-206	5	26	12.99	-69	17	51.0	17.912	0.027	1.313	0.071	...	...
D197-209	5	26	11.80	-69	18	55.2	17.917	0.020	1.017	0.054	...	...
D197-211	5	26	08.86	-69	17	43.6	17.917	0.023	0.943	0.050	...	...
D197-216	5	26	45.18	-69	16	21.5	17.924	0.026	0.934	0.064	...	...
D197-210	5	26	14.00	-69	17	12.7	17.929	0.026	1.245	0.058	...	...
D197-230	5	26	38.12	-69	18	05.6	17.929	0.024	-0.056	0.037	-0.537	0.065
D197-212	5	26	48.01	-69	16	40.7	17.932	0.023	1.233	0.064	...	...
D197-215	5	26	24.68	-69	19	16.7	17.933	0.028	1.130	0.067	...	...
D197-219	5	26	35.53	-69	18	37.0	17.934	0.023	0.856	0.046	...	...
D197-218	5	26	49.61	-69	18	06.8	17.935	0.026	1.002	0.067	...	...
D197-217	5	26	46.69	-69	17	55.5	17.938	0.025	1.198	0.058	...	...
D197-225	5	26	37.63	-69	18	57.4	17.941	0.110	0.602	0.135	-1.194	0.266
D197-231	5	26	42.66	-69	17	38.2	17.943	0.029	0.251	0.050	0.267	0.120
D197-223	5	26	12.30	-69	17	09.0	17.949	0.040	0.889	0.085	...	...
D197-221	5	26	43.00	-69	16	48.9	17.956	0.028	1.166	0.069	...	...
D197-220	5	26	34.78	-69	17	00.8	17.959	0.022	1.310	0.056	...	...
D197-242	5	26	32.94	-69	18	22.2	17.960	0.046	0.041	0.086	-0.174	0.139
D197-228	5	26	10.23	-69	18	50.3	17.964	0.039	1.088	0.090	0.704	0.493
D197-224	5	26	32.27	-69	16	35.0	17.971	0.027	1.313	0.077	...	...
D197-233	5	26	15.56	-69	19	10.9	17.975	0.033	0.885	0.074	0.119	0.252
D197-227	5	26	42.80	-69	18	19.0	17.977	0.025	1.404	0.060	...	...
D197-235	5	26	06.93	-69	19	43.5	17.987	0.031	1.017	0.062	...	...
D197-232	5	26	17.72	-69	19	02.5	17.993	0.026	1.314	0.069	...	...
D197-236	5	26	07.34	-69	19	33.3	17.993	0.029	1.109	0.066	...	...
D197-238	5	26	15.36	-69	19	26.7	17.993	0.033	0.988	0.073	...	...
D197-241	5	26	07.50	-69	18	34.0	17.993	0.025	0.900	0.059	...	...
D197-229	5	26	26.66	-69	20	04.3	17.994	0.025	1.525	0.069	...	...
D197-234	5	26	27.73	-69	19	52.3	18.001	0.053	1.433	0.157	...	...
D197-239	5	26	42.80	-69	19	12.9	18.003	0.024	1.214	0.073	...	...
D197-237	5	26	45.05	-69	17	23.9	18.004	0.027	1.277	0.066	...	...
D197-240	5	26	25.04	-69	18	59.6	18.004	0.022	1.176	0.066	...	...
D197-244	5	26	30.92	-69	19	32.7	18.005	0.025	0.884	0.066	...	...
D197-260	5	26	28.69	-69	17	57.3	18.012	0.090	-0.305	0.126	-0.569	0.135
D197-243	5	26	16.17	-69	18	24.1	18.014	0.029	1.144	0.075	...	...
D197-248	5	26	46.13	-69	18	28.3	18.018	0.028	0.489	0.045	0.068	0.131
D197-254	5	26	17.45	-69	19	11.1	18.022	0.031	0.120	0.047	-0.436	0.084
D197-265	5	26	48.26	-69	19	22.8	18.033	0.025	-0.194	0.035	-0.165	0.085
D197-246	5	26	13.78	-69	18	27.6	18.035	0.026	0.947	0.057	...	...
D197-259	5	26	31.14	-69	19	04.0	18.044	0.043	0.432	0.205	...	...
D197-250	5	26	38.14	-69	17	31.8	18.050	0.038	1.082	0.072	...	...
D197-247	5	26	37.10	-69	18	14.7	18.051	0.028	1.325	0.073	...	...
D197-245	5	26	18.57	-69	19	11.6	18.053	0.032	1.649	0.151	...	...
D197-255	5	26	42.66	-69	18	00.7	18.055	0.027	0.867	0.053	...	...
D197-267	5	26	39.26	-69	18	59.1	18.055	0.028	-0.103	0.037	-0.537	0.063
D197-258	5	26	10.08	-69	17	09.2	18.060	0.031	0.841	0.057	...	...
D197-249	5	26	25.55	-69	19	16.7	18.061	0.034	1.407	0.068	...	...
D197-256	5	26	45.24	-69	20	02.3	18.063	0.051	0.966	0.085	...	...
D197-251	5	26	27.81	-69	19	35.3	18.065	0.028	1.389	0.206	...	...
D197-253	5	26	48.32	-69	17	31.4	18.067	0.033	1.231	0.090	...	...
D197-261	5	26	24.36	-69	16	38.8	18.068	0.029	0.956	0.058	...	...
D197-257	5	26	39.60	-69	16	24.0	18.069	0.019	1.102	0.075	...	...
D197-270	5	26	07.32	-69	18	37.5	18.072	0.023	0.019	0.037	-0.149	0.101

D197-263	5	26	36.57	-69	17	31.1	18.073	0.033	0.934	0.068	...	...
D197-264	5	26	25.08	-69	19	14.1	18.073	0.036	0.822	0.067	...	...
D197-252	5	26	46.55	-69	18	26.6	18.076	0.034	1.481	0.147	...	...
D197-269	5	26	29.31	-69	18	17.2	18.086	0.111	0.409	0.206	...	...
D197-262	5	26	09.03	-69	17	11.2	18.090	0.116	1.370	0.370	...	...
D197-275	5	26	29.87	-69	18	06.7	18.095	0.037	-0.043	0.050	-0.641	0.061
D197-278	5	26	19.97	-69	17	05.6	18.096	0.039	-0.037	0.054	-0.548	0.079
D197-277	5	26	26.93	-69	16	29.3	18.098	0.027	0.027	0.045	0.099	0.139
D197-268	5	26	48.72	-69	16	46.5	18.103	0.025	0.825	0.058	...	...
D197-266	5	26	20.65	-69	17	52.6	18.106	0.028	1.386	0.085	...	...
D197-271	5	26	28.94	-69	19	11.3	18.122	0.046	0.991	0.100	...	...
D197-273	5	26	22.90	-69	17	48.2	18.124	0.026	0.883	0.064	...	...
D197-284	5	26	24.38	-69	18	40.5	18.126	0.037	-0.113	0.053	-0.337	0.110
D197-272	5	26	16.02	-69	18	13.8	18.137	0.023	1.259	0.077	...	...
D197-274	5	26	10.42	-69	18	12.4	18.138	0.032	1.193	0.075	...	...
D197-276	5	26	17.57	-69	16	34.2	18.142	0.029	1.039	0.073	...	...
D197-282	5	26	25.96	-69	19	30.7	18.149	0.039	0.737	0.072	...	...
D197-279	5	26	37.31	-69	16	53.2	18.152	0.024	1.176	0.072	...	...
D197-280	5	26	40.02	-69	16	40.2	18.160	0.026	1.282	0.083	...	...
D197-283	5	26	49.19	-69	18	55.6	18.165	0.036	0.802	0.080	...	...
D197-281	5	26	24.50	-69	18	10.5	18.169	0.031	1.295	0.079	...	...
D197-290	5	26	24.52	-69	18	49.9	18.174	0.029	-0.165	0.044	-0.350	0.073
D197-285	5	26	16.94	-69	17	52.7	18.183	0.033	1.069	0.071	...	...
D197-295	5	26	09.55	-69	18	16.5	18.192	0.026	-0.065	0.037	0.070	0.111
D197-291	5	26	41.01	-69	19	08.1	18.194	0.028	0.302	0.052	0.232	0.132
D197-286	5	26	29.64	-69	19	54.2	18.202	0.073	1.162	0.109	...	...
D197-287	5	26	30.51	-69	18	02.4	18.202	0.039	1.025	0.107	0.218	0.310
D197-296	5	26	24.00	-69	18	39.4	18.206	0.034	0.123	0.048	-0.324	0.098
D197-298	5	26	25.40	-69	18	30.6	18.207	0.047	0.083	0.072	-0.155	0.126
D197-288	5	26	25.95	-69	17	42.4	18.208	0.028	0.906	0.066	...	...
D197-301	5	26	24.09	-69	19	16.4	18.209	0.046	-0.059	0.061	-0.096	0.100
D197-300	5	26	21.97	-69	19	27.0	18.210	0.031	0.043	0.043	-0.156	0.077
D197-292	5	26	29.52	-69	16	60.0	18.217	0.051	0.793	0.078	...	...
D197-293	5	26	26.31	-69	19	38.3	18.227	0.042	0.861	0.083	...	...
D197-289	5	26	16.92	-69	17	22.7	18.229	0.032	1.221	0.089	...	...
D197-306	5	26	26.60	-69	18	30.8	18.229	0.032	-0.074	0.050	-0.575	0.078
D197-299	5	26	23.30	-69	18	53.8	18.242	0.030	0.836	0.072	...	...
D197-302	5	26	49.24	-69	18	18.0	18.245	0.033	0.688	0.072	...	...
D197-305	5	26	10.23	-69	16	20.2	18.250	0.033	0.541	0.067	...	...
D197-303	5	26	39.52	-69	17	59.9	18.255	0.029	0.852	0.062	...	...
D197-294	5	26	26.77	-69	19	34.7	18.257	0.028	1.459	0.079	...	...
D197-297	5	26	32.44	-69	18	07.7	18.259	0.056	1.301	0.102	...	...
D197-304	5	26	40.37	-69	18	38.7	18.268	0.029	1.111	0.082	...	...
D197-309	5	26	18.57	-69	19	16.9	18.270	0.041	0.717	0.073	...	...
D197-307	5	26	21.30	-69	19	02.3	18.280	0.031	1.006	0.078	...	...
D197-311	5	26	46.60	-69	17	01.8	18.287	0.032	0.999	0.078	...	...
D197-317	5	26	12.24	-69	16	34.9	18.287	0.032	0.155	0.057	-0.136	0.126
D197-310	5	26	17.04	-69	17	08.1	18.292	0.038	1.164	0.089	...	...
D197-308	5	26	40.68	-69	16	20.9	18.296	0.033	1.331	0.138	...	...
D197-320	5	26	32.91	-69	18	23.4	18.297	0.253	0.094	0.312	-1.160	0.211
D197-313	5	26	16.38	-69	16	58.1	18.302	0.030	1.050	0.082	...	...
D197-315	5	26	32.24	-69	19	17.8	18.303	0.033	0.878	0.068	...	...
D197-316	5	26	42.15	-69	19	34.6	18.307	0.033	0.902	0.065	...	...
D197-314	5	26	20.05	-69	17	22.5	18.312	0.042	1.106	0.093	...	...
D197-312	5	26	36.08	-69	17	50.3	18.314	0.036	1.373	0.108	...	...
D197-321	5	26	07.22	-69	19	41.3	18.316	0.036	0.534	0.063	-0.263	0.169
D197-331	5	26	34.40	-69	18	39.2	18.320	0.029	-0.162	0.041	-0.479	0.072
D197-326	5	26	33.94	-69	18	07.0	18.322	0.043	0.362	0.076	...	...
D197-319	5	26	45.44	-69	16	44.1	18.326	0.045	0.848	0.085	...	...
D197-336	5	26	30.59	-69	17	01.6	18.333	0.033	-0.182	0.047	-0.687	0.086
D197-333	5	26	42.29	-69	17	01.3	18.336	0.031	0.163	0.047	-0.206	0.106
D197-322	5	26	28.94	-69	16	30.3	18.340	0.045	1.055	0.096	...	...
D197-328	5	26	21.52	-69	18	41.6	18.346	0.072	0.842	0.138	...	...
D197-323	5	26	19.74	-69	16	34.9	18.353	0.035	1.289	0.098	...	...
D197-318	5	26	42.25	-69	19	39.4	18.354	0.040	1.542	0.097	...	...
D197-325	5	26	45.02	-69	18	07.8	18.355	0.032	1.184	0.093	...	...

D197-327	5	26	16.00	-69	19	06.3	18.357	0.033	1.183	0.092	...	...
D197-330	5	26	25.17	-69	17	00.5	18.363	0.032	0.999	0.080	...	...
D197-332	5	26	07.46	-69	19	56.6	18.367	0.071	0.893	0.119	...	...
D197-329	5	26	48.93	-69	18	12.3	18.369	0.038	1.337	0.100	...	...
D197-334	5	26	28.75	-69	18	15.2	18.372	0.030	0.828	0.099	...	...
D197-338	5	26	38.89	-69	17	46.0	18.375	0.036	0.717	0.084	...	...
D197-335	5	26	25.92	-69	16	23.8	18.381	0.047	0.934	0.087	...	...
D197-337	5	26	25.93	-69	17	10.2	18.391	0.026	1.130	0.088	...	...
D197-352	5	26	28.92	-69	19	04.9	18.393	0.080	0.114	0.109	-0.784	0.153
D197-347	5	26	35.28	-69	19	31.2	18.395	0.038	0.255	0.057	-0.157	0.150
D197-339	5	26	37.88	-69	17	56.0	18.402	0.040	0.897	0.087	...	...
D197-342	5	26	30.70	-69	17	49.1	18.404	0.032	0.770	0.063	...	...
D197-356	5	26	42.73	-69	18	53.4	18.405	0.031	0.255	0.063	-0.144	0.176
D197-341	5	26	09.73	-69	17	05.9	18.407	0.062	0.919	0.101	...	...
D197-364	5	26	30.34	-69	19	00.6	18.411	0.066	-0.100	0.096	0.022	0.142
D197-362	5	26	06.96	-69	17	21.2	18.415	0.036	0.091	0.060	...	...
D197-343	5	26	09.63	-69	18	08.6	18.417	0.039	1.010	0.078	...	...
D197-363	5	26	22.33	-69	16	25.0	18.417	0.044	0.040	0.070	-0.373	0.118
D197-344	5	26	41.61	-69	19	20.4	18.419	0.049	0.825	0.100	...	...
D197-350	5	26	45.01	-69	16	55.2	18.419	0.040	0.748	0.076	...	...
D197-346	5	26	08.43	-69	18	45.7	18.421	0.040	0.858	0.075	...	...
D197-369	5	26	27.51	-69	17	41.5	18.421	0.062	-0.139	0.078	-0.587	0.083
D197-368	5	26	32.65	-69	18	34.0	18.422	0.042	-0.013	0.061	-0.248	0.119
D197-349	5	26	10.08	-69	16	25.4	18.424	0.036	0.860	0.084	...	...
D197-359	5	26	25.31	-69	17	19.0	18.427	0.034	0.609	0.060	...	...
D197-345	5	26	13.65	-69	19	51.0	18.428	0.042	1.024	0.089	...	...
D197-355	5	26	46.27	-69	18	53.7	18.430	0.042	0.889	0.086	...	...
D197-376	5	26	38.74	-69	17	53.8	18.430	0.046	-0.268	0.063	-0.067	0.109
D197-348	5	26	25.72	-69	17	36.7	18.433	0.032	1.095	0.090	...	...
D197-353	5	26	33.10	-69	17	30.5	18.434	0.039	1.034	0.076	...	...
D197-358	5	26	19.66	-69	18	01.1	18.437	0.033	0.842	0.085	...	...
D197-351	5	26	48.41	-69	19	37.3	18.438	0.031	1.153	0.081	...	...
D197-372	5	26	27.30	-69	17	28.1	18.441	0.040	0.223	0.071	-0.324	0.152
D197-354	5	26	20.18	-69	18	40.7	18.448	0.048	1.317	0.110	...	...
D197-381	5	26	27.13	-69	19	01.4	18.448	0.074	-0.161	0.120	-0.538	0.149
D197-360	5	26	31.83	-69	18	34.2	18.452	0.052	1.124	0.211	...	...
D197-357	5	26	33.77	-69	16	53.6	18.453	0.045	1.202	0.108	...	...
D197-361	5	26	47.49	-69	17	03.2	18.454	0.034	1.032	0.099	...	...
D197-378	5	26	30.02	-69	16	31.4	18.457	0.046	0.119	0.078	-0.396	0.126
D197-367	5	26	10.55	-69	17	01.4	18.459	0.038	0.905	0.083	...	...
D197-379	5	26	29.52	-69	19	35.4	18.459	0.037	0.147	0.056	0.064	0.169
D197-365	5	26	38.15	-69	17	24.9	18.462	0.034	1.062	0.098	...	...
D197-375	5	26	08.62	-69	18	36.0	18.462	0.055	0.602	0.107	...	...
D197-385	5	26	30.96	-69	16	41.4	18.464	0.038	-0.181	0.059	-0.182	0.094
D197-373	5	26	23.20	-69	17	23.2	18.468	0.055	0.867	0.095	...	...
D197-384	5	26	15.22	-69	18	55.0	18.471	0.036	0.013	0.056	-0.344	0.116
D197-387	5	26	29.63	-69	19	07.9	18.474	0.079	0.013	0.145	-0.611	0.332
D197-370	5	26	08.13	-69	17	45.2	18.476	0.040	1.085	0.100	...	...
D197-371	5	26	08.54	-69	19	07.0	18.486	0.048	1.276	0.145	...	...
D197-393	5	26	33.80	-69	18	48.9	18.487	0.037	0.017	0.057	-0.478	0.095
D197-374	5	26	26.55	-69	18	36.6	18.490	0.036	1.339	0.111	...	...
D197-389	5	26	28.53	-69	19	17.6	18.490	0.045	0.184	0.073	-0.047	0.181
D197-380	5	26	14.56	-69	18	20.3	18.491	0.030	0.865	0.093	...	...
D197-400	5	26	39.62	-69	17	21.8	18.492	0.036	-0.019	0.052	-0.544	0.075
D197-394	5	26	31.61	-69	18	05.8	18.493	0.073	0.140	0.097	-0.132	0.136
D197-377	5	26	28.33	-69	17	23.2	18.496	0.053	1.179	0.113	...	...
D197-396	5	26	29.27	-69	19	38.9	18.497	0.036	0.162	0.080	-0.340	0.164
D197-382	5	26	29.35	-69	17	28.6	18.498	0.049	0.788	0.082	-0.328	0.254
D197-390	5	26	12.57	-69	17	36.7	18.512	0.039	0.689	0.077	-0.201	0.227
D197-388	5	26	24.78	-69	17	52.1	18.516	0.032	0.914	0.085	...	...
D197-391	5	26	19.82	-69	17	35.2	18.517	0.049	0.756	0.093	...	...
D197-383	5	26	29.64	-69	16	47.8	18.520	0.039	1.231	0.147	...	...
D197-399	5	26	10.46	-69	17	09.9	18.520	0.044	0.661	0.076	...	...
D197-416	5	26	40.19	-69	19	06.1	18.520	0.045	-0.181	0.058	0.106	0.145
D197-386	5	26	45.59	-69	20	03.8	18.521	0.042	1.103	0.086	...	...
D197-415	5	26	47.94	-69	19	42.9	18.522	0.059	-0.127	0.082	-0.642	0.110

D197-405	5	26	39.13	-69	16	23.7	18.523	0.029	0.456	0.061	...	...
D197-421	5	26	34.53	-69	18	24.4	18.527	0.034	-0.135	0.049	-0.308	0.101
D197-395	5	26	17.48	-69	17	48.4	18.528	0.037	0.913	0.095	...	...
D197-392	5	26	11.00	-69	18	40.3	18.532	0.110	1.083	0.148	...	...
D197-422	5	26	11.53	-69	19	25.3	18.532	0.040	-0.065	0.059	-0.068	0.127
D197-398	5	26	25.23	-69	20	03.6	18.534	0.072	1.002	0.127	...	...
D197-397	5	26	43.97	-69	18	32.3	18.536	0.030	1.048	0.093	...	...
D197-417	5	26	19.86	-69	17	23.3	18.536	0.131	0.143	0.171	-0.158	0.174
D197-403	5	26	16.73	-69	17	20.7	18.539	0.040	0.943	0.098	...	...
D197-402	5	26	20.15	-69	18	14.8	18.543	0.041	1.074	0.107	...	...
D197-401	5	26	15.54	-69	19	57.7	18.544	0.040	1.144	0.113	...	...
D197-410	5	26	10.70	-69	20	03.2	18.545	0.039	0.740	0.085	...	...
D197-406	5	26	22.82	-69	19	42.7	18.551	0.084	1.078	0.125	...	...
D197-408	5	26	08.46	-69	18	07.1	18.554	0.040	1.096	0.092	...	...
D197-409	5	26	22.47	-69	19	30.6	18.554	0.031	1.058	0.111	...	...
D197-412	5	26	37.23	-69	19	34.5	18.556	0.048	0.864	0.094	...	...
D197-414	5	26	44.85	-69	19	38.3	18.561	0.041	0.837	0.072	...	...
D197-424	5	26	34.13	-69	19	54.4	18.562	0.030	0.460	0.065	...	...
D197-413	5	26	20.52	-69	18	54.6	18.563	0.042	0.978	0.073	...	...
D197-441	5	26	31.49	-69	18	38.8	18.565	0.039	-0.117	0.101	-0.684	0.130
D197-404	5	26	26.82	-69	20	05.4	18.570	0.065	1.608	0.364	...	...
D197-423	5	26	11.40	-69	18	03.8	18.571	0.050	0.762	0.092	...	...
D197-439	5	26	15.81	-69	18	19.3	18.572	0.040	0.143	0.058	-0.782	0.090
D197-433	5	26	45.28	-69	16	29.2	18.573	0.053	0.296	0.087	...	...
D197-431	5	26	30.42	-69	18	56.5	18.577	0.045	0.406	0.080	-0.101	0.210
D197-419	5	26	07.84	-69	16	32.5	18.578	0.034	1.085	0.110	...	...
D197-451	5	26	28.09	-69	20	04.0	18.582	0.071	-0.158	0.089	-0.409	0.167
D197-458	5	26	29.12	-69	19	07.4	18.585	0.157	-0.559	0.208	-0.914	0.324
D197-448	5	26	27.12	-69	17	38.0	18.586	0.073	0.038	0.093	0.263	0.177
D197-425	5	26	08.09	-69	18	44.2	18.587	0.057	0.865	0.110	...	...
D197-436	5	26	35.16	-69	18	14.8	18.589	0.065	0.577	0.094	-0.134	0.229
D197-444	5	26	20.41	-69	19	52.5	18.589	0.055	0.328	0.110	-0.227	0.212
D197-427	5	26	27.24	-69	18	32.8	18.594	0.062	0.886	0.100	...	...
D197-426	5	26	40.64	-69	17	56.8	18.595	0.054	0.904	0.109	...	...
D197-429	5	26	09.91	-69	16	54.8	18.598	0.040	0.895	0.099	...	...
D197-452	5	26	20.92	-69	18	43.7	18.598	0.070	0.119	0.090	-0.196	0.117
D197-438	5	26	26.56	-69	16	24.4	18.599	0.087	0.772	0.162	...	...
D197-434	5	26	13.24	-69	17	28.0	18.603	0.050	0.953	0.107	...	...
D197-461	5	26	11.27	-69	19	02.7	18.604	0.052	-0.177	0.065	-0.394	0.112
D197-430	5	26	20.90	-69	17	19.8	18.605	0.063	1.059	0.118	...	...
D197-447	5	26	21.40	-69	17	59.9	18.605	0.035	0.495	0.066	0.049	0.245
D197-440	5	26	31.77	-69	19	05.0	18.608	0.056	0.933	0.115	...	...
D197-432	5	26	37.86	-69	18	53.9	18.609	0.046	1.141	0.124	...	...
D197-442	5	26	46.21	-69	19	09.3	18.609	0.052	0.849	0.099	...	...
D197-449	5	26	32.21	-69	16	30.4	18.609	0.044	0.579	0.083	...	...
D197-456	5	26	43.07	-69	16	28.9	18.611	0.043	0.116	0.063	-0.214	0.156
D197-437	5	26	18.33	-69	17	40.8	18.612	0.048	1.084	0.212	...	...
D197-463	5	26	28.53	-69	19	56.0	18.614	0.057	-0.301	0.081	-0.411	0.099
D197-435	5	26	29.11	-69	19	18.7	18.620	0.045	1.321	0.109	...	...
D197-445	5	26	19.29	-69	17	43.2	18.623	0.043	1.084	0.107	...	...
D197-462	5	26	31.96	-69	19	52.1	18.628	0.044	0.349	0.068	-0.051	0.245
D197-446	5	26	26.87	-69	19	50.7	18.632	0.058	1.250	0.137	...	...
D197-460	5	26	12.75	-69	19	42.0	18.644	0.049	0.787	0.103	...	...
D197-465	5	26	20.89	-69	16	59.1	18.647	0.034	0.164	0.074	-0.158	0.191
D197-467	5	26	30.69	-69	16	26.6	18.650	0.040	0.048	0.070	-0.285	0.167
D197-471	5	26	34.98	-69	17	48.7	18.652	0.035	-0.091	0.056	0.054	0.152
D197-453	5	26	22.92	-69	18	46.6	18.653	0.035	1.324	0.104	...	...
D197-472	5	26	25.49	-69	19	32.1	18.654	0.053	-0.129	0.075	-0.421	0.109
D197-459	5	26	20.04	-69	18	39.2	18.662	0.064	1.204	0.185	...	...
D197-478	5	26	29.30	-69	18	57.0	18.665	0.078	-0.247	0.101	-0.196	0.130
D197-468	5	26	48.22	-69	18	38.6	18.671	0.041	0.499	0.077	...	...
D197-466	5	26	40.49	-69	17	22.1	18.677	0.045	0.793	0.087	...	...
D197-464	5	26	39.47	-69	17	16.1	18.678	0.057	1.144	0.147	...	...
D197-474	5	26	28.82	-69	17	17.4	18.678	0.095	0.367	0.126	-0.157	0.219
D197-476	5	26	48.51	-69	18	17.6	18.685	0.062	0.385	0.095	...	...
D197-480	5	26	29.44	-69	19	00.9	18.685	0.051	0.058	0.085	-0.355	0.161

D197-497	5	26	32.63	-69	17	47.9	18.693	0.051	-0.308	0.069	-0.102	0.123
D197-486	5	26	24.30	-69	18	42.1	18.698	0.058	0.068	0.089	-0.073	0.256
D197-479	5	26	47.93	-69	16	57.5	18.704	0.051	0.559	0.096	...	...
D197-473	5	26	44.82	-69	19	05.0	18.705	0.048	1.017	0.094	...	...
D197-492	5	26	42.35	-69	19	22.6	18.706	0.056	0.059	0.134	-0.190	0.216
D197-493	5	26	18.80	-69	16	24.4	18.706	0.046	0.065	0.081	-0.181	0.180
D197-475	5	26	09.79	-69	18	06.5	18.707	0.050	1.037	0.103	...	...
D197-483	5	26	42.37	-69	17	37.0	18.707	0.055	0.338	0.100	-0.094	0.196
D197-494	5	26	35.73	-69	16	56.6	18.708	0.043	0.107	0.069	0.036	0.220
D197-500	5	26	07.24	-69	19	19.6	18.708	0.053	-0.040	0.077	...	...
D197-502	5	26	25.58	-69	18	09.8	18.708	0.056	-0.093	0.076	-0.105	0.155
D197-509	5	26	27.25	-69	19	05.5	18.708	0.052	-0.277	0.071	-0.598	0.090
D197-484	5	26	37.84	-69	17	41.5	18.712	0.040	0.429	0.073	...	...
D197-506	5	26	17.84	-69	17	04.1	18.713	0.052	-0.044	0.071	-0.235	0.129
D197-496	5	26	34.12	-69	17	02.3	18.714	0.052	0.212	0.082	...	...
D197-477	5	26	45.69	-69	17	20.0	18.717	0.044	0.962	0.106	...	...
D197-508	5	26	15.24	-69	17	26.7	18.718	0.043	0.077	0.066	-0.055	0.193
D197-487	5	26	41.56	-69	19	06.5	18.728	0.041	0.751	0.105	...	...
D197-495	5	26	15.21	-69	16	20.3	18.728	0.044	0.568	0.085	...	...
D197-491	5	26	33.28	-69	18	33.5	18.729	0.063	0.631	0.115	-0.003	0.306
D197-485	5	26	38.18	-69	16	58.1	18.730	0.048	0.842	0.093	...	...
D197-514	5	26	29.32	-69	19	09.7	18.730	0.080	-0.054	0.108	-0.362	0.219
D197-515	5	26	37.64	-69	18	43.9	18.730	0.046	-0.084	0.069	0.065	0.160
D197-507	5	26	38.00	-69	19	21.4	18.731	0.099	0.373	0.139	...	...
D197-520	5	26	07.06	-69	16	40.1	18.739	0.084	0.004	0.161	...	...
D197-489	5	26	23.26	-69	17	07.7	18.741	0.038	0.975	0.108	...	...
D197-498	5	26	39.98	-69	19	16.0	18.741	0.058	0.778	0.111	...	...
D197-482	5	26	19.62	-69	17	40.4	18.742	0.038	1.279	0.130	...	...
D197-504	5	26	23.19	-69	19	29.7	18.744	0.067	0.722	0.106	...	...
D197-522	5	26	34.49	-69	17	31.8	18.744	0.043	-0.004	0.063	0.359	0.234
D197-499	5	26	25.84	-69	19	05.2	18.745	0.035	0.835	0.094	...	...
D197-503	5	26	13.40	-69	16	32.5	18.746	0.042	0.766	0.092	...	...
D197-490	5	26	29.24	-69	17	13.9	18.750	0.056	1.116	0.126	...	...
D197-505	5	26	26.26	-69	16	50.9	18.750	0.041	0.835	0.105	...	...
D197-523	5	26	30.87	-69	18	55.7	18.750	0.062	0.113	0.101	-0.427	0.165
D197-534	5	26	38.86	-69	19	07.3	18.750	0.051	-0.193	0.071	-0.442	0.104
D197-529	5	26	39.79	-69	18	50.1	18.751	0.052	-0.064	0.075	0.099	0.163
D197-510	5	26	39.11	-69	18	41.1	18.752	0.036	0.718	0.091	...	...
D197-511	5	26	33.44	-69	17	44.6	18.752	0.048	0.696	0.107	...	...
D197-532	5	26	10.13	-69	18	43.0	18.759	0.040	0.080	0.066	-0.355	0.172
D197-501	5	26	36.98	-69	19	50.4	18.760	0.037	1.110	0.109	...	...
D197-531	5	26	21.50	-69	17	31.0	18.762	0.068	0.148	0.100	...	...
D197-519	5	26	45.84	-69	17	52.4	18.766	0.045	0.643	0.085	...	...
D197-543	5	26	07.80	-69	16	55.6	18.767	0.046	-0.095	0.064	-0.182	0.169
D197-552	5	26	29.27	-69	18	47.9	18.776	0.055	-0.311	0.082	-0.578	0.107
D197-538	5	26	19.48	-69	18	10.5	18.780	0.048	0.376	0.085	...	...
D197-527	5	26	31.14	-69	19	39.2	18.781	0.045	0.626	0.087	...	...
D197-535	5	26	27.11	-69	17	29.4	18.781	0.066	0.528	0.120	...	...
D197-541	5	26	33.02	-69	18	17.2	18.781	0.045	0.331	0.078	-0.409	0.166
D197-518	5	26	37.81	-69	19	35.6	18.782	0.056	1.034	0.130	...	...
D197-521	5	26	47.35	-69	19	54.5	18.784	0.050	0.968	0.124	...	...
D197-526	5	26	47.25	-69	19	48.1	18.791	0.049	0.909	0.110	...	...
D197-528	5	26	10.90	-69	17	43.4	18.791	0.056	0.862	0.105	...	...
D197-524	5	26	22.97	-69	16	42.3	18.795	0.052	1.157	0.135	...	...
D197-560	5	26	40.02	-69	17	12.7	18.795	0.052	-0.025	0.083	-0.564	0.153
D197-537	5	26	16.45	-69	19	39.6	18.796	0.045	0.778	0.086	...	...
D197-557	5	26	36.15	-69	17	38.7	18.796	0.054	0.044	0.076	-0.042	0.185
D197-533	5	26	39.55	-69	17	43.9	18.799	0.050	0.986	0.111	...	...
D197-525	5	26	34.73	-69	17	36.1	18.801	0.041	1.131	0.110	...	...
D197-549	5	26	35.80	-69	17	33.6	18.801	0.111	0.335	0.148	...	...
D197-548	5	26	34.26	-69	18	05.1	18.805	0.059	0.414	0.107	...	...
D197-544	5	26	33.47	-69	18	36.0	18.807	0.055	0.749	0.122	...	...
D197-551	5	26	07.84	-69	18	27.6	18.811	0.046	0.543	0.084	...	...
D197-569	5	26	10.48	-69	18	51.0	18.811	0.088	-0.020	0.122	0.005	0.242
D197-573	5	26	30.05	-69	16	22.7	18.813	0.064	-0.069	0.085	-0.234	0.122
D197-576	5	26	26.00	-69	16	37.0	18.813	0.104	-0.129	0.123	0.118	0.206

D197-550	5	26	45.97	-69	16	40.8	18.821	0.046	0.759	0.110	...	...
D197-553	5	26	31.86	-69	18	15.3	18.822	0.049	0.736	0.100	...	...
D197-555	5	26	33.55	-69	17	51.2	18.823	0.069	0.749	0.120	...	...
D197-542	5	26	07.13	-69	18	27.1	18.828	0.057	1.358	0.163	...	...
D197-554	5	26	31.52	-69	19	27.2	18.828	0.044	0.866	0.105	...	...
D197-559	5	26	23.19	-69	19	12.2	18.830	0.039	0.786	0.113	...	...
D197-562	5	26	08.80	-69	16	50.8	18.836	0.042	0.794	0.096	...	...
D197-563	5	26	15.89	-69	16	29.6	18.837	0.064	0.794	0.121	...	...
D197-572	5	26	41.84	-69	19	35.8	18.841	0.053	0.580	0.089	...	...
D197-595	5	26	23.91	-69	19	24.2	18.842	0.053	-0.154	0.075	-0.034	0.181
D197-574	5	26	14.71	-69	19	55.9	18.843	0.044	0.605	0.098	...	...
D197-568	5	26	39.90	-69	18	37.2	18.844	0.046	0.758	0.122	...	...
D197-579	5	26	11.94	-69	19	56.1	18.844	0.054	0.355	0.088	...	...
D197-567	5	26	29.15	-69	18	42.6	18.846	0.046	0.823	0.113	...	...
D197-558	5	26	40.21	-69	19	18.9	18.847	0.061	1.186	0.152	...	...
D197-577	5	26	36.57	-69	18	25.0	18.849	0.053	0.672	0.091	...	...
D197-582	5	26	21.78	-69	18	32.9	18.849	0.053	0.385	0.096	-0.241	0.266
D197-581	5	26	31.05	-69	18	25.8	18.850	0.067	0.418	0.158	0.006	0.353
D197-603	5	26	49.61	-69	18	42.7	18.853	0.053	-0.128	0.082	...	...
D197-578	5	26	13.55	-69	16	44.8	18.856	0.058	0.811	0.116	...	...
D197-575	5	26	23.45	-69	18	03.7	18.863	0.034	1.044	0.105	-0.915	0.245
D197-607	5	26	15.64	-69	16	59.0	18.866	0.051	0.016	0.080	0.036	0.203
D197-587	5	26	26.50	-69	19	37.1	18.867	0.074	0.713	0.135	...	...
D197-600	5	26	40.69	-69	17	41.7	18.869	0.073	0.342	0.120	-0.349	0.278
D197-604	5	26	38.85	-69	16	27.4	18.869	0.061	0.176	0.090	...	...
D197-615	5	26	29.16	-69	18	30.9	18.869	0.060	-0.170	0.080	0.013	0.157
D197-588	5	26	10.27	-69	19	35.8	18.873	0.044	0.852	0.133	...	...
D197-598	5	26	29.12	-69	16	42.7	18.875	0.072	0.543	0.122	...	...
D197-580	5	26	07.85	-69	18	33.3	18.876	0.056	1.059	0.130	...	...
D197-586	5	26	32.00	-69	16	32.4	18.876	0.049	0.937	0.123	...	...
D197-617	5	26	37.89	-69	19	22.9	18.878	0.112	-0.101	0.137	-0.290	0.179
D197-591	5	26	37.22	-69	16	39.7	18.880	0.070	0.748	0.140	...	...
D197-611	5	26	26.89	-69	17	40.0	18.880	0.089	0.255	0.120	...	...
D197-609	5	26	31.62	-69	18	27.7	18.884	0.047	0.403	0.085	...	...
D197-585	5	26	07.79	-69	19	13.3	18.885	0.051	1.193	0.133	...	...
D197-594	5	26	34.76	-69	19	36.8	18.885	0.046	0.845	0.128	...	...
D197-614	5	26	20.24	-69	17	20.3	18.885	0.057	0.239	0.095	...	...
D197-605	5	26	08.49	-69	19	44.0	18.886	0.056	0.580	0.121	...	...
D197-593	5	26	33.02	-69	19	18.3	18.887	0.048	0.906	0.112	...	...
D197-592	5	26	20.37	-69	17	24.1	18.888	0.062	0.930	0.137	...	...
D197-597	5	26	25.55	-69	19	08.2	18.888	0.043	0.832	0.107	...	...
D197-624	5	26	29.03	-69	18	37.7	18.889	0.052	-0.013	0.076	-0.030	0.193
D197-629	5	26	25.91	-69	17	30.3	18.889	0.064	-0.202	0.093	0.267	0.205
D197-590	5	26	26.63	-69	18	32.9	18.895	0.052	1.143	0.149	...	...
D197-633	5	26	17.98	-69	17	10.7	18.895	0.045	-0.149	0.070	-0.239	0.159
D197-596	5	26	13.77	-69	18	03.2	18.901	0.055	1.203	0.143	...	...
D197-618	5	26	49.12	-69	19	16.7	18.902	0.049	0.449	0.104	...	...
D197-620	5	26	09.02	-69	18	52.2	18.904	0.066	0.416	0.106	...	...
D197-608	5	26	12.85	-69	17	34.7	18.908	0.056	1.006	0.110	...	...
D197-589	5	26	25.46	-69	18	33.5	18.909	0.077	1.486	0.260	...	...
D197-602	5	26	37.75	-69	16	34.5	18.909	0.059	1.213	0.151	...	...
D197-619	5	26	34.02	-69	19	42.9	18.910	0.074	0.588	0.120	...	...
D197-616	5	26	40.05	-69	18	19.5	18.914	0.048	0.798	0.098	...	...
D197-627	5	26	19.88	-69	19	53.8	18.915	0.118	0.443	0.155	...	...
D197-622	5	26	30.25	-69	16	30.0	18.919	0.069	0.737	0.162	...	...
D197-626	5	26	28.23	-69	17	16.6	18.922	0.059	0.626	0.102	...	...
D197-647	5	26	31.61	-69	19	45.5	18.924	0.047	-0.074	0.074	0.089	0.211
D197-675	5	26	46.86	-69	19	17.3	18.924	0.068	-0.552	0.134	-0.434	0.158
D197-649	5	26	22.70	-69	18	38.4	18.925	0.052	-0.062	0.074	0.310	0.246
D197-632	5	26	28.74	-69	18	33.5	18.928	0.062	0.616	0.147	...	...
D197-636	5	26	18.64	-69	17	34.5	18.928	0.074	0.536	0.108	...	...
D197-635	5	26	30.87	-69	17	09.2	18.929	0.055	0.570	0.118	...	...
D197-657	5	26	33.96	-69	18	13.7	18.929	0.068	-0.108	0.096	0.057	0.216
D197-628	5	26	26.03	-69	18	05.3	18.931	0.070	0.778	0.127	...	...
D197-631	5	26	10.88	-69	18	24.4	18.931	0.043	0.719	0.087	...	...
D197-637	5	26	15.63	-69	19	11.9	18.932	0.226	0.596	0.311	...	...

D197-625	5	26	11.62	-69	18	02.4	18.935	0.053	0.945	0.132	...	...
D197-634	5	26	23.97	-69	17	35.1	18.935	0.045	0.735	0.094	...	...
D197-638	5	26	33.81	-69	18	24.4	18.940	0.056	0.747	0.113	...	...
D197-660	5	26	28.46	-69	18	18.3	18.941	0.048	0.022	0.072	0.038	0.181
D197-653	5	26	17.11	-69	17	54.5	18.942	0.062	0.200	0.100	...	...
D197-621	5	26	28.28	-69	19	24.5	18.943	0.093	1.298	0.218	...	...
D197-663	5	26	21.40	-69	17	04.4	18.947	0.057	0.147	0.094	-0.485	0.156
D197-666	5	26	10.66	-69	18	38.7	18.947	0.058	0.114	0.088	0.851	0.476
D197-670	5	26	16.90	-69	17	17.6	18.950	0.062	0.150	0.106	...	...
D197-641	5	26	47.84	-69	19	44.3	18.952	0.082	0.782	0.163	...	...
D197-678	5	26	19.38	-69	17	10.3	18.952	0.059	0.067	0.091	-0.096	0.251
D197-676	5	26	30.30	-69	18	28.7	18.955	0.079	0.151	0.136	-0.437	0.485
D197-654	5	26	45.15	-69	16	43.7	18.956	0.113	0.528	0.164	...	...
D197-640	5	26	20.65	-69	18	36.9	18.957	0.094	0.960	0.160	...	...
D197-650	5	26	28.07	-69	18	16.1	18.961	0.050	0.763	0.101	...	...
D197-700	5	26	36.19	-69	19	19.2	18.962	0.060	-0.102	0.082	-0.204	0.177
D197-674	5	26	10.11	-69	19	17.6	18.963	0.061	0.391	0.102	...	...
D197-694	5	26	41.15	-69	19	38.4	18.963	0.051	-0.026	0.074	-0.366	0.172
D197-702	5	26	09.34	-69	18	32.9	18.964	0.042	-0.072	0.063	...	...
D197-648	5	26	46.94	-69	18	26.5	18.965	0.086	0.859	0.175	...	...
D197-642	5	26	14.47	-69	16	31.8	18.966	0.057	1.116	0.142	...	...
D197-655	5	26	36.54	-69	16	59.3	18.966	0.051	0.759	0.107	...	...
D197-656	5	26	38.85	-69	16	58.5	18.968	0.060	0.795	0.116	...	...
D197-664	5	26	09.01	-69	18	56.7	18.968	0.055	0.607	0.111	...	...
D197-665	5	26	25.54	-69	18	22.1	18.969	0.072	0.633	0.132	...	...
D197-671	5	26	29.64	-69	18	47.8	18.969	0.064	0.556	0.139	...	...
D197-673	5	26	21.31	-69	17	08.6	18.971	0.135	0.579	0.175	...	...
D197-693	5	26	30.70	-69	18	34.6	18.973	0.065	0.321	0.152	...	...
D197-669	5	26	46.09	-69	18	49.8	18.974	0.066	0.707	0.111	...	...
D197-661	5	26	45.31	-69	19	13.0	18.975	0.064	0.786	0.124	...	...
D197-667	5	26	15.69	-69	17	52.7	18.976	0.059	0.796	0.120	...	...
D197-685	5	26	10.23	-69	18	46.4	18.977	0.054	0.554	0.104	...	...
D197-697	5	26	07.14	-69	18	28.9	18.977	0.067	0.304	0.106	...	...
D197-707	5	26	41.31	-69	18	09.0	18.977	0.069	0.169	0.100	-0.500	0.190
D197-659	5	26	24.83	-69	19	47.6	18.979	0.053	0.934	0.126	...	...
D197-683	5	26	14.71	-69	17	42.2	18.980	0.061	0.635	0.118	...	...
D197-677	5	26	12.09	-69	19	38.5	18.987	0.057	0.907	0.134	...	...
D197-696	5	26	43.17	-69	16	54.0	18.987	0.055	0.541	0.098	...	...
D197-717	5	26	45.88	-69	17	41.3	18.987	0.060	0.123	0.089	...	...
D197-731	5	26	13.91	-69	16	59.5	18.988	0.082	-0.094	0.106	...	...
D197-722	5	26	13.72	-69	17	54.2	18.990	0.056	0.119	0.088	-0.118	0.240
D197-689	5	26	31.97	-69	17	19.3	18.992	0.074	0.838	0.124	...	...
D197-724	5	26	24.18	-69	16	33.7	18.993	0.074	0.171	0.105	...	...
D197-706	5	26	38.82	-69	19	36.0	18.994	0.053	0.560	0.096	...	...
D197-688	5	26	29.13	-69	20	04.0	18.996	0.065	0.981	0.137	...	...
D197-691	5	26	43.33	-69	17	04.9	18.997	0.058	0.934	0.123	...	...
D197-682	5	26	25.28	-69	16	39.5	18.999	0.059	1.080	0.147	-0.257	0.555
D197-698	5	26	14.62	-69	16	27.1	18.999	0.075	0.793	0.148	...	...
D197-692	5	26	26.31	-69	17	35.2	19.000	0.049	0.969	0.131	...	...
D197-679	5	26	08.79	-69	17	08.7	19.001	0.066	1.217	0.179	...	...
D197-695	5	26	13.55	-69	19	14.3	19.003	0.056	0.904	0.138	...	...
D197-713	5	26	31.09	-69	19	09.0	19.007	0.086	0.644	0.131	...	...
D197-681	5	26	33.28	-69	18	12.3	19.008	0.061	1.278	0.178	...	...
D197-742	5	26	35.80	-69	17	49.3	19.008	0.065	0.100	0.139	-0.691	0.196
D197-708	5	26	30.96	-69	19	58.4	19.011	0.061	0.932	0.147	...	...
D197-718	5	26	30.84	-69	16	51.5	19.012	0.066	0.695	0.122	...	...
D197-761	5	26	38.52	-69	17	28.6	19.017	0.057	-0.030	0.090	...	...
D197-764	5	26	28.15	-69	19	47.4	19.019	0.068	-0.058	0.106	0.193	0.257
D197-725	5	26	35.32	-69	19	53.3	19.026	0.097	0.886	0.181	...	...
D197-726	5	26	48.11	-69	19	35.4	19.026	0.050	0.879	0.101	...	...
D197-732	5	26	09.18	-69	18	11.5	19.029	0.062	0.869	0.137	...	...
D197-746	5	26	26.80	-69	17	04.2	19.034	0.078	0.639	0.199	...	...
D197-720	5	26	44.63	-69	19	10.7	19.035	0.058	1.203	0.149	...	...
D197-740	5	26	24.53	-69	20	03.6	19.035	0.061	0.779	0.137	...	...
D197-747	5	26	13.46	-69	16	26.5	19.035	0.057	0.639	0.120	-0.115	0.370
D197-736	5	26	31.73	-69	19	24.6	19.036	0.054	0.930	0.137	...	...

D197-748	5	26	33.78	-69	17	01.8	19.039	0.047	0.711	0.124	...	...
D197-760	5	26	40.62	-69	18	10.8	19.039	0.053	0.510	0.109	...	...
D197-750	5	26	18.18	-69	19	49.8	19.040	0.064	0.706	0.119	...	...
D197-778	5	26	10.57	-69	16	49.7	19.043	0.065	0.213	0.104	...	...
D197-786	5	26	44.15	-69	16	28.6	19.044	0.077	0.066	0.115	-0.230	0.268
D197-756	5	26	16.25	-69	19	46.0	19.046	0.056	0.712	0.116	...	...
D197-772	5	26	19.34	-69	18	20.0	19.049	0.059	0.526	0.113	...	...
D197-798	5	26	23.88	-69	18	20.2	19.049	0.055	-0.143	0.082	-0.358	0.142
D197-773	5	26	15.50	-69	19	03.1	19.051	0.057	0.558	0.112	...	...
D197-755	5	26	17.00	-69	19	08.2	19.056	0.093	0.948	0.240	...	...
D197-771	5	26	30.67	-69	18	25.4	19.056	0.077	0.714	0.344	...	...
D197-779	5	26	07.25	-69	19	15.9	19.056	0.110	0.484	0.152	...	...
D197-787	5	26	34.22	-69	16	46.8	19.059	0.056	0.419	0.107	...	...
D197-777	5	26	35.80	-69	16	42.7	19.062	0.065	0.677	0.128	...	...
D197-814	5	26	34.80	-69	18	35.7	19.067	0.050	-0.091	0.082	-0.439	0.161
D197-781	5	26	35.33	-69	17	25.1	19.068	0.062	0.741	0.116	...	...
D197-794	5	26	12.83	-69	16	32.5	19.073	0.056	0.551	0.108	...	...
D197-793	5	26	29.85	-69	17	02.9	19.076	0.062	0.657	0.121	...	...
D197-818	5	26	28.09	-69	16	25.6	19.086	0.066	0.219	0.100	...	...
D197-843	5	26	08.97	-69	16	57.6	19.087	0.056	-0.291	0.078	...	...
D197-789	5	26	29.68	-69	16	37.8	19.088	0.059	1.078	0.256	...	...
D197-831	5	26	13.56	-69	17	25.3	19.092	0.065	0.156	0.098	...	...
D197-842	5	26	39.67	-69	17	36.4	19.092	0.066	-0.130	0.098	-0.177	0.192
D197-800	5	26	34.86	-69	18	12.7	19.094	0.071	0.859	0.147	...	...
D197-841	5	26	48.36	-69	18	56.3	19.095	0.071	-0.013	0.117	...	...
D197-803	5	26	46.73	-69	17	33.6	19.096	0.074	0.847	0.142	...	...
D197-835	5	26	24.62	-69	18	24.1	19.098	0.065	0.209	0.116	...	...
D197-838	5	26	31.17	-69	18	35.9	19.100	0.070	0.255	0.232	...	...
D197-821	5	26	07.78	-69	17	26.6	19.102	0.056	0.527	0.112	...	...
D197-817	5	26	39.44	-69	16	44.8	19.103	0.056	0.645	0.103	...	...
D197-834	5	26	44.09	-69	19	55.3	19.105	0.119	0.362	0.176	...	...
D197-810	5	26	28.46	-69	19	23.3	19.107	0.107	0.985	0.210	...	...
D197-845	5	26	13.52	-69	19	08.8	19.107	0.062	0.127	0.096	...	...
D197-804	5	26	40.17	-69	17	21.1	19.109	0.062	1.134	0.154	...	...
D197-829	5	26	10.29	-69	16	56.0	19.114	0.062	0.700	0.139	...	...
D197-870	5	26	26.74	-69	18	56.7	19.115	0.072	-0.223	0.118	...	...
D197-830	5	26	21.27	-69	16	58.2	19.117	0.054	0.754	0.139	...	...
D197-840	5	26	29.64	-69	20	02.8	19.118	0.070	0.570	0.122	...	...
D197-849	5	26	43.64	-69	16	39.6	19.118	0.071	0.290	0.129	...	...
D197-820	5	26	15.54	-69	17	43.4	19.121	0.063	0.967	0.145	...	...
D197-837	5	26	36.13	-69	19	31.3	19.121	0.065	0.754	0.146	...	...
D197-832	5	26	36.61	-69	17	09.9	19.126	0.062	0.926	0.166	...	...
D197-867	5	26	08.87	-69	18	36.8	19.133	0.104	0.248	0.170	...	...
D197-884	5	26	07.71	-69	17	37.8	19.133	0.058	-0.098	0.101	...	...
D197-836	5	26	27.23	-69	16	32.4	19.134	0.063	1.046	0.185	...	...
D197-886	5	26	15.15	-69	17	48.8	19.138	0.079	0.008	0.111	-0.246	0.178
D197-855	5	26	20.52	-69	17	46.6	19.146	0.103	0.827	0.183	...	...
D197-848	5	26	36.92	-69	18	56.6	19.147	0.079	0.984	0.169	...	...
D197-866	5	26	14.15	-69	19	24.2	19.147	0.057	0.580	0.117	...	...
D197-872	5	26	14.16	-69	17	29.5	19.149	0.080	0.456	0.128	...	...
D197-851	5	26	27.48	-69	19	52.8	19.150	0.148	1.012	0.238	...	...
D197-918	5	26	16.01	-69	17	24.0	19.151	0.328	-0.258	0.588	...	...
D197-850	5	26	22.18	-69	17	17.5	19.152	0.071	1.080	0.181	...	...
D197-846	5	26	44.06	-69	19	47.6	19.156	0.101	1.253	0.242	...	...
D197-868	5	26	32.32	-69	19	20.4	19.156	0.067	0.753	0.132	...	...
D197-902	5	26	40.26	-69	17	44.0	19.156	0.065	0.129	0.108	...	...
D197-919	5	26	19.83	-69	16	38.2	19.162	0.069	-0.030	0.102	...	...
D197-869	5	26	37.91	-69	19	37.6	19.163	0.074	0.899	0.169	...	...
D197-890	5	26	28.93	-69	17	16.3	19.163	0.051	0.500	0.130	...	...
D197-883	5	26	43.84	-69	19	21.9	19.164	0.072	0.655	0.141	...	...
D197-904	5	26	30.98	-69	17	30.4	19.164	0.055	0.251	0.100	...	...
D197-914	5	26	29.26	-69	18	58.8	19.170	0.181	0.250	0.232	...	...
D197-926	5	26	32.72	-69	16	22.1	19.170	0.078	0.051	0.118	...	...
D197-891	5	26	34.18	-69	19	06.2	19.172	0.068	0.693	0.155	...	...
D197-920	5	26	07.78	-69	16	27.8	19.173	0.069	0.232	0.112	...	...
D197-937	5	26	18.50	-69	16	36.4	19.173	0.080	-0.127	0.108	...	...

D197-863	5	26	09.55	-69	17	11.6	19.175	0.078	1.260	0.231	...	...
D197-912	5	26	25.12	-69	18	36.0	19.177	0.086	0.406	0.162	...	...
D197-929	5	26	23.13	-69	18	43.2	19.177	0.070	0.154	0.099	0.386	0.377
D197-894	5	26	46.05	-69	18	59.7	19.180	0.070	0.820	0.169	...	...
D197-876	5	26	08.10	-69	17	07.3	19.186	0.110	1.259	0.231	...	...
D197-940	5	26	07.79	-69	18	50.5	19.187	0.052	0.156	0.088	...	...
D197-935	5	26	22.13	-69	19	47.4	19.188	0.074	0.254	0.111	...	...
D197-911	5	26	46.43	-69	19	43.9	19.192	0.075	0.784	0.131	...	...
D197-927	5	26	28.99	-69	18	32.3	19.192	0.082	0.545	0.181	...	...
D197-917	5	26	47.65	-69	19	46.8	19.195	0.078	0.793	0.179	...	...
D197-942	5	26	30.93	-69	18	57.3	19.197	0.089	0.371	0.152	...	...
D197-916	5	26	18.20	-69	17	48.1	19.199	0.055	0.900	0.137	...	...
D197-976	5	26	16.65	-69	16	52.6	19.204	0.070	-0.168	0.095	...	...
D197-973	5	26	23.78	-69	17	43.2	19.205	0.049	-0.072	0.082	-0.298	0.184
D197-924	5	26	15.32	-69	19	56.3	19.206	0.070	0.885	0.171	...	...
D197-900	5	26	45.89	-69	19	32.3	19.207	0.064	1.339	0.250	...	...
D197-934	5	26	19.73	-69	17	43.8	19.207	0.066	0.751	0.145	...	...
D197-923	5	26	23.64	-69	18	06.6	19.210	0.051	0.997	0.149	...	...
D197-931	5	26	35.96	-69	18	35.3	19.211	0.068	0.873	0.218	...	...
D197-978	5	26	29.99	-69	19	05.0	19.212	0.139	0.019	0.212	...	...
D197-907	5	26	31.92	-69	16	35.2	19.213	0.062	1.307	0.222	...	...
D197-943	5	26	30.15	-69	16	43.0	19.213	0.072	0.732	0.143	...	...
D197-975	5	26	35.88	-69	16	36.4	19.213	0.082	0.066	0.124	...	...
D197-979	5	26	44.82	-69	17	41.5	19.213	0.064	0.019	0.093	...	...
D197-983	5	26	25.47	-69	18	37.7	19.221	0.108	0.165	0.167	-0.069	0.317
D197-993	5	26	45.53	-69	18	28.1	19.221	0.073	-0.014	0.105	-0.130	0.215
D197-999	5	26	30.30	-69	19	58.2	19.222	0.072	-0.131	0.105	0.241	0.260
D197-941	5	26	31.55	-69	18	10.7	19.226	0.127	1.044	0.219	...	...
D197-946	5	26	07.97	-69	18	06.2	19.227	0.069	1.037	0.159	...	...
D197-959	5	26	07.04	-69	19	18.3	19.228	0.071	0.814	0.172	...	...
D197-974	5	26	17.93	-69	17	42.4	19.228	0.080	0.473	0.137	-0.165	0.388
D197-1018	5	26	48.11	-69	19	02.5	19.230	0.101	-0.163	0.151	-0.614	0.312
D197-951	5	26	10.69	-69	19	44.8	19.232	0.076	1.045	0.170	...	...
D197-971	5	26	13.61	-69	18	19.5	19.234	0.059	0.611	0.132	...	...
D197-980	5	26	46.98	-69	19	30.7	19.234	0.061	0.477	0.137	...	...
D197-962	5	26	10.15	-69	19	47.1	19.235	0.086	0.912	0.188	...	...
D197-1013	5	26	38.29	-69	19	18.1	19.237	0.060	0.045	0.102	-0.321	0.242
D197-972	5	26	42.49	-69	19	11.6	19.240	0.068	0.747	0.165	...	...
D197-982	5	26	34.85	-69	17	33.3	19.241	0.074	0.623	0.130	...	...
D197-1034	5	26	18.70	-69	19	20.2	19.248	0.077	-0.002	0.118	-0.318	0.232
D197-1015	5	26	09.77	-69	19	47.5	19.249	0.082	0.333	0.138	...	...
D197-1038	5	26	33.89	-69	17	25.3	19.250	0.072	0.004	0.113	...	...
D197-998	5	26	21.13	-69	17	32.4	19.251	0.115	0.567	0.173	...	...
D197-981	5	26	26.56	-69	16	33.9	19.252	0.099	0.907	0.193	...	...
D197-1040	5	26	11.85	-69	16	28.9	19.254	0.093	0.016	0.145	...	...
D197-995	5	26	21.25	-69	17	00.5	19.254	0.057	0.694	0.151	...	...
D197-1032	5	26	10.74	-69	19	33.2	19.255	0.077	0.199	0.124	...	...
D197-1049	5	26	35.64	-69	16	27.0	19.255	0.089	-0.167	0.135	...	...
D197-1000	5	26	24.66	-69	18	39.5	19.259	0.095	0.726	0.193	...	...
D197-986	5	26	24.61	-69	16	44.9	19.259	0.075	0.957	0.152	...	...
D197-1057	5	26	12.15	-69	20	00.8	19.261	0.080	-0.212	0.112	...	...
D197-1002	5	26	25.54	-69	16	35.4	19.268	0.137	0.908	0.199	...	...
D197-1029	5	26	29.67	-69	19	17.2	19.268	0.077	0.528	0.158	...	...
D197-1069	5	26	25.72	-69	18	56.6	19.268	0.066	-0.329	0.096	-0.642	0.143
D197-1001	5	26	12.30	-69	17	42.4	19.271	0.067	0.983	0.140	...	...
D197-1054	5	26	29.03	-69	18	01.0	19.271	0.116	0.064	0.197	-0.901	0.250
D197-1058	5	26	12.42	-69	16	22.0	19.271	0.080	0.018	0.123	-0.410	0.211
D197-1068	5	26	32.39	-69	18	19.9	19.274	0.095	-0.195	0.130	-0.542	0.171
D197-1019	5	26	12.29	-69	17	34.2	19.278	0.076	0.930	0.175	...	...
D197-1059	5	26	37.41	-69	16	59.1	19.278	0.102	0.120	0.146	...	...
D197-1017	5	26	10.06	-69	19	10.1	19.280	0.060	1.014	0.174	...	...
D197-1039	5	26	37.12	-69	16	59.9	19.281	0.066	0.679	0.235	...	...
D197-1066	5	26	20.60	-69	17	36.8	19.282	0.077	0.086	0.134	...	...
D197-1043	5	26	14.62	-69	16	29.0	19.283	0.090	0.603	0.155	...	...
D197-1102	5	26	28.39	-69	18	43.9	19.286	0.091	-0.557	0.119	...	...
D197-1072	5	26	48.78	-69	16	50.8	19.290	0.073	0.158	0.118	...	...

D197-1082	5	26	43.94	-69	19	50.1	19.290	0.068	0.033	0.142	...	...
D197-1027	5	26	46.19	-69	18	55.9	19.292	0.088	1.120	0.218	...	...
D197-1056	5	26	27.87	-69	16	32.5	19.292	0.086	0.503	0.144	...	...
D197-1065	5	26	07.67	-69	16	38.1	19.293	0.100	0.338	0.245	...	...
D197-1042	5	26	20.90	-69	17	45.7	19.296	0.173	0.909	0.256	...	...
D197-1053	5	26	13.68	-69	18	48.2	19.299	0.070	0.794	0.177	...	...
D197-1052	5	26	12.69	-69	17	40.8	19.302	0.071	0.894	0.150	...	...
D197-1080	5	26	29.62	-69	19	33.0	19.303	0.069	0.356	0.117	...	...
D197-1035	5	26	30.91	-69	18	12.4	19.304	0.083	1.300	0.235	...	...
D197-1061	5	26	08.09	-69	17	08.6	19.306	0.125	0.671	0.196	...	...
D197-1074	5	26	10.08	-69	16	30.0	19.312	0.063	0.652	0.321	...	...
D197-1075	5	26	40.11	-69	16	28.2	19.313	0.072	0.625	0.124	...	...
D197-1055	5	26	37.85	-69	18	10.5	19.315	0.112	1.036	0.216	...	...
D197-1110	5	26	45.00	-69	20	03.2	19.315	0.162	0.001	0.205	...	...
D197-1092	5	26	27.70	-69	19	18.4	19.318	0.062	0.341	0.113	...	...
D197-1130	5	26	40.83	-69	16	22.2	19.319	0.114	-0.316	0.141	-0.262	0.178
D197-1111	5	26	29.82	-69	18	26.8	19.324	0.112	0.189	0.158	...	...
D197-1115	5	26	18.64	-69	19	30.0	19.326	0.191	0.123	0.230	...	...
D197-1119	5	26	47.44	-69	16	36.8	19.329	0.068	0.056	0.104	...	...
D197-1100	5	26	39.34	-69	17	56.5	19.330	0.107	0.470	0.150	...	...
D197-1101	5	26	17.38	-69	18	11.0	19.336	0.074	0.597	0.133	...	...
D197-1106	5	26	20.65	-69	18	41.9	19.338	0.090	0.611	0.158	...	...
D197-1140	5	26	42.69	-69	16	48.2	19.342	0.105	-0.013	0.144	...	...
D197-1093	5	26	28.87	-69	16	32.0	19.343	0.101	0.905	0.212	...	...
D197-1143	5	26	31.36	-69	19	24.1	19.345	0.074	-0.082	0.111	...	...
D197-1117	5	26	46.85	-69	18	40.0	19.348	0.097	0.578	0.177	...	...
D197-1149	5	26	31.53	-69	18	56.7	19.351	0.082	-0.018	0.122	-0.209	0.277
D197-1181	5	26	28.73	-69	17	43.9	19.365	0.117	-0.330	0.197	...	...
D197-1185	5	26	32.75	-69	18	28.3	19.365	0.085	-0.379	0.109	-0.373	0.159
D197-1144	5	26	12.52	-69	20	00.9	19.366	0.086	0.399	0.154	...	...
D197-1125	5	26	18.48	-69	17	15.8	19.367	0.074	0.869	0.178	...	...
D197-1176	5	26	31.76	-69	18	46.3	19.375	0.065	0.033	0.109	...	...
D197-1199	5	26	17.06	-69	18	27.6	19.377	0.080	-0.295	0.163	...	...
D197-1194	5	26	35.19	-69	17	56.2	19.384	0.078	-0.079	0.111	-0.700	0.198
D197-1146	5	26	44.53	-69	19	25.1	19.385	0.080	0.809	0.195	...	...
D197-1157	5	26	44.74	-69	17	22.6	19.391	0.089	0.798	0.168	...	...
D197-1165	5	26	29.98	-69	17	34.9	19.393	0.074	0.644	0.175	...	...
D197-1183	5	26	40.78	-69	19	13.7	19.393	0.086	0.330	0.143	...	...
D197-1160	5	26	41.92	-69	19	24.8	19.394	0.104	0.760	0.214	...	...
D197-1198	5	26	38.74	-69	18	06.6	19.403	0.081	0.345	0.138	...	...
D197-1188	5	26	15.38	-69	19	23.1	19.404	0.075	0.536	0.152	...	...
D197-1208	5	26	13.01	-69	18	58.9	19.406	0.074	0.205	0.116	...	...
D197-1213	5	26	24.62	-69	17	05.3	19.407	0.156	0.149	0.193	...	...
D197-1209	5	26	22.54	-69	18	45.6	19.412	0.066	0.336	0.115	...	...
D197-1197	5	26	17.79	-69	16	32.5	19.421	0.087	0.773	0.181	...	...
D197-1256	5	26	24.64	-69	17	24.2	19.427	0.087	-0.181	0.127	...	...
D197-1241	5	26	44.06	-69	18	16.0	19.430	0.091	0.140	0.123	...	...
D197-1230	5	26	48.37	-69	16	49.8	19.435	0.090	0.483	0.158	...	...
D197-1260	5	26	26.30	-69	17	17.6	19.440	0.094	0.046	0.139	...	...
D197-1263	5	26	46.69	-69	19	30.0	19.440	0.099	-0.045	0.145	...	...
D197-1234	5	26	08.80	-69	17	06.4	19.442	0.088	0.547	0.157	...	...
D197-1266	5	26	09.29	-69	20	02.7	19.444	0.075	0.000	0.131	...	...
D197-1267	5	26	18.43	-69	18	28.2	19.446	0.087	0.036	0.147	...	...
D197-1232	5	26	28.46	-69	19	48.1	19.448	0.095	0.710	0.223	...	...
D197-1269	5	26	18.88	-69	16	51.5	19.449	0.090	0.057	0.135	-0.809	0.211
D197-1244	5	26	47.80	-69	17	15.7	19.451	0.088	0.599	0.160	...	...
D197-1240	5	26	33.50	-69	16	37.7	19.452	0.093	0.658	0.178	...	...
D197-1274	5	26	42.83	-69	19	22.1	19.454	0.163	0.103	0.221	...	...
D197-1279	5	26	30.86	-69	18	40.8	19.455	0.149	-0.216	0.183	-0.410	0.238
D197-1257	5	26	12.95	-69	17	56.7	19.458	0.148	0.483	0.221	...	...
D197-1287	5	26	32.33	-69	19	55.4	19.458	0.084	-0.339	0.120	...	...
D197-1265	5	26	49.53	-69	16	51.8	19.460	0.119	0.399	0.204	...	...
D197-1239	5	26	20.52	-69	17	42.8	19.466	0.134	1.061	0.366	...	...
D197-1309	5	26	09.42	-69	17	05.6	19.472	0.196	-0.439	0.237	-0.428	0.156
D197-1294	5	26	35.55	-69	18	32.6	19.475	0.080	-0.069	0.113	...	...
D197-1270	5	26	07.87	-69	17	39.2	19.479	0.081	0.768	0.223	...	...

D197-1284	5	26	46.53	-69	19	14.6	19.491	0.082	0.523	0.149	...	...
D197-1308	5	26	37.83	-69	19	32.2	19.491	0.098	-0.009	0.158	...	...
D197-1323	5	26	34.94	-69	16	34.8	19.493	0.090	-0.190	0.125	...	...
D197-1271	5	26	25.14	-69	20	00.8	19.498	0.120	1.190	0.296	...	...
D197-1282	5	26	41.68	-69	18	09.1	19.500	0.109	0.813	0.201	...	...
D197-1312	5	26	19.16	-69	16	37.3	19.500	0.073	0.133	0.119	...	...
D197-1301	5	26	47.71	-69	19	20.3	19.504	0.105	0.461	0.182	...	...
D197-1331	5	26	26.77	-69	16	22.6	19.505	0.108	-0.180	0.142	...	...
D197-1332	5	26	12.82	-69	16	54.7	19.512	0.080	-0.025	0.131	...	...
D197-1324	5	26	30.09	-69	18	40.6	19.513	0.079	0.264	0.145	...	...
D197-1298	5	26	31.93	-69	18	08.5	19.514	0.198	0.794	0.279	...	...
D197-1346	5	26	44.62	-69	19	17.3	19.520	0.091	0.010	0.148	...	...
D197-1343	5	26	38.47	-69	17	42.6	19.525	0.083	0.120	0.130	...	...
D197-1341	5	26	42.42	-69	19	50.2	19.528	0.076	0.212	0.150	...	...
D197-1335	5	26	13.58	-69	17	28.5	19.536	0.114	0.504	0.196	...	...
D197-1337	5	26	16.55	-69	17	46.7	19.536	0.090	0.459	0.169	...	...
D197-1350	5	26	10.03	-69	18	31.6	19.540	0.111	0.421	0.185	...	...
D197-1365	5	26	19.45	-69	19	53.3	19.548	0.097	0.167	0.157	-0.638	0.278
D197-1338	5	26	24.41	-69	18	22.5	19.561	0.098	1.033	0.288	...	...
D197-1366	5	26	17.36	-69	17	01.6	19.562	0.098	0.497	0.157	...	...
D197-1354	5	26	27.87	-69	17	24.1	19.563	0.107	0.872	0.236	...	...
D197-1411	5	26	33.31	-69	18	27.2	19.567	0.101	-0.369	0.130	-0.054	0.236
D197-1389	5	26	18.14	-69	17	45.5	19.568	0.084	0.145	0.133	...	...
D197-1386	5	26	27.78	-69	16	28.6	19.571	0.120	0.289	0.179	...	...
D197-1394	5	26	47.87	-69	19	48.3	19.571	0.108	0.025	0.169	...	...
D197-1392	5	26	17.35	-69	17	24.5	19.576	0.092	0.289	0.153	...	...
D197-1404	5	26	38.78	-69	17	58.2	19.576	0.117	-0.017	0.152	...	...
D197-1412	5	26	15.07	-69	16	30.2	19.591	0.109	0.161	0.163	...	...
D197-1420	5	26	27.04	-69	17	06.4	19.597	0.109	-0.045	0.153	...	...
D197-1424	5	26	25.47	-69	18	58.5	19.597	0.095	-0.087	0.139	-0.548	0.231
D197-1400	5	26	29.54	-69	19	39.5	19.603	0.151	0.649	0.321	...	...
D197-1393	5	26	47.21	-69	19	26.0	19.608	0.100	0.962	0.240	...	...
D197-1402	5	26	43.70	-69	18	09.7	19.615	0.086	0.914	0.202	...	...
D197-1439	5	26	12.52	-69	19	36.1	19.619	0.105	0.043	0.146	...	...
D197-1449	5	26	26.70	-69	18	17.9	19.622	0.115	-0.142	0.155	...	...
D197-1429	5	26	27.73	-69	19	04.1	19.625	0.140	0.408	0.233	...	...
D197-1421	5	26	39.21	-69	16	27.3	19.628	0.093	0.679	0.184	...	...
D197-1442	5	26	16.70	-69	19	08.0	19.629	0.166	0.216	0.274	...	...
D197-1464	5	26	40.05	-69	17	55.2	19.635	0.117	-0.290	0.157	...	...
D197-1448	5	26	12.66	-69	16	41.1	19.640	0.111	0.324	0.196	...	...
D197-1461	5	26	16.18	-69	19	02.7	19.640	0.088	-0.081	0.140	...	...
D197-1433	5	26	48.16	-69	17	13.5	19.644	0.115	0.815	0.234	...	...
D197-1462	5	26	19.33	-69	18	17.8	19.645	0.100	0.054	0.155	...	...
D197-1441	5	26	34.73	-69	19	51.4	19.648	0.116	0.677	0.204	...	...
D197-1457	5	26	41.90	-69	19	22.3	19.655	0.116	0.417	0.230	...	...
D197-1477	5	26	11.88	-69	18	48.4	19.660	0.106	-0.113	0.154	...	...
D197-1488	5	26	48.89	-69	18	57.2	19.660	0.137	-0.596	0.197	...	...
D197-1486	5	26	39.94	-69	19	32.5	19.680	0.094	-0.114	0.134	...	...
D197-1496	5	26	24.66	-69	18	47.1	19.690	0.108	-0.203	0.165	-0.285	0.280
D197-1487	5	26	48.78	-69	19	36.5	19.693	0.093	0.161	0.155	...	...
D197-1472	5	26	22.73	-69	18	21.8	19.695	0.111	0.870	0.216	...	...
D197-1479	5	26	49.22	-69	16	50.0	19.695	0.138	0.672	0.252	...	...
D197-1506	5	26	13.64	-69	16	57.3	19.700	0.146	-0.343	0.181	...	...
D197-1494	5	26	30.89	-69	18	44.1	19.718	0.188	0.496	0.265	...	...
D197-1500	5	26	18.01	-69	16	35.2	19.718	0.130	0.220	0.203	...	...
D197-1489	5	26	07.32	-69	18	58.3	19.721	0.105	0.714	0.323	...	...
D197-1519	5	26	10.06	-69	17	20.2	19.727	0.116	-0.013	0.182	...	...
D197-1525	5	26	26.64	-69	17	33.3	19.727	0.108	-0.162	0.154	...	...
D197-1527	5	26	11.36	-69	17	01.8	19.737	0.096	-0.190	0.152	...	...
D197-1529	5	26	10.39	-69	18	53.1	19.739	0.143	-0.194	0.183	...	...
D197-1511	5	26	23.15	-69	18	38.4	19.749	0.104	0.553	0.187	...	...
D197-1533	5	26	08.85	-69	19	24.4	19.749	0.101	-0.168	0.159	...	...
D197-1520	5	26	29.69	-69	18	16.6	19.750	0.219	0.477	0.297	-1.126	0.386
D197-1530	5	26	25.01	-69	17	33.5	19.756	0.101	0.190	0.181	...	...
D197-1541	5	26	12.47	-69	16	30.3	19.757	0.104	-0.064	0.166	...	...
D197-1548	5	26	13.82	-69	18	24.3	19.765	0.094	-0.131	0.141	...	...

D197-1539	5	26	18.04	-69	19	10.7	19.789	0.111	0.667	0.246	...	...
D197-1561	5	26	10.40	-69	18	06.1	19.791	0.126	-0.267	0.156	...	...
D197-1570	5	26	09.17	-69	18	53.8	19.799	0.146	-0.598	0.183	...	...
D197-1559	5	26	08.51	-69	17	12.5	19.803	0.133	0.089	0.207	...	...
D197-1578	5	26	22.88	-69	19	26.9	19.828	0.111	-0.203	0.156	...	...
D197-1556	5	26	26.31	-69	20	04.3	19.832	0.164	0.885	0.335	...	...
D197-1584	5	26	08.28	-69	18	23.1	19.849	0.117	-0.015	0.189	...	...
D197-1583	5	26	24.80	-69	17	13.8	19.863	0.148	0.330	0.234	...	...
D197-1586	5	26	22.39	-69	18	48.3	19.863	0.096	0.276	0.161	...	...
D197-1595	5	26	07.87	-69	18	45.2	19.886	0.117	0.193	0.176	...	...
D197-1596	5	26	31.58	-69	17	59.6	19.899	0.221	0.404	0.291	...	...
D197-1604	5	26	32.95	-69	19	13.3	19.904	0.135	-0.372	0.173	...	...
D197-1605	5	26	10.89	-69	19	22.0	19.918	0.120	-0.106	0.204	...	...
D197-1607	5	26	48.54	-69	19	25.1	19.923	0.122	-0.117	0.176	...	...
D197-1620	5	26	30.33	-69	18	22.2	19.955	0.174	-0.208	0.233	...	...
D197-1621	5	26	08.17	-69	18	26.7	19.966	0.142	-0.006	0.205	...	...
D197-1618	5	26	11.52	-69	19	52.8	19.970	0.186	0.185	0.287	...	...
D197-1628	5	26	29.88	-69	18	46.1	19.970	0.138	-0.696	0.187	...	...
D197-1627	5	26	28.54	-69	19	45.8	19.995	0.138	-0.006	0.202	...	...
D197-1635	5	26	21.59	-69	18	04.2	20.019	0.116	0.048	0.191	...	...
D197-1640	5	26	21.26	-69	19	04.4	20.024	0.156	0.020	0.231	...	...
D197-1633	5	26	21.43	-69	18	08.4	20.026	0.094	0.244	0.189	...	...
D197-1629	5	26	09.18	-69	18	23.5	20.031	0.137	0.624	0.342	...	...
D197-1648	5	26	36.08	-69	18	37.0	20.039	0.151	-0.394	0.232	...	...
D197-1659	5	26	25.31	-69	18	25.3	20.086	0.149	-0.233	0.197	...	...
D197-1658	5	26	21.30	-69	19	43.7	20.094	0.226	0.029	0.289	...	...
D197-1660	5	26	08.65	-69	19	10.3	20.098	0.154	-0.022	0.218	...	...
D197-1695	5	26	18.26	-69	18	17.6	20.535	0.374	-0.990	0.438	...	...
D197-1694	5	26	27.56	-69	18	30.7	20.566	0.245	-0.162	0.329	...	...

Table 41

D243-1a	5	35	41.27	-66	02	36.9	12.822	...	-0.129	...	-0.985	...
D243-2	5	35	32.26	-66	02	38.0	13.067	0.003	-0.217	0.009	-1.041	0.012
D243-3	5	35	35.21	-66	01	45.9	13.370	0.002	-0.072	0.006	-0.940	0.008
D243-1b	5	35	41.27	-66	02	36.9	13.622	...	-0.129	...	-0.985	...
D243-4	5	35	44.57	-66	03	21.0	13.976	0.004	-0.172	0.007	-0.961	0.009
D243-5	5	35	36.27	-66	01	14.8	13.979	0.122	-0.296	0.143	-0.857	0.088
D243-6	5	35	36.68	-66	02	02.9	14.008	0.003	-0.227	0.010	-1.012	0.013
D243-7	5	35	32.08	-66	01	29.2	14.149	0.003	-0.180	0.012	-1.005	0.016
D243-9	5	35	27.73	-66	02	38.3	14.356	0.005	-0.203	0.009	-1.014	0.011
D243-10	5	35	30.55	-66	02	48.0	14.517	0.004	-0.111	0.007	-0.998	0.010
D243-12	5	35	54.18	-66	03	30.2	14.551	0.003	-0.124	0.005	-0.997	0.008
D243-14	5	35	46.81	-66	02	30.6	14.951	0.004	-0.198	0.009	-0.957	0.012
D243-15	5	35	40.73	-66	01	14.8	14.977	0.004	-0.172	0.009	-0.964	0.011
D243-16	5	35	31.24	-66	02	36.5	15.084	0.004	-0.211	0.007	-1.007	0.010
D243-17	5	35	36.33	-66	01	15.5	15.339	0.058	0.514	0.151	-1.833	0.299
D243-18	5	35	34.91	-66	02	07.9	15.366	0.006	-0.222	0.013	-1.004	0.017
D243-21	5	35	41.42	-66	01	31.7	15.610	0.006	-0.169	0.011	-0.950	0.014
D243-22	5	35	30.29	-66	01	29.9	15.628	0.005	-0.139	0.010	-0.913	0.016
D243-23	5	35	30.41	-66	00	47.2	15.695	0.006	-0.088	0.014	-0.876	0.019
D243-24	5	35	35.41	-66	01	26.9	15.699	0.006	-0.124	0.013	-0.850	0.017
D243-25	5	35	35.26	-65	59	57.7	15.703	0.008	-0.148	0.015	-0.926	0.020
D243-26	5	35	21.89	-66	00	49.7	15.744	0.007	-0.065	0.013	-0.863	0.019
D243-28	5	35	39.96	-66	02	20.9	15.801	0.009	-0.204	0.015	-0.849	0.020
D243-29	5	35	23.43	-66	01	56.0	15.856	0.005	0.063	0.012	-0.775	0.019
D243-31	5	35	36.52	-66	01	15.3	15.999	0.073	-0.323	0.146	-0.558	0.186
D243-32	5	35	32.92	-66	01	22.3	16.049	0.006	-0.140	0.014	-0.844	0.018
D243-30	5	35	40.74	-66	02	06.8	16.059	0.197	1.977	0.259	-1.607	0.300
D243-33	5	35	50.75	-66	01	32.3	16.138	0.010	-0.183	0.017	-0.799	0.028
D243-34	5	35	36.89	-66	02	09.6	16.217	0.010	-0.145	0.019	-0.838	0.027
D243-35	5	35	28.04	-66	03	15.2	16.287	0.006	-0.178	0.016	-0.809	0.027
D243-36	5	35	56.41	-66	02	18.9	16.299	0.007	-0.189	0.011	-0.831	0.021
D243-37	5	35	22.10	-66	01	50.6	16.341	0.007	-0.165	0.015	-0.835	0.023
D243-38	5	35	41.44	-66	01	43.3	16.360	0.008	-0.185	0.015	-0.865	0.025
D243-39	5	35	34.18	-66	03	19.7	16.365	0.010	-0.189	0.020	-0.809	0.029
D243-40	5	35	45.26	-66	01	51.9	16.385	0.009	-0.140	0.016	-0.910	0.021
D243-41	5	35	41.35	-66	02	03.5	16.423	0.011	-0.168	0.027	-0.898	0.057
D243-42	5	35	44.70	-66	01	22.5	16.436	0.009	0.062	0.025	-0.869	0.034
D243-45	5	35	42.12	-66	01	25.0	16.480	0.009	-0.119	0.017	-0.875	0.026
D243-43	5	35	40.96	-66	01	50.9	16.484	0.015	0.963	0.036	0.218	0.092
D243-47	5	35	50.01	-66	02	51.2	16.514	0.010	-0.117	0.016	-0.833	0.021
D243-44	5	35	58.02	-66	00	32.8	16.518	0.008	1.256	0.030	...	...
D243-48	5	35	44.43	-66	02	00.7	16.518	0.009	-0.148	0.015	-0.807	0.025
D243-49	5	35	40.80	-66	02	06.2	16.546	0.075	-1.270	0.098	-0.853	0.082
D243-46	5	35	22.58	-66	02	32.2	16.575	0.012	1.411	0.037	...	...
D243-51	5	35	48.93	-66	01	32.5	16.644	0.011	-0.110	0.019	-0.645	0.028
D243-50	5	35	48.60	-66	01	37.4	16.646	0.025	-0.049	0.036	-0.605	0.062
D243-52	5	35	34.25	-66	02	20.1	16.649	0.010	-0.145	0.020	-0.855	0.029
D243-53	5	35	34.02	-66	02	13.8	16.662	0.011	-0.128	0.018	-0.796	0.026
D243-55	5	35	37.04	-66	01	55.1	16.670	0.013	-0.155	0.031	-0.916	0.037
D243-54	5	35	28.21	-66	00	54.9	16.671	0.011	-0.097	0.018	-0.798	0.027
D243-56	5	35	31.09	-66	03	38.3	16.682	0.011	-0.172	0.017	-0.810	0.020
D243-58	5	35	27.93	-66	00	51.2	16.823	0.010	-0.048	0.017	-0.715	0.028
D243-57	5	35	57.34	-66	00	10.1	16.878	0.014	1.804	0.052	...	...
D243-59	5	35	35.55	-66	02	16.5	16.897	0.008	-0.150	0.019	-0.678	0.037
D243-60	5	35	43.55	-66	00	51.7	16.940	0.012	-0.183	0.021	-0.800	0.035
D243-61	5	35	29.06	-66	02	05.6	16.998	0.014	-0.142	0.020	-0.742	0.024
D243-62	5	35	34.65	-66	02	23.0	17.013	0.021	-0.075	0.035	-0.836	0.061
D243-63	5	35	50.19	-66	01	23.1	17.018	0.012	-0.151	0.021	-0.889	0.028
D243-65	5	35	34.65	-66	01	12.7	17.048	0.017	-0.036	0.034	-0.749	0.044
D243-64	5	35	31.64	-66	00	57.2	17.062	0.016	0.362	0.028	-0.531	0.052
D243-67	5	35	23.44	-66	03	24.5	17.085	0.013	-0.170	0.022	-0.756	0.028
D243-68	5	35	56.92	-66	00	04.5	17.093	0.013	-0.148	0.025	-0.799	0.037
D243-66	5	35	22.15	-66	03	13.8	17.128	0.012	0.929	0.035	...	...
D243-70	5	35	37.89	-66	01	28.7	17.128	0.012	-0.124	0.025	-0.773	0.044

D243-69	5	35	55.13	-66	02	35.3	17.151	0.009	0.978	0.033	...	...
D243-71	5	35	56.30	-66	02	45.6	17.203	0.012	1.266	0.064	...	...
D243-72	5	35	38.89	-66	02	02.2	17.212	0.014	-0.162	0.026	-0.770	0.048
D243-77	5	35	52.16	-66	03	05.5	17.252	0.011	-0.175	0.022	-0.894	0.032
D243-75	5	35	32.92	-66	00	25.0	17.260	0.012	0.118	0.027	-0.732	0.043
D243-78	5	35	39.87	-66	02	22.2	17.275	0.020	-0.118	0.034	-0.885	0.065
D243-79	5	35	34.99	-66	02	22.7	17.286	0.039	-0.144	0.049	-0.751	0.044
D243-76	5	35	53.83	-66	00	32.9	17.293	0.013	0.825	0.043	...	...
D243-74	5	35	40.12	-66	01	56.4	17.294	0.017	1.065	0.062	...	...
D243-73	5	35	58.54	-66	00	23.1	17.304	0.011	1.452	0.054	...	...
D243-80	5	35	31.00	-66	00	24.7	17.329	0.009	0.731	0.055	0.107	0.105
D243-81	5	35	55.15	-66	01	42.1	17.361	0.019	0.800	0.038	...	...
D243-82	5	35	31.01	-66	00	41.8	17.362	0.022	0.357	0.036	-0.518	0.069
D243-84	5	35	29.15	-66	02	28.3	17.374	0.016	-0.097	0.026	-0.683	0.036
D243-86	5	35	34.18	-66	03	14.3	17.410	0.019	-0.160	0.031	-0.560	0.046
D243-85	5	35	33.92	-66	00	53.0	17.411	0.016	0.644	0.050	0.307	0.122
D243-83	5	35	40.38	-66	01	17.1	17.418	0.016	1.483	0.087	...	...
D243-88	5	35	50.90	-66	01	28.8	17.465	0.020	-0.145	0.037	-0.680	0.054
D243-87	5	35	27.46	-66	01	38.1	17.489	0.016	1.116	0.056	...	...
D243-92	5	35	37.11	-66	02	10.9	17.515	0.023	-0.164	0.049	-0.556	0.068
D243-93	5	35	40.54	-66	02	06.3	17.526	0.150	0.035	0.274	-1.523	0.346
D243-91	5	35	39.41	-66	00	35.3	17.532	0.018	0.667	0.041	...	...
D243-89	5	35	35.07	-66	03	38.8	17.540	0.019	1.368	0.083	...	...
D243-90	5	35	52.70	-66	00	47.7	17.545	0.019	1.063	0.041	...	...
D243-95	5	35	54.50	-66	01	49.5	17.573	0.015	-0.077	0.037	-0.691	0.052
D243-94	5	35	28.18	-66	03	24.7	17.589	0.017	0.873	0.052	...	...
D243-96	5	35	25.38	-66	03	05.1	17.604	0.018	-0.131	0.027	-0.704	0.040
D243-99	5	35	42.76	-66	01	53.5	17.640	0.026	-0.181	0.039	-0.787	0.068
D243-98	5	35	24.54	-66	00	20.3	17.647	0.021	0.001	0.038	-0.829	0.071
D243-97	5	35	29.82	-66	01	43.5	17.668	0.016	1.153	0.063	...	...
D243-101	5	35	31.73	-66	01	46.3	17.691	0.030	0.030	0.047	-0.529	0.077
D243-102	5	35	37.88	-66	01	59.0	17.707	0.028	-0.092	0.047	-0.757	0.061
D243-100	5	35	48.01	-65	59	55.5	17.712	0.019	1.189	0.060	...	...
D243-104	5	35	34.43	-66	02	22.8	17.721	0.037	-0.186	0.050	-0.583	0.066
D243-103	5	35	45.87	-66	00	24.2	17.722	0.021	-0.092	0.037	-0.495	0.059
D243-106	5	35	48.01	-66	02	17.5	17.740	0.021	-0.112	0.035	-0.787	0.057
D243-107	5	35	43.40	-66	01	52.4	17.740	0.034	-0.152	0.056	-0.362	0.073
D243-108	5	35	41.06	-66	02	08.5	17.751	0.046	-0.268	0.095	-0.999	0.149
D243-109	5	35	35.36	-66	01	14.7	17.763	0.026	-0.118	0.048	-0.688	0.059
D243-105	5	35	26.33	-66	01	58.7	17.771	0.021	0.912	0.050	...	...
D243-111	5	35	37.93	-66	02	17.7	17.820	0.019	-0.071	0.034	-0.594	0.060
D243-112	5	35	40.84	-66	03	33.6	17.822	0.015	-0.101	0.025	-0.697	0.048
D243-114	5	35	48.40	-66	01	37.2	17.845	0.021	0.043	0.108	-0.914	0.146
D243-116	5	35	37.53	-66	02	47.3	17.845	0.028	-0.107	0.052	-0.793	0.061
D243-110	5	35	43.72	-66	03	12.2	17.855	0.018	1.126	0.053	...	...
D243-117	5	35	33.70	-66	02	54.2	17.862	0.020	-0.113	0.032	-0.660	0.048
D243-118	5	35	39.19	-66	01	53.5	17.867	0.022	-0.168	0.038	-0.697	0.071
D243-119	5	35	56.26	-66	03	05.8	17.873	0.024	-0.097	0.043	-0.628	0.072
D243-120	5	35	31.56	-66	03	05.2	17.879	0.024	-0.127	0.048	-0.784	0.064
D243-121	5	35	38.98	-66	01	19.3	17.879	0.020	-0.160	0.041	-0.560	0.066
D243-115	5	35	56.43	-66	02	36.7	17.892	0.016	1.021	0.070	...	...
D243-122	5	35	49.40	-66	01	34.8	17.896	0.034	0.197	0.055	-0.263	0.090
D243-123	5	35	40.90	-66	02	23.0	17.899	0.028	-0.151	0.043	-0.686	0.059
D243-113	5	35	32.44	-66	01	03.6	17.904	0.016	1.454	0.094	...	...
D243-124	5	35	42.05	-66	02	11.3	17.906	0.022	-0.208	0.055	-1.002	0.083
D243-126	5	35	30.73	-66	02	22.8	17.928	0.020	-0.057	0.038	-0.848	0.068
D243-127	5	35	32.80	-66	03	17.5	17.937	0.038	0.009	0.053	-0.525	0.081
D243-128	5	35	52.24	-66	02	08.3	17.944	0.035	0.091	0.059	-0.711	0.079
D243-129	5	35	32.87	-66	02	14.0	17.946	0.026	-0.011	0.051	-0.610	0.086
D243-132	5	35	51.98	-66	01	56.3	17.968	0.022	-0.173	0.042	-0.531	0.063
D243-125	5	35	55.55	-66	01	44.1	17.978	0.026	1.439	0.139	...	...
D243-133	5	35	28.82	-66	02	26.2	17.981	0.039	-0.034	0.059	-0.545	0.087
D243-131	5	35	27.07	-66	03	27.5	17.996	0.024	0.828	0.077	...	...
D243-130	5	35	25.62	-66	01	33.9	18.004	0.031	1.311	0.082	...	...
D243-134	5	35	50.73	-66	03	19.3	18.004	0.021	0.018	0.046	-0.312	0.128
D243-135	5	35	51.80	-66	00	34.1	18.022	0.029	0.125	0.048	-0.124	0.112

D243-136	5	35	30.34	-66	01	22.3	18.025	0.032	-0.120	0.049	-0.542	0.072
D243-137	5	35	36.25	-66	02	33.5	18.031	0.028	-0.106	0.047	-0.603	0.067
D243-139	5	35	51.56	-66	02	09.4	18.041	0.021	-0.001	0.043	-0.629	0.072
D243-140	5	35	26.91	-66	03	07.9	18.044	0.023	-0.105	0.037	-0.620	0.050
D243-141	5	35	40.22	-66	02	12.5	18.063	0.036	-0.192	0.066	-1.345	0.143
D243-138	5	35	41.27	-66	02	45.1	18.081	0.025	0.925	0.119	...	...
D243-142	5	35	21.90	-66	00	52.2	18.088	0.029	0.043	0.050	-0.615	0.085
D243-145	5	35	27.42	-66	03	28.2	18.145	0.028	-0.126	0.052	-0.705	0.066
D243-144	5	35	48.80	-66	01	23.5	18.146	0.026	-0.051	0.052	-0.554	0.103
D243-147	5	35	34.86	-66	02	17.3	18.194	0.032	-0.056	0.059	-0.436	0.084
D243-148	5	35	49.87	-66	01	46.7	18.197	0.019	-0.090	0.039	-0.679	0.073
D243-149	5	35	41.60	-66	02	04.0	18.198	0.040	-0.420	0.073	-1.314	0.190
D243-150	5	35	43.21	-66	02	23.4	18.223	0.042	0.048	0.070	-0.475	0.114
D243-146	5	35	23.78	-66	01	27.6	18.241	0.033	1.216	0.102	...	...
D243-155	5	35	38.42	-66	01	44.5	18.252	0.030	-0.144	0.055	-0.745	0.069
D243-156	5	35	42.56	-66	01	59.4	18.254	0.119	-0.193	0.224	-1.516	0.270
D243-151	5	35	40.41	-66	00	04.8	18.262	0.026	0.893	0.086	...	...
D243-158	5	35	51.30	-66	00	43.2	18.264	0.036	-0.210	0.062	-0.636	0.081
D243-152	5	35	51.83	-66	02	51.9	18.283	0.023	1.144	0.111	...	...
D243-153	5	35	23.90	-66	02	11.3	18.291	0.035	0.842	0.087	...	...
D243-154	5	35	57.90	-66	02	33.8	18.293	0.030	0.842	0.082	...	...
D243-161	5	35	33.58	-66	03	02.4	18.293	0.032	-0.141	0.049	-0.752	0.085
D243-160	5	35	58.74	-66	01	01.4	18.295	0.035	-0.004	0.064	-0.329	0.140
D243-157	5	35	34.78	-65	59	58.7	18.309	0.028	0.978	0.145	...	...
D243-159	5	35	29.70	-66	01	03.3	18.314	0.022	0.759	0.085	...	...
D243-162	5	35	32.91	-66	00	50.7	18.317	0.023	0.102	0.048	...	...
D243-163	5	35	44.06	-66	02	52.0	18.344	0.035	0.001	0.064	-0.530	0.098
D243-164	5	35	42.31	-66	02	36.5	18.356	0.059	-0.044	0.090	-0.510	0.144
D243-169	5	35	39.12	-66	01	55.3	18.381	0.036	-0.118	0.062	-0.587	0.112
D243-165	5	35	40.66	-66	01	05.3	18.408	0.037	1.041	0.110	...	...
D243-166	5	35	37.13	-66	03	25.5	18.413	0.032	0.960	0.092	...	...
D243-168	5	35	46.93	-66	00	56.5	18.415	0.048	0.769	0.093	...	...
D243-171	5	35	41.57	-66	01	17.6	18.424	0.038	-0.075	0.075	-0.686	0.140
D243-172	5	35	38.57	-66	01	18.3	18.426	0.049	-0.150	0.070	-0.386	0.114
D243-170	5	35	58.70	-66	02	15.6	18.430	0.043	0.602	0.098	...	...
D243-173	5	35	38.04	-66	01	21.4	18.437	0.041	-0.187	0.069	-0.549	0.123
D243-176	5	35	43.22	-66	01	56.2	18.473	0.086	-0.715	0.180	-1.089	0.251
D243-177	5	35	46.62	-66	00	32.2	18.504	0.035	-0.084	0.074	...	...
D243-180	5	35	29.90	-66	02	35.9	18.511	0.054	-0.121	0.082	-0.880	0.115
D243-178	5	35	40.86	-66	01	50.0	18.514	0.095	-0.005	0.117	...	...
D243-174	5	35	24.38	-66	01	26.2	18.519	0.040	0.717	0.088	...	...
D243-175	5	35	34.46	-66	02	18.5	18.539	0.041	1.130	0.162	...	...
D243-179	5	35	35.61	-66	00	06.2	18.551	0.029	0.817	0.108	...	...
D243-182	5	35	42.14	-66	01	57.8	18.552	0.118	-0.393	0.223	-1.736	0.290
D243-183	5	35	44.90	-66	01	27.6	18.572	0.042	-0.030	0.069	-0.329	0.165
D243-184	5	35	43.36	-66	01	32.6	18.585	0.040	0.148	0.071	-0.505	0.134
D243-186	5	35	49.72	-66	01	56.0	18.591	0.045	-0.117	0.077	-0.505	0.137
D243-188	5	35	34.44	-66	02	26.2	18.608	0.033	-0.085	0.076	-0.556	0.127
D243-187	5	35	24.33	-66	03	39.4	18.611	0.053	0.056	0.077	...	...
D243-190	5	35	37.71	-66	02	43.1	18.611	0.032	-0.230	0.053	-0.641	0.103
D243-185	5	35	38.75	-66	03	32.2	18.636	0.035	1.007	0.130	...	...
D243-189	5	35	46.65	-66	02	34.9	18.651	0.045	0.713	0.117	...	...
D243-194	5	35	50.08	-66	01	38.1	18.656	0.049	-0.072	0.084	-0.464	0.170
D243-195	5	35	23.35	-66	02	22.5	18.667	0.036	0.076	0.075	...	...
D243-196	5	35	50.02	-66	00	07.5	18.687	0.047	0.301	0.084	...	...
D243-198	5	35	39.24	-66	02	07.9	18.693	0.055	0.081	0.093	...	...
D243-197	5	35	50.50	-66	01	33.6	18.696	0.039	0.163	0.092	...	...
D243-200	5	35	57.12	-66	00	22.4	18.708	0.045	-0.020	0.079	-0.395	0.160
D243-199	5	35	25.27	-66	02	27.2	18.709	0.039	0.096	0.070	...	...
D243-201	5	35	29.82	-66	01	40.0	18.710	0.058	0.025	0.076	-0.599	0.140
D243-203	5	35	37.30	-66	02	31.0	18.715	0.040	-0.137	0.086	...	...
D243-204	5	35	48.35	-66	03	11.6	18.742	0.070	0.011	0.118	...	...
D243-205	5	35	32.56	-66	02	49.5	18.743	0.043	-0.156	0.089	-0.320	0.176
D243-202	5	35	36.20	-66	01	08.3	18.744	0.051	0.652	0.119	...	...
D243-207	5	35	56.22	-66	02	32.4	18.758	0.041	0.124	0.089	...	...
D243-206	5	35	25.75	-66	01	38.2	18.760	0.050	0.158	0.094	...	...

D243-209	5	35	35.46	-66	02	28.0	18.774	0.037	-0.049	0.069	-0.387	0.131
D243-210	5	35	36.87	-66	02	35.6	18.776	0.047	-0.090	0.071	-0.456	0.167
D243-212	5	35	24.58	-66	02	12.6	18.791	0.039	-0.029	0.073	...	...
D243-214	5	35	46.69	-66	02	37.4	18.795	0.046	-0.013	0.088	-0.528	0.157
D243-216	5	35	49.00	-66	01	36.5	18.801	0.088	-0.079	0.164	...	...
D243-215	5	35	31.61	-66	00	47.8	18.811	0.052	0.183	0.085	-0.711	0.151
D243-218	5	35	40.60	-66	00	32.5	18.812	0.042	-0.012	0.084	...	...
D243-217	5	35	33.99	-66	03	18.2	18.813	0.058	0.081	0.138	...	...
D243-220	5	35	24.81	-66	03	32.9	18.827	0.057	0.080	0.095	...	...
D243-221	5	35	45.79	-66	01	06.4	18.831	0.039	0.067	0.081	-0.807	0.173
D243-223	5	35	42.56	-66	01	16.9	18.836	0.056	0.034	0.105	...	...
D243-226	5	35	28.44	-66	02	37.0	18.842	0.053	-0.127	0.093	-0.446	0.139
D243-222	5	35	36.06	-66	02	01.9	18.851	0.070	0.509	0.113	...	...
D243-225	5	35	23.29	-66	00	56.1	18.851	0.058	0.130	0.106	...	...
D243-227	5	35	50.23	-66	01	17.6	18.858	0.056	0.050	0.085	...	...
D243-229	5	35	25.22	-66	01	40.0	18.870	0.048	-0.085	0.091	...	...
D243-231	5	35	28.91	-66	03	12.2	18.881	0.042	-0.020	0.081	...	...
D243-232	5	35	38.30	-66	02	12.3	18.884	0.054	-0.003	0.102	...	...
D243-228	5	35	23.08	-66	01	54.5	18.914	0.055	0.940	0.154	...	...
D243-236	5	35	41.81	-66	02	05.5	18.915	0.060	-0.323	0.114	...	...
D243-234	5	35	49.90	-66	01	42.0	18.918	0.053	0.011	0.079	...	...
D243-240	5	35	53.25	-66	01	13.3	18.940	0.043	-0.011	0.077	...	...
D243-239	5	35	49.75	-66	01	29.3	18.945	0.062	0.130	0.122	...	...
D243-243	5	35	23.58	-66	02	03.4	18.953	0.054	0.141	0.109	...	...
D243-245	5	35	42.58	-66	01	03.2	18.977	0.061	-0.118	0.084	...	...
D243-246	5	35	33.40	-66	02	29.0	18.987	0.050	0.060	0.096	...	...
D243-247	5	35	33.74	-66	01	54.2	18.990	0.062	-0.028	0.097	...	...
D243-251	5	35	42.03	-66	01	39.7	19.003	0.080	0.044	0.129	...	...
D243-254	5	35	50.59	-66	01	40.7	19.007	0.055	-0.006	0.088	-0.648	0.166
D243-258	5	35	48.66	-66	01	56.9	19.014	0.043	-0.158	0.083	...	...
D243-256	5	35	25.87	-66	02	18.4	19.015	0.051	0.044	0.090	...	...
D243-250	5	35	55.75	-65	59	59.2	19.022	0.070	0.590	0.153	...	...
D243-255	5	35	27.17	-66	01	36.0	19.038	0.059	0.660	0.112	...	...
D243-262	5	35	37.82	-66	00	35.8	19.046	0.056	0.131	0.119	...	...
D243-265	5	35	32.45	-66	01	43.7	19.060	0.083	0.102	0.115	...	...
D243-266	5	35	45.17	-66	01	55.6	19.067	0.090	0.131	0.155	...	...
D243-263	5	35	26.17	-66	02	01.8	19.080	0.056	0.659	0.230	...	...
D243-269	5	35	26.94	-66	03	20.5	19.083	0.052	0.034	0.131	...	...
D243-270	5	35	26.75	-66	02	33.8	19.085	0.057	0.014	0.110	-0.668	0.265
D243-275	5	35	50.78	-66	03	10.6	19.094	0.057	-0.036	0.095	...	...
D243-273	5	35	25.11	-66	01	35.6	19.097	0.064	0.140	0.140	-1.123	0.182
D243-276	5	35	38.66	-66	02	20.1	19.098	0.049	-0.100	0.092	...	...
D243-272	5	35	46.45	-66	02	04.0	19.101	0.053	0.296	0.156	...	...
D243-277	5	35	29.54	-66	02	33.5	19.113	0.065	0.109	0.111	...	...
D243-281	5	35	30.89	-66	03	00.4	19.129	0.059	-0.059	0.117	...	...
D243-283	5	35	47.47	-66	00	44.6	19.141	0.066	-0.109	0.094	...	...
D243-284	5	35	33.09	-66	01	55.6	19.164	0.085	0.093	0.176	...	...
D243-286	5	35	42.65	-66	02	24.8	19.165	0.053	0.040	0.089	...	...
D243-287	5	35	34.61	-66	02	02.2	19.169	0.051	-0.084	0.108	...	...
D243-289	5	35	38.27	-66	01	49.2	19.173	0.058	-0.129	0.094	...	...
D243-292	5	35	38.51	-66	01	23.0	19.194	0.086	0.117	0.130	...	...
D243-294	5	35	31.72	-66	02	49.1	19.210	0.061	0.197	0.108	...	...
D243-299	5	35	50.12	-66	02	16.5	19.211	0.074	-0.128	0.117	...	...
D243-306	5	35	27.75	-66	03	29.2	19.258	0.065	-0.195	0.119	...	...
D243-307	5	35	34.21	-66	02	57.6	19.275	0.074	0.064	0.128	...	...
D243-311	5	35	33.14	-66	03	21.9	19.293	0.070	-0.111	0.103	...	...
D243-309	5	35	29.16	-66	02	43.5	19.307	0.063	0.518	0.149	...	...
D243-314	5	35	37.45	-66	01	18.6	19.318	0.082	0.188	0.132	...	...
D243-316	5	35	27.31	-66	02	17.9	19.336	0.061	0.320	0.185	...	...
D243-318	5	35	35.01	-66	01	14.3	19.342	0.095	0.047	0.174	...	...
D243-319	5	35	44.29	-66	03	38.9	19.344	0.082	0.028	0.135	...	...
D243-321	5	35	43.38	-66	01	04.6	19.346	0.057	-0.167	0.112	...	...
D243-322	5	35	34.72	-66	01	39.1	19.358	0.076	0.072	0.141	...	...
D243-325	5	35	32.96	-66	01	25.3	19.368	0.080	-0.381	0.127	...	...
D243-324	5	35	35.54	-66	01	22.4	19.373	0.084	-0.097	0.153	...	...
D243-326	5	35	30.03	-66	00	44.9	19.385	0.077	-0.224	0.125	...	...

D243-328	5	35	51.95	-66	01	44.9	19.397	0.079	-0.098	0.131	...	...
D243-330	5	35	52.31	-66	01	49.4	19.401	0.079	-0.144	0.141	...	...
D243-331	5	35	46.20	-66	02	23.0	19.402	0.074	-0.197	0.142	...	...
D243-334	5	35	34.89	-66	01	07.5	19.418	0.093	-0.318	0.136	...	...
D243-344	5	35	36.78	-66	01	55.2	19.434	0.120	-0.425	0.295	...	...
D243-342	5	35	30.88	-66	00	07.6	19.438	0.061	-0.190	0.124	...	...
D243-339	5	35	32.62	-66	01	31.6	19.440	0.071	0.033	0.146	...	...
D243-340	5	35	34.30	-66	03	24.3	19.451	0.105	0.209	0.201	...	...
D243-350	5	35	49.52	-66	03	17.6	19.493	0.058	0.000	0.150	...	...
D243-345	5	35	39.21	-66	01	58.7	19.498	0.093	0.921	0.276	...	...
D243-351	5	35	35.24	-66	02	21.2	19.509	0.178	0.138	0.258	...	...
D243-358	5	35	39.18	-66	01	42.8	19.526	0.085	-0.345	0.135	...	...
D243-357	5	35	38.89	-66	01	52.1	19.547	0.083	0.324	0.214	...	...
D243-359	5	35	31.64	-66	01	27.0	19.551	0.098	0.051	0.162	...	...
D243-364	5	35	38.89	-66	01	57.7	19.587	0.103	0.219	0.184	...	...
D243-367	5	35	31.91	-66	03	15.2	19.602	0.087	-0.098	0.167	...	...
D243-368	5	35	26.71	-66	03	14.3	19.605	0.086	-0.170	0.140	...	...
D243-371	5	35	32.31	-66	03	21.4	19.610	0.069	-0.183	0.144	...	...
D243-369	5	35	53.21	-66	01	44.6	19.611	0.125	-0.039	0.179	...	...
D243-370	5	35	29.30	-66	02	53.3	19.622	0.082	0.112	0.145	...	...
D243-372	5	35	27.12	-66	02	42.9	19.634	0.084	0.341	0.193	...	...
D243-375	5	35	34.18	-66	01	44.9	19.657	0.125	-0.098	0.227	...	...
D243-377	5	35	34.59	-66	01	51.5	19.709	0.119	0.248	0.226	...	...
D243-382	5	35	33.82	-66	03	15.9	19.749	0.083	-0.103	0.182	...	...
D243-391	5	35	30.58	-66	02	55.5	19.880	0.123	0.339	0.260	...	...

Table 4m

D293-1	5	41	39.68	-71	19	56.4	12.856	0.006	-0.159	0.010	-1.023	0.024
D293-2	5	41	53.38	-71	21	42.5	13.375	0.003	0.660	0.005	0.205	0.010
D293-3	5	41	45.19	-71	20	54.1	14.709	0.006	-0.159	0.008	-1.001	0.010
D293-4	5	41	37.83	-71	19	03.2	14.814	0.013	-0.091	0.021	-0.952	0.035
D293-5	5	41	44.60	-71	20	06.8	14.836	0.004	-0.164	0.005	-0.953	0.009
D293-6	5	41	42.51	-71	21	19.2	15.203	0.007	-0.105	0.010	-0.837	0.013
D293-7	5	41	41.50	-71	19	48.3	15.234	0.007	-0.189	0.010	-0.984	0.017
D293-8	5	41	42.12	-71	21	58.1	15.238	0.007	-0.161	0.009	-0.926	0.013
D293-9	5	41	48.38	-71	20	46.1	15.304	0.007	-0.155	0.011	-0.886	0.016
D293-10	5	41	41.80	-71	19	40.6	15.455	0.007	-0.169	0.010	-0.979	0.015
D293-11	5	41	41.40	-71	19	33.9	15.515	0.016	-0.160	0.021	-0.785	0.021
D293-12	5	41	59.80	-71	21	52.9	15.612	0.006	0.878	0.014	0.722	0.058
D293-13	5	41	30.28	-71	21	53.8	15.655	0.007	0.715	0.013	0.169	0.049
D293-14	5	41	37.65	-71	19	58.5	15.694	0.011	-0.140	0.016	-0.922	0.020
D293-15	5	41	42.35	-71	19	59.7	15.773	0.009	0.844	0.017	0.517	0.072
D293-16	5	41	38.20	-71	19	07.2	15.855	0.013	-0.057	0.027	-0.845	0.037
D293-18	5	41	35.19	-71	21	01.5	15.938	0.015	-0.150	0.020	-0.815	0.021
D293-19	5	41	38.54	-71	19	59.0	15.953	0.010	-0.134	0.017	-0.967	0.023
D293-17	5	41	26.15	-71	20	37.0	15.993	0.010	2.165	0.038	...	...
D293-20	5	41	40.25	-71	20	08.6	16.066	0.010	-0.100	0.018	-0.900	0.028
D293-21	5	41	43.11	-71	19	59.1	16.074	0.010	-0.018	0.018	-0.975	0.026
D293-24	5	41	38.46	-71	19	25.1	16.137	0.016	-0.174	0.024	-0.813	0.038
D293-22	5	41	46.50	-71	19	00.5	16.150	0.011	0.559	0.022	0.256	0.061
D293-23	5	41	53.40	-71	18	20.9	16.161	0.081	0.508	0.365	...	...
D293-25	5	41	39.44	-71	19	03.8	16.226	0.014	1.180	0.073	...	...
D293-26	5	41	48.96	-71	21	15.4	16.266	0.011	-0.060	0.018	-0.733	0.029
D293-27	5	41	55.81	-71	22	02.2	16.268	0.012	-0.058	0.019	-0.580	0.032
D293-28	5	41	41.77	-71	19	07.3	16.360	0.013	1.339	0.036	...	...
D293-29	5	41	35.77	-71	20	13.0	16.417	0.012	0.940	0.031	0.678	0.101
D293-30	5	41	22.63	-71	18	46.0	16.454	0.012	1.534	0.059	...	...
D293-31	5	41	42.67	-71	20	52.1	16.463	0.015	-0.154	0.022	-0.863	0.026
D293-34	5	41	49.66	-71	20	46.3	16.584	0.031	-0.234	0.042	-0.824	0.036
D293-32	5	41	58.38	-71	20	27.7	16.603	0.011	0.912	0.029	0.426	0.145
D293-35	5	41	40.32	-71	19	53.1	16.604	0.030	0.223	0.068	-0.118	0.207
D293-33	5	41	29.75	-71	18	59.4	16.606	0.037	0.501	0.048	0.160	0.084
D293-36	5	41	32.54	-71	21	17.2	16.645	0.015	0.649	0.033	0.455	0.122
D293-37	5	41	33.10	-71	18	29.7	16.688	0.013	0.495	0.028	-0.227	0.061
D293-39	5	41	36.69	-71	19	05.7	16.688	0.046	-0.129	0.058	-0.861	0.062
D293-38	5	41	44.02	-71	21	20.2	16.706	0.017	0.325	0.033	-0.721	0.047
D293-41	5	41	39.96	-71	19	56.6	16.724	0.058	-0.210	0.112	-1.788	0.194
D293-42	5	41	23.19	-71	21	20.3	16.788	0.018	1.012	0.048	...	...
D293-40	5	41	26.97	-71	18	48.1	16.795	0.015	1.631	0.059	...	...
D293-47	5	41	37.71	-71	19	05.0	16.852	0.066	-0.398	0.161	-1.161	0.232
D293-48	5	41	38.06	-71	20	56.0	16.896	0.023	-0.115	0.043	-0.878	0.053
D293-43	5	41	33.25	-71	22	04.2	16.899	0.021	1.475	0.080	...	...
D293-46	5	41	40.60	-71	20	56.7	16.900	0.020	0.818	0.044	0.259	0.153
D293-45	5	41	34.05	-71	19	20.9	16.915	0.023	1.515	0.086	...	...
D293-49	5	41	52.52	-71	21	55.7	16.918	0.017	-0.101	0.026	-0.624	0.040
D293-44	5	41	22.74	-71	19	57.0	16.921	0.021	1.894	0.106	...	...
D293-53	5	41	42.87	-71	20	14.7	17.001	0.022	-0.081	0.034	-0.839	0.045
D293-54	5	41	27.26	-71	20	17.2	17.001	0.022	-0.150	0.035	-0.857	0.047
D293-55	5	41	53.87	-71	18	34.4	17.027	0.016	-0.085	0.031	-0.841	0.040
D293-50	5	41	36.14	-71	20	15.8	17.035	0.040	1.317	0.086	...	...
D293-51	5	41	27.09	-71	20	10.2	17.044	0.019	1.458	0.081	...	...
D293-52	5	42	05.32	-71	20	37.9	17.071	0.021	1.614	0.094	...	...
D293-57	5	41	34.68	-71	21	08.0	17.099	0.022	-0.092	0.031	-0.645	0.043
D293-56	5	41	31.61	-71	21	18.6	17.121	0.021	1.409	0.069	...	...
D293-60	5	41	39.71	-71	18	54.8	17.163	0.039	-0.122	0.062	-0.839	0.067
D293-58	5	41	25.52	-71	20	52.7	17.182	0.026	1.555	0.075	...	...
D293-59	5	41	23.35	-71	19	06.8	17.219	0.027	1.444	0.074	...	...
D293-63	5	41	52.79	-71	18	55.5	17.233	0.026	0.883	0.071	...	...
D293-61	5	41	59.32	-71	19	47.9	17.236	0.027	1.374	0.087	...	...
D293-62	5	41	55.30	-71	18	29.1	17.252	0.025	1.339	0.076	...	...
D293-65	5	41	20.77	-71	21	27.4	17.254	0.029	0.960	0.064	...	...

D293-64	5	41	22.26	-71	19	37.7	17.276	0.024	1.655	0.097	...	...
D293-66	5	41	21.28	-71	21	40.2	17.303	0.031	1.473	0.091	...	...
D293-70	5	41	48.60	-71	21	21.2	17.336	0.026	-0.077	0.043	-0.678	0.066
D293-67	5	41	22.55	-71	21	19.6	17.344	0.027	1.595	0.112	...	...
D293-72	5	41	33.92	-71	19	05.9	17.353	0.028	-0.038	0.043	-0.701	0.062
D293-71	5	41	44.41	-71	21	18.9	17.357	0.028	0.103	0.048	-0.757	0.065
D293-69	5	41	18.98	-71	22	05.6	17.381	0.037	1.031	0.074	...	...
D293-68	5	41	45.34	-71	19	23.2	17.385	0.033	1.392	0.119	...	...
D293-75	5	41	56.86	-71	19	43.7	17.406	0.022	0.558	0.057	0.470	0.229
D293-79	5	41	37.39	-71	20	51.4	17.409	0.035	-0.068	0.053	-0.735	0.059
D293-76	5	41	30.97	-71	22	02.3	17.415	0.026	0.679	0.052	0.516	0.200
D293-74	5	41	24.29	-71	21	05.1	17.426	0.034	1.106	0.079	...	...
D293-73	5	41	35.03	-71	18	23.7	17.428	0.033	1.316	0.093	...	...
D293-77	5	41	46.39	-71	19	47.3	17.432	0.030	0.798	0.071	0.405	0.264
D293-78	5	41	59.19	-71	21	53.1	17.439	0.032	0.807	0.069	0.131	0.186
D293-80	5	41	44.42	-71	20	53.3	17.506	0.036	1.658	0.102	...	...
D293-82	5	41	31.43	-71	18	43.5	17.512	0.029	0.817	0.075	...	...
D293-81	5	41	33.68	-71	18	53.1	17.523	0.038	1.230	0.086	...	...
D293-83	5	41	39.84	-71	18	53.7	17.538	0.030	1.200	0.181	...	...
D293-84	5	41	33.64	-71	19	21.6	17.551	0.038	1.269	0.126	...	...
D293-85	5	41	47.43	-71	21	27.2	17.568	0.040	1.109	0.083	...	...
D293-92	5	41	43.11	-71	19	57.9	17.594	0.102	-0.510	0.170	-0.501	0.301
D293-86	5	41	48.44	-71	21	50.2	17.606	0.033	0.878	0.108	...	...
D293-93	5	41	53.62	-71	22	01.2	17.618	0.029	-0.012	0.048	0.081	0.120
D293-87	5	41	43.02	-71	18	48.5	17.626	0.042	1.324	0.152	...	...
D293-88	5	41	44.30	-71	18	26.7	17.627	0.040	0.923	0.080	...	...
D293-89	5	41	49.68	-71	21	38.5	17.653	0.030	1.145	0.100	...	...
D293-90	5	41	52.35	-71	21	37.4	17.668	0.030	1.453	0.134	...	...
D293-91	5	41	56.84	-71	21	45.4	17.669	0.033	1.267	0.111	...	...
D293-98	5	41	24.89	-71	18	37.1	17.690	0.029	0.141	0.051	-0.629	0.102
D293-97	5	41	37.85	-71	20	31.1	17.695	0.035	0.763	0.071	...	...
D293-95	5	41	29.79	-71	19	47.6	17.703	0.031	1.310	0.122	...	...
D293-96	5	41	32.07	-71	18	52.9	17.704	0.043	1.224	0.133	...	...
D293-99	5	41	35.16	-71	21	26.7	17.721	0.032	0.685	0.075	...	...
D293-102	5	41	55.37	-71	22	03.0	17.724	0.038	0.257	0.067	-0.309	0.165
D293-104	5	41	36.27	-71	18	28.2	17.725	0.043	-0.088	0.061	-0.402	0.086
D293-100	5	41	52.34	-71	18	50.0	17.746	0.031	1.033	0.096	...	...
D293-101	5	42	04.00	-71	21	17.9	17.759	0.038	1.136	0.100	...	...
D293-103	5	42	02.23	-71	19	06.6	17.776	0.040	1.454	0.141	...	...
D293-112	5	41	39.80	-71	19	53.2	17.777	0.095	-0.478	0.140	-0.669	0.232
D293-115	5	41	38.89	-71	19	06.4	17.791	0.090	-0.421	0.140	-0.801	0.181
D293-105	5	41	43.27	-71	20	53.0	17.795	0.045	1.339	0.158	...	...
D293-108	5	41	51.06	-71	20	03.3	17.813	0.041	0.781	0.095	...	...
D293-114	5	41	34.60	-71	18	40.3	17.814	0.033	0.272	0.073	-0.477	0.123
D293-109	5	41	52.32	-71	19	28.7	17.826	0.038	0.984	0.134	...	...
D293-122	5	41	37.28	-71	19	03.4	17.841	0.111	-1.414	0.198	...	...
D293-119	5	41	48.42	-71	19	35.3	17.873	0.044	0.047	0.081	-0.048	0.135
D293-120	5	41	38.25	-71	20	16.6	17.878	0.035	-0.034	0.054	-0.692	0.082
D293-116	5	41	47.15	-71	20	24.3	17.879	0.038	1.554	0.148	...	...
D293-117	5	41	35.41	-71	18	43.0	17.898	0.041	1.848	0.320	-1.288	0.483
D293-125	5	41	27.69	-71	18	34.8	17.920	0.042	-0.038	0.068	0.000	0.164
D293-118	5	41	40.45	-71	22	07.1	17.935	0.040	1.509	0.179	...	...
D293-121	5	41	42.82	-71	20	06.7	17.938	0.042	1.030	0.125	...	...
D293-128	5	42	03.51	-71	18	23.3	17.954	0.043	0.249	0.073	...	...
D293-123	5	41	33.81	-71	22	07.0	17.958	0.049	1.184	0.132	...	...
D293-126	5	41	25.99	-71	21	54.4	17.973	0.041	1.174	0.129	...	...
D293-124	5	41	27.80	-71	19	28.9	17.974	0.048	1.428	0.181	...	...
D293-127	5	42	02.27	-71	21	58.7	17.985	0.050	1.235	0.145	...	...
D293-136	5	41	47.65	-71	21	15.7	17.997	0.046	-0.134	0.071	-0.723	0.081
D293-133	5	41	38.95	-71	19	41.6	18.004	0.054	0.929	0.162	...	...
D293-130	5	41	54.15	-71	19	57.5	18.006	0.063	1.182	0.179	...	...
D293-134	5	41	40.02	-71	18	50.7	18.017	0.033	1.200	0.119	...	...
D293-132	5	41	58.54	-71	21	57.7	18.020	0.050	1.310	0.165	...	...
D293-141	5	41	48.13	-71	20	44.1	18.028	0.055	-0.038	0.089	-0.539	0.135
D293-139	5	41	38.03	-71	19	10.5	18.040	0.068	0.524	0.210	...	...
D293-138	5	41	31.54	-71	21	26.2	18.046	0.047	0.838	0.113	...	...

D293-135	5	42	01.72	-71	21	41.9	18.063	0.048	1.574	0.196	...	...
D293-140	5	41	27.26	-71	19	54.4	18.067	0.042	1.155	0.137	...	...
D293-142	5	41	33.99	-71	21	54.6	18.070	0.075	0.887	0.125	...	...
D293-149	5	42	02.57	-71	18	26.2	18.077	0.061	0.422	0.110	...	...
D293-137	5	41	49.17	-71	21	12.0	18.083	0.052	1.707	0.336	...	...
D293-143	5	41	49.08	-71	21	09.8	18.094	0.048	1.415	0.187	...	...
D293-154	5	41	36.55	-71	18	21.0	18.096	0.091	-0.189	0.941	...	...
D293-148	5	41	19.65	-71	21	43.3	18.099	0.040	0.958	0.111	...	...
D293-147	5	41	22.87	-71	19	43.9	18.106	0.044	1.203	0.163	...	...
D293-156	5	41	42.87	-71	22	05.7	18.112	0.039	-0.013	0.071	-0.263	0.125
D293-159	5	41	38.31	-71	19	09.5	18.115	0.075	-0.233	0.108	-1.140	0.134
D293-150	5	41	53.50	-71	22	06.4	18.126	0.065	1.059	0.170	...	...
D293-162	5	42	03.11	-71	19	37.6	18.133	0.053	-0.077	0.079	-0.632	0.114
D293-152	5	41	56.34	-71	20	04.1	18.134	0.054	0.923	0.138	...	...
D293-153	5	41	54.12	-71	20	39.9	18.144	0.051	0.961	0.137	...	...
D293-166	5	41	42.36	-71	19	37.5	18.151	0.061	0.049	0.097	-0.494	0.131
D293-160	5	42	02.34	-71	21	31.2	18.154	0.058	0.554	0.129	...	...
D293-158	5	41	40.49	-71	20	12.5	18.163	0.055	0.997	0.118	...	...
D293-157	5	41	57.92	-71	19	57.3	18.166	0.047	1.155	0.139	...	...
D293-169	5	41	48.52	-71	20	01.8	18.168	0.064	-0.004	0.096	-0.557	0.127
D293-163	5	41	48.04	-71	18	25.2	18.176	0.064	0.777	0.142	...	...
D293-164	5	41	53.43	-71	21	24.2	18.193	0.053	1.169	0.151	...	...
D293-168	5	41	59.02	-71	19	46.4	18.207	0.072	1.119	0.193	...	...
D293-172	5	42	04.67	-71	19	27.9	18.218	0.062	0.827	0.143	...	...
D293-181	5	41	36.82	-71	20	44.2	18.224	0.051	-0.057	0.079	-0.323	0.152
D293-180	5	41	23.24	-71	19	50.9	18.225	0.059	0.013	0.089	0.218	0.191
D293-184	5	41	35.75	-71	20	17.5	18.236	0.058	-0.052	0.100	-0.436	0.140
D293-183	5	41	20.47	-71	18	47.0	18.242	0.058	0.262	0.104	...	...
D293-188	5	41	43.19	-71	18	47.3	18.246	0.076	-0.177	0.115	-0.255	0.137
D293-178	5	41	46.87	-71	19	41.0	18.247	0.062	1.114	0.167	...	...
D293-182	5	41	36.85	-71	19	59.2	18.248	0.073	0.483	0.132	-0.282	0.233
D293-176	5	41	30.65	-71	20	34.7	18.249	0.061	1.369	0.284	...	...
D293-187	5	41	52.21	-71	20	22.2	18.251	0.052	0.058	0.095	...	...
D293-186	5	41	36.51	-71	19	06.5	18.265	0.193	0.527	0.244	...	...
D293-197	5	41	37.18	-71	22	03.9	18.296	0.079	-0.158	0.106	-0.109	0.143
D293-194	5	41	50.41	-71	19	22.7	18.300	0.076	0.199	0.117	-0.238	0.193
D293-191	5	41	47.80	-71	19	36.1	18.313	0.056	0.915	0.142	...	...
D293-193	5	41	55.56	-71	21	05.5	18.320	0.059	0.715	0.144	...	...
D293-200	5	41	29.16	-71	21	52.9	18.337	0.059	0.062	0.089	-0.483	0.142
D293-198	5	41	47.84	-71	19	25.4	18.341	0.061	0.752	0.153	...	...
D293-196	5	41	37.98	-71	21	59.5	18.351	0.075	1.142	0.205	...	...
D293-199	5	41	22.33	-71	20	22.7	18.352	0.068	0.708	0.140	...	...
D293-195	5	41	55.54	-71	18	32.5	18.354	0.070	1.275	0.186	...	...
D293-202	5	42	00.23	-71	19	04.2	18.354	0.228	0.231	0.280	...	...
D293-206	5	41	30.78	-71	19	38.4	18.360	0.070	0.135	0.115	...	...
D293-205	5	41	43.80	-71	19	06.3	18.378	0.065	0.661	0.143	...	...
D293-208	5	42	00.40	-71	21	32.2	18.380	0.087	0.299	0.134	...	...
D293-201	5	41	57.96	-71	21	55.0	18.384	0.043	1.053	0.188	...	...
D293-211	5	41	45.61	-71	20	58.5	18.392	0.064	0.046	0.087	-0.812	0.109
D293-212	5	41	26.49	-71	21	22.1	18.398	0.079	0.004	0.109	-0.222	0.180
D293-213	5	41	43.95	-71	19	11.9	18.410	0.067	-0.141	0.103	-0.119	0.178
D293-215	5	41	55.77	-71	20	13.9	18.433	0.070	-0.044	0.100	-0.079	0.206
D293-218	5	41	47.28	-71	19	08.5	18.444	0.070	-0.068	0.113	-0.742	0.154
D293-214	5	41	36.49	-71	22	04.1	18.448	0.075	0.412	0.133	...	...
D293-219	5	41	38.71	-71	19	24.2	18.454	0.116	0.065	0.192	-0.871	0.349
D293-223	5	41	31.78	-71	20	59.2	18.474	0.088	0.038	0.122	-0.257	0.190
D293-216	5	41	44.73	-71	21	35.1	18.476	0.072	0.893	0.181	...	...
D293-226	5	41	33.26	-71	18	47.9	18.490	0.085	0.104	0.128	-0.438	0.176
D293-220	5	41	42.81	-71	21	11.3	18.499	0.070	0.713	0.152	...	...
D293-231	5	41	51.03	-71	19	43.4	18.508	0.063	0.058	0.099	...	...
D293-221	5	41	37.99	-71	20	57.5	18.509	0.070	0.952	0.216	...	...
D293-235	5	41	36.01	-71	19	51.2	18.523	0.102	-0.006	0.141	-0.669	0.203
D293-222	5	41	51.45	-71	21	40.7	18.527	0.106	1.345	0.290	...	...
D293-229	5	41	22.56	-71	20	43.8	18.544	0.071	0.953	0.196	...	...
D293-238	5	41	18.67	-71	20	11.4	18.547	0.073	0.107	0.126	...	...
D293-234	5	42	03.08	-71	19	56.6	18.553	0.083	0.684	0.165	...	...

D293-240	5	41	23.23	-71	20	46.5	18.553	0.068	0.198	0.119	...	...
D293-237	5	41	29.23	-71	20	07.0	18.568	0.077	0.807	0.170	...	...
D293-241	5	41	22.80	-71	20	45.3	18.588	0.075	0.673	0.169	...	...
D293-250	5	41	58.26	-71	20	07.2	18.600	0.063	-0.025	0.117	-0.740	0.176
D293-248	5	41	38.01	-71	21	57.1	18.602	0.095	0.165	0.156	...	...
D293-252	5	41	47.02	-71	20	58.7	18.606	0.087	-0.185	0.117	-0.396	0.178
D293-254	5	41	42.86	-71	20	29.8	18.623	0.068	0.053	0.108	...	...
D293-260	5	41	30.82	-71	20	36.1	18.629	0.090	-0.115	0.122	-0.046	0.197
D293-256	5	41	22.37	-71	21	24.7	18.635	0.074	0.135	0.139	-0.802	0.201
D293-253	5	41	53.38	-71	18	50.5	18.638	0.070	0.427	0.147	...	...
D293-266	5	41	38.65	-71	19	12.7	18.653	0.089	-0.089	0.151	...	...
D293-259	5	42	01.64	-71	18	29.1	18.654	0.094	0.450	0.139	...	...
D293-263	5	41	46.51	-71	19	32.2	18.655	0.076	0.035	0.131	...	...
D293-258	5	41	59.84	-71	21	48.4	18.660	0.079	0.656	0.170	...	...
D293-271	5	41	46.47	-71	22	07.5	18.673	0.100	0.026	0.140	...	...
D293-270	5	41	21.10	-71	18	30.2	18.675	0.083	0.133	0.139	...	...
D293-257	5	41	34.67	-71	21	00.9	18.676	0.085	1.009	0.256	...	...
D293-273	5	41	28.55	-71	20	53.0	18.678	0.069	-0.229	0.099	-0.556	0.164
D293-272	5	41	32.96	-71	18	54.7	18.684	0.081	0.055	0.133	-0.295	0.287
D293-279	5	41	39.45	-71	19	19.1	18.685	0.114	-0.296	0.147	-0.279	0.173
D293-280	5	41	25.78	-71	19	32.6	18.702	0.107	-0.040	0.152	-0.386	0.237
D293-283	5	41	41.66	-71	21	23.2	18.704	0.094	-0.165	0.135	-0.461	0.192
D293-289	5	41	41.64	-71	18	57.6	18.731	0.088	-0.227	0.120	...	...
D293-287	5	41	40.19	-71	19	29.5	18.748	0.082	0.192	0.152	...	...
D293-285	5	41	38.97	-71	19	15.5	18.756	0.115	0.685	0.202	...	...
D293-288	5	41	29.39	-71	19	28.4	18.758	0.077	0.411	0.165	...	...
D293-291	5	42	03.13	-71	18	44.9	18.758	0.120	0.007	0.158	...	...
D293-294	5	41	54.72	-71	21	58.7	18.769	0.079	-0.053	0.152	-0.261	0.265
D293-290	5	41	38.78	-71	21	02.4	18.773	0.080	0.554	0.191	...	...
D293-293	5	41	47.45	-71	20	42.6	18.774	0.117	0.109	0.184	-0.434	0.288
D293-302	5	41	22.53	-71	19	30.5	18.815	0.093	0.184	0.175	...	...
D293-303	5	41	33.33	-71	19	47.3	18.816	0.086	0.168	0.149	...	...
D293-306	5	41	35.59	-71	20	20.2	18.823	0.101	0.156	0.181	...	...
D293-309	5	41	52.32	-71	21	50.2	18.835	0.097	0.259	0.169	-0.125	0.306
D293-318	5	41	52.99	-71	19	12.2	18.851	0.087	0.033	0.143	...	...
D293-317	5	41	43.41	-71	21	12.6	18.854	0.103	0.164	0.166	...	...
D293-319	5	41	59.28	-71	21	38.7	18.856	0.131	0.161	0.193	...	...
D293-323	5	41	48.93	-71	21	40.4	18.857	0.140	-0.164	0.193	...	...
D293-324	5	41	30.52	-71	19	27.5	18.864	0.223	-0.081	0.264	...	...
D293-325	5	41	22.71	-71	19	32.3	18.887	0.093	0.358	0.203	...	...
D293-329	5	42	05.03	-71	21	54.2	18.901	0.093	-0.215	0.137	...	...
D293-327	5	41	42.99	-71	21	22.6	18.903	0.099	0.144	0.179	...	...
D293-342	5	41	24.97	-71	18	42.8	18.922	0.094	-0.369	0.129	-0.396	0.177
D293-335	5	41	58.26	-71	20	46.5	18.923	0.095	-0.066	0.174	-0.624	0.231
D293-338	5	41	42.17	-71	19	22.6	18.928	0.128	-0.099	0.187	-0.418	0.262
D293-337	5	41	28.35	-71	20	57.8	18.931	0.091	0.003	0.154	...	...
D293-340	5	41	55.00	-71	21	31.2	18.935	0.114	-0.017	0.178	...	...
D293-348	5	41	25.74	-71	21	51.5	18.951	0.116	-0.129	0.187	...	...
D293-349	5	41	31.68	-71	21	12.7	18.963	0.129	0.124	0.198	...	...
D293-336	5	41	43.16	-71	19	51.0	18.964	0.106	0.804	0.291	...	...
D293-350	5	41	47.94	-71	20	59.5	18.973	0.091	0.352	0.200	...	...
D293-365	5	41	44.48	-71	21	32.6	19.021	0.123	-0.106	0.186	...	...
D293-363	5	41	44.04	-71	19	50.3	19.033	0.148	0.385	0.223	...	...
D293-367	5	42	03.33	-71	18	25.6	19.067	0.114	0.279	0.199	...	...
D293-372	5	41	45.52	-71	20	06.6	19.088	0.110	-0.145	0.166	...	...
D293-375	5	41	27.08	-71	18	35.3	19.133	0.144	0.147	0.227	...	...
D293-373	5	41	56.94	-71	19	41.4	19.145	0.098	0.733	0.303	...	...
D293-380	5	41	36.44	-71	20	44.1	19.165	0.116	0.260	0.202	...	...
D293-383	5	41	54.20	-71	21	50.6	19.194	0.137	0.404	0.236	...	...
D293-386	5	41	42.52	-71	19	39.6	19.197	0.161	0.405	0.287	...	...
D293-389	5	41	27.10	-71	18	45.0	19.198	0.144	0.136	0.243	...	...
D293-384	5	41	46.27	-71	20	50.0	19.209	0.126	0.770	0.290	...	...
D293-388	5	41	33.64	-71	22	03.4	19.212	0.141	0.641	0.355	...	...
D293-390	5	41	46.77	-71	19	46.4	19.226	0.143	0.694	0.331	...	...
D293-393	5	41	48.38	-71	20	03.9	19.244	0.153	0.441	0.311	...	...
D293-406	5	41	48.34	-71	21	17.6	19.303	0.143	-0.023	0.240	...	...

D293-410	5	41	34.24	-71	22	05.7	19.330	0.154	0.211	0.251	...	...
D293-424	5	41	45.99	-71	20	05.0	19.432	0.179	-0.054	0.263	...	...
D293-429	5	41	49.44	-71	20	41.9	19.476	0.092	-0.277	0.178	...	...
D293-431	5	41	41.54	-71	21	57.2	19.559	0.188	0.487	0.374	...	...
D293-449	5	41	25.37	-71	19	34.0	19.801	0.265	-0.135	0.358	...	...
D293-451	5	41	44.68	-71	20	02.9	19.854	0.252	-0.272	0.324	...	...
D293-456	5	41	42.81	-71	21	14.3	19.963	0.281	-0.686	0.356	...	...

Table 5. Bright Stars in the Literature

ID	Sk	HD/E	Other ^a
D31-2001	−67 17	32034	R62, S7
D31E-1001	−67 18		Br5
D106-1	−67 64	34664	S22
D106A-1	−67 67	269195	
D192.L51N-1	−67 97		
D192.L54S-1	−67 101		
D192.L54S-1001	−67 104	36402	Br31
D192.L54S-1002	−67 106	269525	
D192.L54S-2	−67 107		
D231-2	−67 184	269748	Br48, S47
D25NE-1	−70 13		
D50SW-1	−70 29	32763	R67, S149
D50NW-1	−70 30		
D50NE-1	−70 30a		S152
D50SE-1	−70 32		
D66-2	−68 38		
D66-1	−68 40		
D197-1	−69 131		
D197-2	−69 135		
D243-1	−66 163		
D293-1	−71 51		
D301SW-1	−67 250		

^aBr = Breysacher (1981), R = Feast *et al.* (1960),
S = Henize (1956).

TABLE 6
PHOTOMETRY COMPARISONS^a

Reference	Cluster	N	ΔV	σ	$\Delta(B - V)$	σ	$\Delta(U - B)$	σ
Hill <i>et al.</i> (1994a)	LH 54	60	-0.130	0.113	0.099	0.171	0.023	0.177
	LH 83	41	0.050	0.051	-0.033	0.082	0.004	0.312
Petr <i>et al.</i> (1995)	LH 54	98	0.029	0.087	0.022	0.062	...	...
Rousseau <i>et al.</i> (1978)	...	15	0.017	0.061	0.006	0.070	-0.062	0.129

^a Average differences, and standard deviations of the differences, for stars with $V < 17.0$, excluding those that deviate by more than 3σ from the mean. Differences are in the sense (this work - comparison).

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Figure 1a-m, OEY 1995a, ApJS submitted

These PostScript files are V images of the OB association fields, with bright stars identified. The remaining stars can be identified with the aid of coordinates given in Table 4a-m. Each individual frame is $3'.8 \times 3'.8$ square, with north up and east to the left.

Superbubble fields:

Figure 1a	DEM 25
Figure 1b	DEM 31
Figure 1c	DEM 50
Figure 1d	DEM 106
Figure 1e	DEM 192
Figure 1f	DEM 226
Figure 1g	DEM 231
Figure 1h	DEM 301

Classical H II regions:

Figure 1i	DEM 10b
Figure 1j	DEM 66
Figure 1k	DEM 197
Figure 1l	DEM 243
Figure 1m	DEM 293

Figure 1a

Figure 1b

Figure 1c

Figure 1d

Figure 1e

Figure 1f

Figure 1g

Figure 1h

Figure 1i

Figure 1j

Figure 1k

Figure 11

Figure 1m

Fig. 2.— Photometric errors in V as a function of V magnitude, for the representative object DEM 106.

Fig. 3.— Differences between the data presented in this work and that of other researchers, as a function of V magnitude. The comparison is in the sense (this work — comparison work).

Fig. 3, *continued*.—

Fig. 4.— Color-magnitude diagrams for the OB associations of superbubbles. Circles represent stars with color errors ≤ 0.07 and plus symbols show stars with higher errors. Geneva group isochrones for 3, 6, 9, and 12 Myr are overlaid. DEM 231 is a Wolf-Rayet bubble.

Fig. 4, *continued*.—

Fig. 5.— Color-magnitude diagrams for the OB associations of classical H II regions, with symbols are as in Figure 4.

Appendix D

THE STELLAR CONTENT OF SUPERBUBBLE H II REGIONS IN THE LARGE MAGELLANIC CLOUD

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The Stellar Content of Superbubble H II Regions in the Large Magellanic Cloud

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ABSTRACT

I examine the stellar population enclosed within a sample of 6 LMC superbubbles and compare these clusters with previously studied OB associations in classical H II regions. The H-R diagrams, constructed with spectral classifications of the most massive stars, do not reveal any systematic differences between OB associations resident within superbubbles and classical nebulae. The main-sequence turnoffs show stars as massive and luminous as those in classical H II regions, implying that the shell formation timescale is somewhat shorter than the cluster evolutionary timescale. The stellar winds and/or supernovae of the one or two most massive stars must therefore dominate the formation of the superbubbles. The star-forming events for the superbubble associations are also no more extended in duration than that of other OB associations. Finally, the IMF slopes are not systematically different from those previously found. Since the OB associations within superbubbles appear normal, the shell structures must be the result of normal OB stellar influences. I also present a few spectrograms of interesting massive stars, including S149, a probable new B[e] supergiant.

Subject headings:

1. Introduction

The strong stellar winds and supernovae of the most massive stars dominate the energy transfer from the stellar to gaseous component of normal galaxies, driving star formation and galaxy evolution. This interaction is manifested on many scales, ranging from individual stellar wind bubbles seen around O stars and Wolf-Rayet stars (*e.g.*, Oey & Massey 1994; Chu 1992), to galactic superwinds

around starburst galaxies (*e.g.*, Heckman *et al.* 1990). The form of this phenomenon most typically observed is the “superbubble” H II region often seen around ordinary OB associations. Since the majority of massive stars are found in these associations (*e.g.*, Garmany 1994), these clusters dominate the input of kinetic energy into the interstellar medium (ISM).

While previous studies have examined the kinematics of superbubbles (*e.g.*, Meaburn *et al.* 1984; Georgelin *et al.* 1983), detailed study of the parent OB associations has only recently received attention. Saken *et al.* (1992) and Brown *et al.* (1995) examined superbubbles around the Galactic associations Cygnus OB1 and Orion OB1, whose stellar contents have been closely examined. These studies helped confirm that the enclosed stellar systems were indeed responsible for producing the shell morphology of the surrounding gas. In the meantime, I have pursued a comprehensive program to study the stellar contents and model the dynamics of superbubbles in the Large Magellanic Cloud (LMC). The advantage provided by the LMC lies in its low obscuration and proximity, thereby offering a clear view of both the stellar and gaseous components in these superbubble systems. Distance and membership uncertainties are therefore unimportant compared to similar work in the Galaxy.

Given the difference in morphology between superbubble nebulae and classical, diffuse H II regions, it is natural to focus attention on the resident OB associations. Is the stellar population normal, with a Salpeter (1955) initial mass function? Is there anything unusual about the star formation history? Or are these shells the normal result of aging star forming regions, which should therefore host evolved stellar associations? In a previous work, we studied the LMC system DEM 152 (Oey & Massey 1995; hereafter Paper I), in which we found a normal stellar content,

but with evidence for propagating star formation. We also applied the stellar data to the superbubble dynamics, and found that the shell's expansion appears too fast, or the radius too small, to be consistent with a straightforward application of the standard Weaver *et al.* (1977) dynamical bubble model. Intriguingly, this same dynamical discrepancy was found by Saken *et al.* (1992) and Brown *et al.* (1995) in the corresponding analyses of their objects. Clearly a larger sample of objects is needed to establish patterns associated with the stellar populations and dynamics of these superbubbles. Hence, the current study aims to provide such a sample of stellar data for 8 superbubble systems in the LMC. Table 1 provides the sample of nebulae studied in this paper, which includes one classical, diffuse H II region to be used as a comparison object. The H α images of the sample, taken from the Kennicutt & Hodge (1986) survey, are shown in Figure 1a and b. With *UBV* photometry and spectral classifications, I construct H-R diagrams for these clusters, and use these data to examine the questions posed above.

Paper I, which examined the first superbubble in the sample, DEM 152, provided a prototype study for the current investigation. A second paper (Oey 1995a; hereafter Paper II) presented *UBV* photometry of the OB associations in the sample. This present third paper in the series provides corresponding spectral classifications, H-R diagrams, and mass functions; I then discuss the results pertaining to the stellar populations of these shell nebulae. Finally, a fourth paper (Oey 1995b, Paper IV) will use these results to model the superbubble evolution and compare with the observed nebular kinematics. In addition, a supplementary paper (Oey 1995c) will speculate on implications suggested by Paper IV, while another (Oey 1995d) will examine the 8th superbubble, DEM 192, an interesting and somewhat more complex region.

2. Spectral Classification of the Most Massive Stars

The *UBV* photometry given in Paper II provides the basis for constructing H-R diagrams of the OB associations enclosed within the superbubbles. However, as has been emphasized elsewhere (see *e.g.*, Massey *et al.* 1995), the broadband colors of the hottest, most massive stars are degenerate due to the position of the *U*, *B*, and *V* bandpasses on the Rayleigh-Jeans tail of the stellar energy distribution. It is therefore essential to obtain spectral classifications of these stars to place them on the H-R diagram and estimate their masses. We are also especially interested in these members because the superbubble shells are presumed to result from the stellar winds and supernovae of primarily the most massive stars.

2.1. Observations and Data Reduction

I obtained spectral classifications of the bluest candidates for the sample using the Argus multi-fiber spectrograph on the CTIO 4-m telescope, during the nights of 1994 January 21–23. Following the criterion of Massey and coworkers (*e.g.*, Massey *et al.* 1989), stars with a reddening-free index $Q = (U - B) - 0.72(B - V)$ of ≤ -0.70 and $V \leq 16.0$ mag were selected as candidates for spectroscopy. In addition, most bright but redder stars with $V \leq 15$ were also observed. For most of the superbubble associations, the spectroscopic observations are reasonably complete to $V \sim 15.5$.

The spectra were obtained with a 632 line mm^{-1} grating blazed at $8200\text{\AA}$ (KPGLF), using the Reticon II 1200×400 CCD. With the grating in second order, the wavelength coverage was about $3800 - 4900\text{\AA}$. The individual fibers subtend $1.2''$ at the 4-m prime focus, projecting to 2.4 pixels, or $2.2\text{\AA}$. Since the 24 fibers

can only approach within roughly 15" of each other, crowding usually required two or more setups per object. Any unused fibers for a given exposure were set to sky positions, providing supplementary sky signal in addition to the 24 designated sky fibers. Helium-argon comparison spectra were observed several times during the course of each night. After the bias and flat-field corrections, the individual fiber responses and transmissions were normalized with uniform, nightly "dome flat" observations. The sky observations were then summed for each exposure and the target spectra were corrected with the combined sky spectra. The extraction of the final spectra and wavelength calibration was straightforward.

The resulting stellar spectra were rectified and then classified, using the criteria and spectral atlas of Walborn & Fitzpatrick (1990) for OB stars. A few blue classification standard stars were observed, although these proved to be unnecessary. The redder stars were classified with the aid of Jaschek & Jaschek (1987), and their spectral types are more approximate. The radial velocities of these non-OB stars fell neatly into a bimodal distribution corresponding to LMC members and Galactic foreground stars. The latter were deleted from the sample.

Table 4 below provides the spectral types of all the classified stars. Some stars have spectral types previously reported in the literature, primarily from Ardeberg *et al.* (1972), Rousseau *et al.* (1978), Conti *et al.* (1985), Fitzpatrick (1988), and Massey *et al.* (1995). In general differences between my classifications and slit spectra from the literature agree within one spectral subtype.

2.2. Individual Interesting Stars

I will now describe a few stellar spectra worthy of individual mention. Four stars which I observed spectroscopically appear in Henize's (1956) $H\alpha$ survey of emission-line stars, and three are discussed in this section. The fourth is S152 (D50NE-1b), which turns out to be a B0: IIIe star. Table 6 in Paper II provides a cross-reference of names for the bright stars appearing in Sanduleak's (1969) survey.

2.2.1. *Br 5 = Sk -67 18*

The star Sk -67 18 in Sanduleak's (1969) catalog, was classified by Walborn (1977) as O6-7n-nn + WN5-6-A. It is named Br 5 in Breysacher's (1981) Wolf-Rayet catalog, and corresponds to my D31E-1001. A spectrum centered on the primary component is shown in Figure 2. This object clearly falls on the O3-4 If — WN-A sequence shown by Walborn *et al.* (1992), and bears a strong resemblance to HD 93162, a weak-lined WN6-A star. For Br 5, the relative line strengths of N IV and N III emission indicate a Wolf-Rayet (WR) type of WN6. However, the emission-line strengths are also quite similar to O3 and O4 supergiants (see *e.g.*, Walborn & Fitzpatrick 1990).

My photometry determines this object to be a dense clump with at least 3 components within the central $\sim 1''$, and 12 or more in the entire knot. The absorption line profiles in Figure 2 imply the superposition of a late component, probably an early B type, suggested by the presence of Si IV $\lambda\lambda 4089, 4116$ and Si III $\lambda\lambda 4552, 4568$. DAOPHOT photometry gives visual magnitudes for the 3 principal components of 12.51 ± 0.07 , 14.36 ± 0.39 , and 14.57 ± 0.18 (Paper II). The

photometric uncertainties and visible superposition of the early B star spectrum are consistent with a luminosity class of II–III. I caution again that other components could also have a non-negligible presence in this composite spectrum. The presence of this late component would then suggest a revision of the spectral class of this object to WN6-A + early B II–III.

The spectrum of Br 5 appears to have varied slightly from that reported by Walborn (1977) in that the N III emission appears stronger (N.R. Walborn, private communication). Since the emission features are presumed to originate from the same stellar component, the variation is quite possibly real, although the object’s composite nature could be the cause as well.

2.2.2. *R62 = Sk -67 17*

R62 (Feast *et al.* 1960), or Sk -67 17, is classified as B9 Iae by Ardeberg *et al.* (1972), refining the B9 Ie type assigned by Feast *et al.* (1960). It is also known as S7 in Henize’s (1956) survey. Stahl *et al.* (1985) identify it as “the visually brightest B star of the LMC,” at $M_V = -8.7$.

Figure 2 also shows my spectrum of R62, called D31-2001 in my nomenclature. A comparison of my spectrum with that taken by Stahl *et al.* appears to show slight variations. The $H\beta$ emission now appears stronger, as does the He I absorption (cf. $\lambda 4471$). Overall, however, the spectrum of this luminous star appears stable. A comparison with Fitzpatrick’s (1991) spectral atlas of B supergiants suggests that R62 has slightly stronger metal lines than its spectral peers. McGregor *et al.* (1988) did not detect any unusual features in near infrared observations of this star.

2.2.3. S22 = Sk -67 64

D106-1 in my sample is S22 (Henize 1956), one of the best studied examples of a B[e] supergiant. The relatively rare B[e] supergiants are characterized by (*e.g.*, Zickgraf 1990): extremely strong Balmer lines; narrow, low-excitation emission of [Fe II] and other metals combined with B-type absorption spectra; and strong infrared excesses. These objects show evidence of axial symmetry, and are thought to possess a dense, circumstellar disk, combined with a more traditional polar fast wind. B[e] supergiants are spectroscopically similar to quiescent-phase luminous blue variables (LBVs), although their relationship is unclear. The degree of spectroscopic and photometric variability in B[e] supergiants appears to be small, but less than two dozen of such objects are known.

The spectrum of S22 in Figure 3 vividly displays the rich metal line spectrum associated with these objects. High-resolution spectra of this star have been previously published by Stahl *et al.* (1985), and Muratorio (1977). A comparison of Figure 3 with those data does show a fairly stable spectrum, although small variations do exist. In particular, the permitted Fe II emission has decreased slightly against the forbidden [Fe II] spectrum.

DEM 106, the host nebula for S22 and its companion OB stars, is one of the noticeably elongated superbubbles in the sample (Figure 1a). It is intriguing that this B[e] supergiant, which is expected to have a bipolar stellar wind, happens to be centrally located within a relatively small, ~ 20 pc radius, elliptical superbubble. Furthermore, the putative underlying absorption spectrum of the B star is not discernible in this object, suggesting that a surrounding thick disk is aligned edge-on to our line of sight. This would be consistent with the prominent elongation observed in the superbubble.

2.2.4. S149 = Sk -70 29

Figure 3 also shows the spectrum of S149, or R67 (D50SW-1), which is clearly another B[e] or related supergiant. Although this star has long been identified as a member of the peculiar massive stars related to LBVs (*e.g.*, Lortet 1988), it is not included in the list of 14 known LMC B[e] stars (Gummersbach *et al.* 1995). Feast *et al.* (1960) in their seminal paper remark that its “spectrum resembles Eta Car, with Fe II (permitted and forbidden) represented by 48 sharp lines between 6300 and 4100Å.” Cowley & Hutchings (1978) spectroscopically identified an M1 I companion to the B1 emission-line star. They discuss this composite system in detail, including careful examination of the radial velocities of most of the prominent emission features. However, since their work predates the investigation of B[e] supergiants as a class, they do not discuss the B component in that context. Stahl *et al.* (1985) included S149 in their photometric study of bright, peculiar, emission-line stars, but its ($H - K$) color is not indicative of a dust envelope characteristic of B[e] stars, and they did not examine it spectroscopically.

In the limited region 4200 – 4500Å, there is no perceptible difference between the metal-line emission spectrum published by Cowley & Hutchings (1978) and my data in Figure 3. However, in an additional spectrum, they detected He I $\lambda 4471$ emission, which is not present in my data. They also comment on “unusually strong He I,” whereas Figure 3 shows normal He I strength. Feast *et al.* (1960) found prominent double components in $H\beta$ and $H\gamma$ which were not detected by Cowley & Hutchings, and do not appear to be present in my spectrum. However, the quoted separation of 135 km s⁻¹ would be around the limit of my resolution. Comparison of Figure 3 with the spectra given by Feast *et al.* and Cowley & Hutchings does seem to show that the Balmer line strength vs. metal emission is

variable, and is observed to be progressively smaller between the three datasets.

Comparison between S149 and S22 in Figure 3 shows a truly remarkable resemblance in the metal-line spectra. Thus we might conclude that the physical conditions in the cool envelopes are perhaps quite similar. S149 additionally exhibits a strong B1 Iab absorption spectrum. However, the Balmer lines of $H\beta$ and $H\gamma$ do not seem consistent with those characteristic of B[e] stars as described by Zickgraf (1990). The EW of $H\beta$ is only $4.3\text{\AA}$, contrasting with the $120\text{\AA}$ width seen in S22, nor do the Balmer lines display the broad wings seen in S22. Furthermore, as mentioned above, S149 is also lacking the infrared evidence for dust. S149's location on the H-R diagram, determined below, yields a mass of $25 - 40 \mathcal{M}_{\odot}$.

I obtained two sets of broadband images of the region around S149: a deep set of exposures with 1200s in V , taken on 1993 December 3 under non-photometric conditions; and a short, photometric set with 300s in V , taken 4 nights later. A subsection of the short V frame is shown in Figure 4. Examination of the broadband images reveals a subcluster of stars in about a $2' \times 1.5'$ area around S149. I list photometry for the brightest stars near S149 in Table 2. S149 itself appears to be a more complex system than a simple binary, and unfortunately I only obtained a spectrum of the dominant star itself. The deep exposures show two primary components, D50SW-1 (S149) and D50SW-2, separated by $6.''7$. However, each appears to have a secondary companion. Surprisingly, all these members appear to be blue, in particular D50SW-2. A third nearby star, D50SW-16, can be seen about $10''$ north of the bright pair, and this star is indeed red. However, at $V = 16.4$, it is not bright enough to be the M supergiant identified by Cowley & Hutchings, who estimate its magnitude at $V \sim 11.9$. I then examined the short exposures, which should reveal primarily the dominant components. Although DAOPHOT still

detected multiple components for both D50SW-1 and D50SW-2, only the latter showed a bright secondary. The two stars corresponding to D50SW-2 in these short frames are identified as D50SWt-4 and D50SWt-5. As seen in Table 2, D50SWt-4 appears to be a substantially brighter red supergiant! Its apparent absence in the deep frames could be due to poor deconvolution of the multiple components, although possibly the two components associated with D50SW-2 are eclipsing. Either explanation, the complicated photometry or an eclipsing system, could be the cause of the large variation in magnitude estimates for the red supergiant summarized by Cowley & Hutchings. S149's companions and their environment could also be responsible for the reported presence and variation in He I $\lambda 4471$ emission, and differences in H Balmer line observations. More detailed observations of this star and its environment are desirable, to clarify the situation.

I suggest that S149 is a B[e] supergiant with an abnormal circumstellar disk, possibly modified by the companion stars. The strong absorption-line spectrum may indicate that we are viewing a thick disk from a polar orientation, showing an unobscured view of the central star. Alternatively, the disk material may be much less extensive, allowing a clearer view of the stellar photosphere; such a scenario would be consistent with the lack of dust emission. Unfortunately, the complicated dynamics of the companion stars limits what could have been a unique opportunity to study the physical nature and geometry of the circumstellar material, had S149 proven to be a simple binary. But given the similarity of its emission-line spectrum to that of B[e] supergiants and LBVs, S149 may yet provide some key insight into understanding the circumstellar environment in those objects.

3. H-R Diagrams

3.1. Transformation to M_{bol} , T_{eff}

The photometry and spectral classifications of the sample were transformed to H-R diagrams (HRDs) of M_{bol} vs. T_{eff} , largely following the same procedure as in Paper I. For stars with spectral types, we follow the prescription of Paper I exactly, using conversions to $\log T_{\text{eff}}$ and bolometric corrections (BCs) from Chlebowski & Garmany (1991) and Humphreys & McElroy (1984). For stars with only photometry, Massey *et al.* (1995) describe in detail the adopted transformation from broadband colors to $\log T_{\text{eff}}$, and relation between $\log T_{\text{eff}}$ and BC. The principal difference in the transformation here is that for stars with photometric errors σ_{B-V} or $\sigma_{U-B} > 0.07$ mag, $\log T_{\text{eff}}$ was derived from the $(B - V)$ colors alone, instead of from Q . The conversion from the intrinsic color $(B - V)_0$, to $\log T_{\text{eff}}$ is also given by Massey *et al.* (1995). Since $(U - B)$ was generally less reliable than $(B - V)$, it is reasonable to use only the one color, $(B - V)$, for the transformation when the uncertainties are high. In addition, these stars with the poorer photometry were usually the fainter ones, and therefore less likely to be in the blue extreme, where the color degeneracy confounds the determination of $\log T_{\text{eff}}$. As in Paper I, all stars with $Q > -0.4$, and all with $(B - V)_0 > 0$, were likewise transformed on the basis of $(B - V)_0$ alone.

In deriving characteristic extinctions for the associations, I adopted the median value derived from both stars with spectral types, and stars with the best photometry. The distribution of the color excess $E(B - V)$, is asymmetric, with a longer tail toward higher reddenings, hence the median is a more appropriate characteristic value. The color excesses derived here are therefore marginally smaller than the means. For comparison with other work, Table 3 presents both

the median and mean $E(B - V)$ for the associations. These are computed from all stars whose combined photometric errors are $\lesssim 0.05$ (including the stars with spectral classifications), and also the subset of only stars with classifications. I also list the total number of stars used to determine these values, and the grand total number of stars with photometry. For individual stars, the minimum and maximum limits imposed on $E(B - V)$ were 0.03 and 0.50, following Paper I. Table 3 shows that the range of extinctions for these associations is normal. The median $E(B - V)$ were then applied to derive $(B - V)_0$ for stars with unreliable Q .

Finally, the bolometric magnitude M_{bol} was computed in the usual way:

$$M_{\text{bol}} = V - A_V + BC - DM \quad , \quad (1)$$

where the visual extinction $A_V = 3.1 \times E(B - V)$ and distance modulus DM to the LMC was taken to be 18.4, consistent with Paper I and Massey *et al.* (1995).

Seven stars were determined to be spectroscopic binaries, which were treated as follows. Based on the estimated spectral type of each component, approximate absolute magnitudes M_V were estimated from Humphreys & McElroy (1985). The predicted, combined visual magnitude was then compared with the observed V , and if necessary the adopted M_V 's were adjusted to better match observation. These adjustments were never greater than 0.3 mag, which is within the standard deviation of luminosities for stars for any given spectral type (Humphreys & McElroy 1985).

The derived parameters are presented in Table 4. Column 1 gives the ID, which reflects the host nebula and frame, if from mosaicked observations. The second column provides the epoch 2000.0 coordinates. Columns 3, 4, 5, and 6 list the derived $\log T_{\text{eff}}$, M_{bol} , $E(B - V)$, and Q . The spectral type is given in column 7, and other commonly used ID's are listed in column 8. Spectroscopic binaries are

denoted by their “a” and “b” components.

The resulting H-R diagrams (HRDs) are shown in Figure 5*a* and *b*. As in Paper I, the stars placed on the basis of their spectral classifications are represented by solid circles, and those placed with their Q values are shown by open circles. The latter stars have photometric errors in $(B - V)$ and $(U - B)$ of ≤ 0.07 . The crosses represent either stars with higher errors in $(U - B)$, but with $\sigma_V \leq 0.05$ and $\sigma_{B-V} \leq 0.07$; or the stars redder than the upper main sequence. These data shown by the crosses have been placed using $(B - V)$ only, as described above. The solid triangles represent either spectroscopic binaries whose individual parameters have been estimated as described above; or stars observed spectroscopically, but whose photometry has been taken from the literature. Evolutionary tracks from Schaerer *et al.* (1993), corresponding to LMC metallicity, are overlaid. Stars with higher errors than the limits imposed here have not been plotted; I will discuss these below. A slight selection effect favoring visually brighter stars for spectral classifications is noticeable, in that the solid points often appear to merge slightly to the red of the open circles.

In Figure 6 I show the HRD for DEM 25, this time including the stars with errors higher than the limits imposed in Figure 5. All of these high-error stars have been placed on the basis of $(B - V)$ color, and the skewed sensitivity to the color (*e.g.*, Massey & Johnson 1993) is vividly apparent in the large, unphysical tail extending to the left of the main-sequence. This effect is also seen and discussed by Hill *et al.* (1994), who show that these stars should belong in the locus where this tail intersects the main-sequence. Since I am interested in the upper end of the main-sequence, I simply omit these high-error stars from the HRDs, but one should bear in mind the resulting substantial incompleteness below $5 M_{\odot}$. Very

few of the omitted stars have $V < 17.0$.

Massey *et al.* (1995) discuss in detail the effect on placement in the HRD due to errors in both photometry and spectral classification. As can be seen in their Figure 1d, the placement error due to only 0.02 mag in $(B - V)_0$ and $(U - B)_0$ are substantial, due to the sensitivity of the BCs to the colors. As indicated in Paper II, the absolute errors in my photometry are typically 0.03 mag.

Figure 5 also shows a slight transformation error apparent in the locus of the red giant branch. An examination of the transformation (Massey *et al.* 1995) used here, shows a function of the BC vs. $(B - V)_0$ that is a bit too shallow for $1.5 < (B - V)_0 < 2.0$ (see *e.g.*, Flower 1977). Since the red giant branch has little relevance to the current purposes, this transformation inaccuracy is inconsequential.

3.2. Comparison with Classical H II Regions

Figure 5a shows the HRDs for the six superbubble nebulae, and Figure 5b shows that for the one classical H II region, DEM 243 (LH 83). HRDs of other LMC OB associations in classical nebulae have been recomputed by Massey *et al.* (1995) from earlier work: LH 10, LH 117, and LH 118. I have largely followed their transformation prescription above. (LH 117 and 118 are each in separate H II regions that can be examined in more detail in Massey *et al.* 1989). The HRDs in Figure 5a qualitatively reiterate the impression found in Paper II, that the massive star populations enclosed within superbubbles are difficult to distinguish from those found in classical H II regions. The upper mass cutoffs might be marginally lower for the superbubble associations, but LH 83 and LH 118, both in classical nebulae, have cutoffs of only $40 - 60 \mathcal{M}_\odot$.

The similar turnoffs are not that surprising in that the superbubbles have probably developed on a timescale less than that for noticeable cluster evolution of the OB associations. If the shells are $\lesssim 4$ Myr old, there will be little perceptible difference between the upper mass functions of superbubbles vs. classical H II regions, since typically only 1 or 2 stars might have expired in that time interval.

Likewise, the superbubble OB associations do not show a noticeable surplus of evolved, red stars below the main-sequence turnoff. While several clusters in Figure 5a do show one or two such stars, the associations studied by *e.g.*, Massey *et al.* (1995) have similarly shown such occasional evolved stars. This therefore implies that the superbubble H II regions do not harbor extended star formation beyond the burst duration for ordinary OB associations. DEM 50 is the only exception, exhibiting several evolved stars. It may be that some of these are field objects, since the data for DEM 50 includes more than twice as many stars as any other field (Table 3). It is also possible that there is a significant age spread present.

The HRD of DEM 31 appears similar to that of DEM 152 in Paper I, suggesting a two-stage starburst, with a group of stars evolving noticeably to the right of the main sequence around the $10 - 15 \mathcal{M}_{\odot}$ tracks. As discussed in Paper I and Massey *et al.* (1995), errors in spectral classification are small, and will tend to displace a star's position parallel to the main-sequence rather than perpendicular. However, the higher-mass stars on the main-sequence, which represent the younger population, do not appear to be spatially associated, and are randomly scattered about the field. The star formation history for DEM 31 therefore does not suggest triggered star formation in the same way as DEM 152. As a final note of interest, the star that appears to be the most massive in DEM 31 is the WN6-A composite,

Br 5. Since this star is so closely related to O3 If stars (§2.2.1), I used the transformation parameters for O3 If stars to estimate its M_{bol} and T_{eff} . As with any WR star, its position and zero-age mass are uncertain; in Figure 5a, it lies just about on the $120 M_{\odot}$ track (not shown).

4. Initial Mass Functions

The mass functions derived from these H-R diagrams will reveal whether the superbubbles host a different proportion of high to low-mass stars, when compared to classical H II regions. I computed the present-day mass functions (PDMFs) following the procedure described in *e.g.*, Massey *et al.* (1989), summing the numbers of stars between the evolutionary tracks and correcting for the size of the mass bin. Any stars that have evolved away from the main-sequence are omitted from the census, since they would not be members of the same star forming event. The derived mass functions ξ are shown in Figure 7a and b, where

$$\xi(\log m) \propto m^{\Gamma} \quad (2)$$

and the slope

$$\Gamma = \frac{d \log \xi(\log m)}{d \log m} \quad , \quad (3)$$

where m is the stellar mass. The Salpeter (1955) slope corresponds to $\Gamma = -1.35$, with ξ in units here of numbers of stars per logarithmic mass interval per kpc^2 .

Figure 7a and Table 5 show the mass function slopes for the populations projected only interior to the shells, as well as those for the entire fields. The internal populations were selected by visually fitting a circle to the nebular image and selecting the interior stars. Stars in a $15''$ border region along the interior to the fitted circle were excluded. In Figure 7a, the interior mass function is shown by the

squares and solid line, while that of the entire region is shown by the circles and dashed line. The highest-mass, non-empty bin in each association was excluded to derive these mass functions, and no weighting was applied.

In their computation of the initial mass functions (IMFs) of OB associations, Massey and coworkers simply interpret the slope of the PDMF as that of the IMF, arguing that the lack of evolved intermediate-mass stars implies a fairly coeval burst of star formation. Given that the superbubble associations show no qualitative difference in the upper main-sequence or numbers of evolved stars, the slopes in Table 5 should be directly comparable to those obtained in *e.g.*, Massey *et al.* (1995). There are two caveats: (1) assuming these superbubble associations are indeed slightly older, the highest mass bins might be relatively depleted. This could cause a slight, systematic steepening of the derived mass functions, although the exclusion of the highest-mass bin in fitting the mass function slope should alleviate this problem. (2) Since the superbubbles are relatively more extended nebulae than classical H II regions, there will be a higher proportion of field stars present. Without an age correction, there will be a much steeper PDMF for the field stars, due to the relative lifetimes of high and low-mass stars. But even with an age correction, Massey *et al.* (1995) found a much steeper IMF of $\Gamma = -4.1$ for field stars in the LMC. The inclusion of field stars would therefore also steepen the derived slopes for the target clusters, and should be a function of area.

For all of the superbubbles except DEM 106, the slopes for the interior population are flatter than those for the entire field. Although Figure 7a appears to show a relative increase in the numbers of high-mass stars for the interior IMFs, this actually reflects a true decrease in low-mass stars, while adjusted to the smaller area of the interior population. This therefore confirms the effect of field star

contamination, which is also suggested by the steeper slopes for DEM 25 and DEM 50. These two superbubble associations exhibit relatively sparse populations of massive stars on a fairly dense, extended field. For example, the PDMF determined by Massey *et al.* (1995) predicts that about 16% of the stars at $10 \mathcal{M}_{\odot}$ are field stars. Of course, the density of field stars varies considerably across the galaxy, but this rough estimate demonstrates that their numbers are significant in these extended regions.

Within the errors, the IMF slopes for the interior superbubble contents are all in the range of Γ found for other OB associations in the Magellanic Clouds and the Galaxy, which range from $\Gamma = -1.1$ to -1.7 (Massey *et al.* 1995). The slope $\Gamma = -1.3 \pm 0.5$ for DEM 243, the classical H II region in the sample, is also unsurprisingly normal, and provides another data point for comparison. Despite the two effects discussed above, the mass functions within the superbubbles do not appear to deviate significantly from Salpeter (1955). The superbubble shell morphology can therefore be taken as a consequence of normal OB stellar influences.

5. Conclusion

I have provided a census of the most massive stars in this sample of LMC superbubbles, based on spectral classifications presented above and *UBV* photometry presented in Paper II. These data are used to investigate whether superbubble nebulae systematically host a stellar population that is different in any way from ordinary OB associations found in classical H II regions.

The spectral observations included a few interesting, high-mass stars. Among

these are Br 5, whose dominant component is a WN6-A star that belongs to the O3-4 If — WN-A spectral sequence. I also find that the metal emission-line spectrum of the peculiar B1 Iab star, S149, strikingly resembles that of S22 (also in the sample), a well-known B[e] supergiant. Although S149 lacks some of the other characteristics of B[e] supergiants, I suggest that it is a member of this class, whose circumstellar material may be modified by its close companions. High-quality, CCD spectrograms are also presented for a few other interesting stars.

The H-R diagrams derived from the spectroscopic and photometric data do not reveal any differences between the superbubble populations and other OB associations that have been studied in the Magellanic Clouds and the Galaxy. In particular:

(1) The main-sequence turnoffs appear indistinguishable in terms of upper mass limit. This implies that the timescale for superbubble evolution is somewhat shorter than that for noticeable evolution in the stellar population, emphasizing the energetic dominance of the one or two most massive stars.

(2) The superbubble associations do not exhibit larger numbers of evolved stars below the main-sequence turnoff. The star formation events giving rise to these structures are therefore no more extended in duration than those of previously studied OB associations.

(3) The initial mass functions of the superbubble clusters show no systematic variation from those of previously studied OB associations.

In summary, the OB associations found within superbubbles appear to be normal in every respect. Therefore these shell structures are probably the result of normal OB stellar winds and supernovae, and in particular from the very few most

massive stars. Whether every OB association creates such a superbubble, however, may depend on the gaseous environment.

In paper IV, I will model the dynamics of these superbubbles, based on the observed stellar census presented here.

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Table 1. Sample of Superbubbles / OB Associations^a

DEM	Henize	LH	DEM (1950) coords	Diameter (")
25	N185	...	04 54 10.0, -70 04 00	6.2
31	N9	6	04 55 20.1, -67 13 40	7.5
50	N186 CE	...	05 00 11.8, -70 15 49	7.5
106	N30 BC	38	05 13 56.3, -67 30 27	4.4
226	N148 GI	73	05 32 06.0, -68 43 00	4.1
243 ^b	N63 A	83	05 35 27.0, -66 04 26	7.5
301	N70	114	05 43 35.6, -67 52 25	7.8

^aIdentifications: DEM = Davies, Elliott, & Meaburn 1976, N = Henize (1956), LH = Lucke & Hodge (1970).

^bClassical H II region.

Table 2. Photometry for Stars near R67

ID	<i>V</i>	err	<i>B</i> − <i>V</i>	err	<i>U</i> − <i>B</i>	err
D50SW-1	11.741	0.006	0.222	0.009	−0.929	0.009
D50SW-2	13.827	0.015	−0.056	0.077	−1.102	0.102
D50SW-3	14.003	0.002	−0.190	0.003	−1.084	0.004
D50SW-13	16.172	0.007	−0.141	0.011	−0.882	0.017
D50SW-14	16.198	0.065	−0.008	0.158	−0.940	0.196
D50SW-16	16.415	0.012	1.303	0.037	0.229	0.235
D50SW-19	16.442	0.127	−0.023	0.212	...	...
D50SW-34	16.961	0.066	−1.397	0.456	−0.095	0.724
D50SWt-1	11.785	0.005	0.199	0.007	−0.902	0.006
D50SWt-4	14.642	0.051	1.246	0.076	...	...
D50SWt-5	14.560	0.205	−0.877	0.235	−1.035	0.056

Table 3. Characteristic Color Excesses^a

Obj	Good Median	Good Mean	Good n	Spec Median	Spec Mean	Spec n	Total n
D25	0.12	0.13	32	0.11	0.13	10	986
D31	0.08	0.09	79	0.09	0.10	18	1015
D50	0.12	0.15	88	0.12	0.18	9	2392
D106	0.16	0.20	33	0.14	0.22	14	270
D226	0.12	0.14	23	0.16	0.23	8	650
D243	0.11	0.12	48	0.10	0.12	13	282
D301	0.08	0.10	46	0.06	0.10	17	1105

^a $E(B - V)$ computed from all stars with high-quality photometry (see text), and also from the subset with spectral types.

TABLE 4
PARAMETERS OF STARS WITH SPECTRAL TYPES

ID	coords (2000.)	log T_{eff}	M_{bol}	$E(B-V)$	Q	Spec. Type	Other ID ^a
D25SE-2	4 54 01.15 -70 00 43.4	3.57	-4.1	0.07	-1.13	K5 I	
D25NE-1	4 54 01.15 -69 59 47.4	4.31	-7.7	0.04	-0.91	B1: Ib	Sk -70 13
D25NE-2	4 54 00.73 -69 59 46.4	4.56	-7.6	0.14	-0.90	O9 V	
D25NE-3	4 53 50.58 -69 59 45.6	4.40	-6.4	0.09	-0.85	B0.5 V	
D25NE-4	4 53 57.39 -69 58 38.3	4.30	-5.5	0.07	-0.84	B1.5 III	
D25NE-5	4 54 11.89 -69 59 24.7	4.29	-5.8	0.19	-0.66	B2-2.5 Ve	
D25SE-3	4 53 41.18 -70 02 25.2	4.30	-5.3	0.25	-0.55	B1.5 III	
D25SE-4	4 53 44.03 -70 01 52.2	4.29	-5.2	0.16	-0.58	B2: V	
D25NE-8	4 54 17.10 -69 59 17.7	4.29	-4.9	0.13	-0.63	B2:: V	
D25NW-4	4 53 16.23 -69 58 11.4	4.34	-5.4	0.18	-0.82	B1.5-2 V	
D31-2001 ^b	4 55 11.09 -67 11 24.1	4.01	-9.3	0.08	-0.67	B9 Iae	Sk -67 17, R62, S7
D31E-1001	4 55 14.98 -67 11 24.1	4.65	-11.1	0.37	-0.93	WN6-A + early B II-III	Sk -67 18, Br 5
D31W-2	4 54 40.04 -67 13 04.9	4.32	-7.7	0.20	-0.81	B1 III	
D31E-2	4 55 01.29 -67 09 36.8	4.58	-8.4	0.09	-0.87	O8 V	
D31E-4	4 55 16.91 -67 09 54.7	4.29	-6.7	0.10	-0.72	B2 V	
D31E-1002	4 55 15.12 -67 11 24.0	4.32	-6.1	0.03	1.24	early B III	
D31E-6	4 55 03.35 -67 08 58.8	4.58	-7.8	0.08	-0.88	O8 V	
D31E-7	4 55 22.03 -67 11 07.1	4.30	-6.0	0.09	-0.71	B1.5-2 III	
D31E-8	4 55 15.69 -67 09 24.3	4.54	-7.7	0.13	-0.84	O9.5-B0 V	
D31E-10	4 55 02.61 -67 12 11.2	4.40	-7.1	0.22	-0.78	B0.5 V	
D31E-11a	4 55 02.75 -67 09 52.1	4.47	-6.6	0.08	...	B0: V	
D31E-11b	4 55 02.75 -67 09 52.1	4.38	-5.5	0.08	...	B1: V	
D31E-12	4 55 14.65 -67 11 56.6	4.57	-7.4	0.03	-0.78	O8.5 V	
D31W-8	4 54 50.11 -67 11 14.8	4.32	-5.9	0.10	-0.65	B1 III	
D31E-13	4 55 21.32 -67 11 38.7	4.28	-5.8	0.12	-0.57	B2.5 V:	
D31E-14	4 55 37.90 -67 11 26.9	4.34	-5.8	0.03	-0.84	B1.5-2: V	
D31E-18	4 55 24.40 -67 11 54.1	4.54	-6.8	0.09	-0.81	O9.5 V	
D31W-12	4 54 41.04 -67 11 38.5	4.23	-4.9	0.10	-0.44	B3 III	
D31W-13	4 54 39.29 -67 13 21.7	4.29	-5.5	0.14	-0.73	B2 V	
D31W-14	4 54 50.69 -67 11 46.9	4.34	-5.5	0.09	-0.70	B1.5-2: V	
D31E-21	4 55 30.75 -67 11 12.6	4.56	-6.6	0.07	-0.81	O9 V	
D31E-26	4 55 12.34 -67 10 56.7	4.29	-4.8	0.06	-0.66	B2: V	
D31E-32	4 55 05.92 -67 10 50.7	4.38	-5.2	0.07	-0.70	B1: V	
D31E-47	4 55 37.49 -67 11 20.8	4.29	-4.1	0.06	-0.60	B2: V	
D50SW-1	4 59 23.19 -70 11 45.2	4.31	-9.6	0.41	-1.09	B1 Ia[e]	Sk -70 29, R67, S149
D50NW-1	4 59 26.49 -70 08 38.0	4.21	-8.0	0.18	-0.84	B3 Ia	Sk -70 30
D50SE-1	5 00 10.33 -70 11 09.8	4.56	-9.2	0.12	-0.88	O9 V	Sk -70 32
D50NE-1a	4 59 54.73 -70 08 07.4	4.57	-7.8	0.12	...	O8.5: V	Sk -70 30a, S152
D50NE-1b	4 59 54.73 -70 08 07.4	4.48	-7.7	0.12	...	B0: IIIe	Sk -70 30a, S152
D50SE-3	5 00 28.71 -70 13 52.5	3.70	-4.9	0.12	1.32	G3 I	
D50SW-3	4 59 19.36 -70 11 26.8	4.61	-8.6	0.13	-0.95	O6.5 V((f))	
D50SE-4	5 00 03.75 -70 14 05.7	4.23	-6.2	0.15	-0.49	B3 III	
D50S-5	4 59 48.47 -70 12 20.3	4.12	-5.5	0.08	-0.41	B7 III	
D50NE-8	5 00 19.20 -70 08 41.0	4.34	-5.4	0.14	-0.73	B1.5 V	
D50NE-10	4 59 57.07 -70 09 39.0	4.29	-5.1	0.16	-0.83	B2:: Ve	
D50SW-15	4 59 00.43 -70 13 20.6	4.47	-5.8	0.22	-0.66	O9.5-early B V	

TABLE 4—Continued

ID	coords (2000.)	log T_{eff}	M_{bol}	$E(B - V)$	Q	Spec. Type	Other ID ^a
D106A-1	5 14 02.02 -67 27 06.9	4.01	-7.7	0.11	-0.59	B9 Ia	Sk -67 67
D106-1 ^c	5 13 53.13 -67 26 54.6	4.46	-10.7	0.46	-0.68	B0-0.5 I[e]	Sk -67 64, S22
D106-2	5 13 54.48 -67 27 27.0	4.31	-7.9	0.13	-0.84	B1 Ib	
D106-4	5 13 49.16 -67 26 47.5	4.49	-9.3	0.41	-0.89	O9.5 Ib	
D106-5	5 13 41.97 -67 27 13.9	4.56	-8.8	0.22	-0.88	O8 III((f))	
D106-7	5 13 56.25 -67 28 38.5	4.54	-8.0	0.14	-0.87	O9.5 V	
D106-8	5 13 43.28 -67 25 27.7	4.61	-8.0	0.14	-0.89	O6.5 V((f))	
D106-9	5 14 07.25 -67 26 28.4	4.60	-7.9	0.23	-0.87	O7 V((f))	
D106-10	5 13 50.96 -67 27 17.8	4.34	-6.0	0.14	-0.80	B1.5: V +neb	
D106-11	5 14 03.60 -67 26 01.2	4.34	-6.2	0.23	-0.78	B1.5 V	
D106-12	5 13 44.47 -67 27 31.7	4.38	-6.0	0.15	-0.78	B1 V	
D106-13	5 14 03.15 -67 26 33.4	4.54	-7.1	0.26	-0.66	O9.5 V	
D106-14	5 13 54.22 -67 27 19.1	4.38	-5.6	0.14	-0.82	B1-1.5 V	
D106-16	5 13 42.71 -67 27 07.0	4.27	-4.6	0.12	-0.76	B3: V	
D106-18	5 13 46.67 -67 26 32.0	4.56	-7.1	0.41	-0.81	O9:: V	
D106-24	5 14 00.57 -67 28 15.5	4.56	-5.9	0.12	-0.81	O9: V:	
D226-5	5 31 55.42 -68 40 08.7	4.61	-10.1	0.50	-1.31	O6.5 V((f))	
D226-6	5 32 01.13 -68 40 22.4	4.57	-8.6	0.23	-0.52	O8.5 V	
D226-9	5 31 55.82 -68 40 16.3	4.40	-6.4	0.16	-0.59	B0.5: V	
D226-10	5 31 59.56 -68 40 36.6	4.57	-7.2	0.15	-0.69	O8.5 V	
D226-11	5 31 49.21 -68 41 20.5	3.66	-3.8	0.14	0.62	G8 I	
D226-13	5 31 54.96 -68 40 46.8	4.47	-6.5	0.16	-0.65	B0 V	
D226-18	5 32 13.91 -68 39 35.9	4.54	-6.4	0.26	-0.66	O9.5 V	
D226-21	5 31 59.92 -68 40 41.7	4.54	-6.0	0.15	-0.61	O9.5-B0: V	
D226-22	5 32 10.34 -68 39 05.7	4.47	-6.1	0.35	-0.66	B0:: Ve	
D226-23	5 31 57.25 -68 42 24.4	4.34	-4.6	0.12	-0.59	B1.5-2: V	
D243-1a	5 35 41.27 -66 02 36.9	4.46	-8.6	0.11	...	B0 Ib	Sk -66 163
D243-1b	5 35 41.27 -66 02 36.9	4.52	-8.3	0.11	...	O9.5 III:	
D243-2	5 35 32.26 -66 02 38.0	4.60	-9.4	0.10	-0.88	O7 V((f))	
D243-3	5 35 35.21 -66 01 45.9	4.52	-9.0	0.23	-0.89	O9.5 III	
D243-4	5 35 44.57 -66 03 21.0	4.32	-6.7	0.09	-0.84	B1 III	
D243-5	5 35 36.27 -66 01 14.8	4.56	-8.0	0.03	-0.64	O7: If +neb	
D243-6	5 35 36.68 -66 02 02.9	4.58	-8.3	0.08	-0.85	O8 V	
D243-7	5 35 32.08 -66 01 29.2	4.52	-7.8	0.12	-0.88	O9.5 III	
D243-9	5 35 27.73 -66 02 38.3	4.56	-7.8	0.11	-0.87	O9 V	
D243-10	5 35 30.55 -66 02 48.0	4.38	-6.8	0.15	-0.92	B1:: V +neb	
D243-12	5 35 54.18 -66 03 30.2	4.58	-8.0	0.19	-0.91	O8 Ve	
D243-14	5 35 46.81 -66 02 30.6	4.40	-6.3	0.08	-0.81	B0.5 V	
D243-15	5 35 40.73 -66 01 14.8	4.54	-7.2	0.13	-0.84	O9.5 V +neb	
D243-16	5 35 31.24 -66 02 36.5	4.56	-7.1	0.10	-0.86	O9 V	
D243-17	5 35 36.33 -66 01 15.5	4.25	-5.0	0.11	-2.20	B2.5: III-V	
D243-18	5 35 34.91 -66 02 07.9	4.56	-6.8	0.09	-0.84	O9 V	
D243-35	5 35 28.04 -66 03 15.2	4.34	-4.5	0.07	-0.68	B1.5: V	
D301-1005 ^d	5 43 08.33 -67 50 52.5	4.54	-7.9	0.08	-0.86	O9.5 V	lmc2-703
D301NE-1	5 43 26.94 -67 48 39.4	3.68	-6.3	0.08	1.30	G5 I	
D301SW-1a	5 43 15.50 -67 51 09.7	4.56	-8.9	0.08	...	O8 III(f)	Sk -67 250, lmc2-682
D301SW-1b	5 43 15.50 -67 51 09.7	4.56	-8.2	0.08	...	O9: V	Sk -67 250, lmc2-682
D301SW-3	5 43 12.87 -67 51 16.3	4.65	-9.0	0.08	-0.84	O3 If*	lmc2-675

TABLE 4—Continued

ID	coords (2000.)	$\log T_{\text{eff}}$	M_{bol}	$E(B - V)$	Q	Spec. Type	Other ID ^a
D301NW-4	5 43 17.70 -67 50 36.6	4.63	-9.2	0.26	-0.93	O5: III:e	
D301NW-8	5 43 15.98 -67 49 51.2	4.60	-7.9	0.06	-0.82	O7 V((f))	lmc2-755
D301NW-9	5 43 24.60 -67 50 31.1	4.54	-7.4	0.05	-0.78	O9.5 V	lmc2-724
D301SE-3	5 43 58.15 -67 52 11.0	3.79	-4.3	0.29	-0.68	F8 I	
D301NW-10	5 43 20.56 -67 49 44.6	4.34	-5.7	0.05	-0.62	B1.5-2 Ve	lmc2-759
D301NE-4	5 43 59.19 -67 49 54.6	4.28	-5.5	0.07	-0.55	B2.5 V	
D301NW-11	5 43 18.08 -67 50 59.7	4.29	-5.4	0.03	-0.70	B2 V	lmc2-696
D301NE-5	5 43 34.85 -67 50 40.9	4.40	-6.5	0.22	-1.00	B0.5 V	lmc2-718
D301SE-6	5 43 46.32 -67 54 40.8	4.30	-5.4	0.16	-0.73	B1.5 III	
D301NW-12	5 43 23.79 -67 50 21.5	4.47	-6.0	0.03	-0.78	B0 V	lmc2-733
D301NW-13	5 43 06.71 -67 49 56.0	4.38	-5.5	0.04	-0.73	B1 V	lmc2-747
D301NW-14	5 43 23.90 -67 47 48.8	4.29	-5.1	0.09	-0.60	B2-2.5 Ve	
D301SW-9*	5 43 10.03 -67 52 21.3	4.34	-5.3	0.07	-0.75	B1.5: V	lmc2-627
D301NW-15	5 43 12.25 -67 50 52.8	4.34	-5.1	0.03	-0.73	B1.5 V	lmc2-702
D301NE-9	5 43 59.77 -67 50 46.9	3.70	-3.6	0.25	0.16	G3 I	
D301NE-10	5 43 51.08 -67 49 57.2	4.29	-5.1	0.16	-0.73	B2-2.5 Ve	
D301SW-11	5 42 50.72 -67 52 11.7	4.28	-5.1	0.19	-0.48	B2.5 V	
D301SW-12	5 42 43.55 -67 52 03.1	3.51	-4.3	0.03	-0.22	M3 I: + A	
D301NW-18*	5 43 11.13 -67 50 40.3	4.47	-5.7	0.10	-0.74	B0 V	lmc2-716

^aBr = Breysacher (1981), R = Feast *et al.* (1960), S = Henize (1956), Sk = Sanduleak (1969), lmc2 = Massey *et al.* (1995).

^bBased on photometry of Ardeberg *et al.* (1972).

^cBased on spectral type (but not photometry) of Zickgraf *et al.* (1986).

^dBased on photometry (but not spectral type) of Massey *et al.* (1995).

^eBased on spectral types (but not photometry) of Massey *et al.* (1995).

Table 5. IMF slopes

Obj	$\Gamma(\text{in})$	$\Gamma(\text{All})$
D25	-1.8 ± 0.4	-3.3 ± 1.1
D31	-1.7 ± 0.4	-2.0 ± 0.5
D50	-1.7 ± 0.3	-2.0 ± 0.3
D106	-1.6 ± 0.2	-1.6 ± 0.3
D226	-1.3 ± 0.4	-1.7 ± 0.3
D301	-1.0 ± 0.1	-1.3 ± 0.1
D243	...	-1.3 ± 0.5

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Fig. 1a.— $H\alpha$ images of the superbubbles, from Kennicutt & Hodge (1986). North is up and east to the left. Each image is $16' 40''$ square, which corresponds to 230 pc at the LMC's distance.

Fig. 1*b*.— $H\alpha$ image of DEM 243, a classical H II region. Scale is same as in 1*a*.

Fig. 2.— Spectra of Br 5 and R62, both in the nebula DEM 31. The former is a composite WN6-A + early B II-III, with line identifications for the Wolf-Rayet component shown below the spectrum, and those for the B component shown above. R62 is classified as B9 Iae. (The small emission feature near $\lambda 4686$ in R62 is spurious.)

Fig. 3.— Spectra of the emission-line stars S22 and S149, in the nebulae DEM 106 and DEM 50, respectively. S22 is a B[e] supergiant. Emission lines due to Fe II are identified with solid lines, while those due to [Fe II] are indicated by dotted lines. S149 also shows an underlying B1 Iab spectrum, whose lines are identified along the bottom.

Fig. 4.— Region of stars around S149 (D50SW-1), taken from the short, 300s *V* exposure. Stars labeled with “t” correspond to photometry from this frame, while those without correspond to photometry on the deep frame. North is up, east to the left.

Fig. 5a.— H-R diagrams for the OB associations of the superbubbles. Solid circles show data with spectral classifications; solid triangles are components of spectroscopic binaries, or stars with classifications but photometry from the literature; open circles are data with $\sigma_{B-V} < 0.07$ and $\sigma_{U-B} < 0.07$; and crosses are data with poorer photometry or redder colors (see text). The stellar evolutionary tracks of Schaerer *et al.* (1993) are overlaid, with the corresponding stellar mass identified in $M_{\odot}$.

Fig. 5*b*.— H-R diagram for the classical H II region, DEM 243. Symbols are as in Figure 5*a*.

Fig. 6.— H-R diagram for DEM 25, the same as that in Figure 5a, but including data with errors $\sigma_V > 0.05$ and $\sigma_{B-V} > 0.07$.

Fig. 7a.— Initial mass functions for the superbubbles. Circles and dashed lines represent the IMF for the entire fields, and squares and solid lines represent the IMF for the population interior to the superbubbles.

Fig. 7b.— Initial mass function for the classical H II region DEM 243.

Appendix E

THE DYNAMICS OF SUPERBUBBLES IN THE LARGE MAGELLANIC CLOUD

To be submitted for publication in *The Astrophysical Journal*.

The Dynamics of Superbubbles in the Large Magellanic Cloud

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ABSTRACT

Based on the stellar populations observed within this sample of LMC superbubbles, I use a numerical version of the standard Weaver *et al.* (1977) bubble model to investigate the shell dynamics. The results fall into two distinct categories corresponding to a subset of objects for which the observed expansion velocity is too large for the observed shell radius (“high-velocity” superbubbles), and a subset of objects which appears more dynamically consistent with the model (“low-velocity superbubbles”). Both subsets of objects imply an overestimate in the shell growth rate equivalent to an overestimate in input power by up to an order of magnitude. The high-velocity objects exhibit X-ray evidence of supernova activity, suggesting that the dynamical discrepancy is due to acceleration by SNR impacts.

Subject headings:

1. Introduction

In recent years, we have come to better appreciate the profound interaction between massive stars and the interstellar medium (ISM). A particular realization that has emerged is the dominance of strong stellar winds and supernovae in the energetics and structuring of the ISM (*e.g.*, Abbott 1982), and the consequences for star formation and galaxy evolution. The resultant superbubbles and giant shells around OB associations and starbursts are therefore the nexus in this cycle between massive stars and their environment. Furthermore, the evolution of these superbubbles is also a critical component in determining the amount and distribution of the hot interstellar component.

For the last two decades, we have used the standard model of Weaver *et al.* (1977) and Castor, McCray, & Weaver (1975) to interpret shell structures. While a few extensions have been contributed over the years to explore varying physical details (*e.g.*, McKee *et al.* 1984; Mac Low & McCray 1988; Koo & McKee 1992a, b), the basic “Weaver model” remains unmodified. Indeed, there has been little opportunity to test the model’s dynamical predictions due to loose constraints on the input parameters. The input wind power, in particular, has been difficult to constrain without detailed knowledge of the parent stellar population. Although this fact has long been appreciated (*e.g.*, Braunsfurth & Feitzinger 1983; Rosado 1986), detailed censuses of OB associations require individual spectral classifications, and have not become available until more recently (*e.g.*, Massey *et al.* 1989a, b).

However, detailed studies of OB associations in the Magellanic Clouds are now routinely possible with CCD photometry and slit or multi-fiber spectroscopy. Similar studies are also possible in the Galaxy, especially with the advances in infrared imaging and spectroscopy. With specific knowledge of the massive star population within any given superbubble, it is possible to constrain the input wind power and also the age of the system. Two studies of OB associations in the Galaxy, Cygnus OB1 (Saken *et al.* 1992) and Orion OB1 (Brown *et al.* 1995), have been used in conjunction with the Weaver model, to examine the surrounding superbubbles. Although these studies only used analytic formulations, both found a discrepancy with the model such that the shell radius appeared too small to be consistent with the observed stellar population.

The only other aspect of the model that has been tested is the prediction of soft X-ray emission, with mixed results. Chu & Mac Low (1990) and Wang

& Helfand (1991) found a majority of superbubbles with X-ray luminosities an order of magnitude in excess of that predicted by the Weaver model. Both papers suggested that supernova remnants (SNRs) striking the shell wall could explain this X-ray excess. More recently, Arthur & Henney (1995) have suggested mass-loading from clumps in a post-shock SNR flow as an alternative explanation. On the other hand, Martin & Kennicutt (1995) suggest mass-loading from pre-existing clumps in the ambient medium to explain X-ray excess in a supergiant shell. Does the X-ray luminosity signal an energy loss mechanism, and therefore imply a discrepancy with the adiabatic Weaver model? Or is the adiabatic model essentially correct, with occasional disturbances due to supernovae (SNe)? Chu *et al.* (1995) report new observations of superbubbles with limits on X-ray luminosities that are consistent with the Weaver model, demonstrating that not all superbubbles have X-ray excesses.

With the role that the supershell phenomenon plays in galactic structure and evolution, it is vital to establish the relevance of the Weaver model and understand the dominant dynamical processes. The current study is part of a comprehensive project to examine a sample of superbubbles in detail, both with regard to the stellar content and the nebular properties, with the aim of these objectives. Given the obscuration, distance, and membership uncertainties in Galactic OB studies, I have turned my attention to the clusters of the Large Magellanic Cloud (LMC). This neighboring galaxy presents a wealth of superbubbles with an unobscured view of both the nebular properties and the resident OB associations. The first paper of this series (Oey & Massey 1995, hereafter Paper I) presented a numerical version of the Weaver model, which was applied to the superbubble DEM 152 and its stellar contents. This numerical investigation reiterated the dynamical discrepancy with the standard model found by Saken *et al.* (1992) and Brown *et al.* (1995), who

used the analytic formulations. A second paper (Oey 1995a, Paper II) presented *UBV* photometry of the remaining 7 superbubbles in the sample, along with corresponding photometry for 5 classical H II regions for comparison. Oey (1995b, Paper III) examined the stellar contents of the superbubble sample, presenting spectral classifications, H-R diagrams, and mass functions. This fourth paper in the series will now use these stellar data to examine the dynamics of all the superbubbles and compare the Weaver model with the observed nebular kinematics. I will speculate on some consequences of the results found here in a fifth paper (Oey 1995c). One final superbubble, DEM 192, is a somewhat more complex and interesting region, and will be presented in a separate paper (Oey 1995d).

2. Observational Parameters of the Superbubbles

The sample of superbubble H II regions is listed in Table 1, which provides identifications for the nebulae and stellar associations. The availability of nebular kinematic data was a primary selection criterion for the sample, and most objects also have at least limited X-ray observations. The $H\alpha$ images of these superbubbles can be found in Paper III.

Table 1 also provides the radius R_s , shell thickness, ΔR , and shell density n_s for the superbubbles. These have all been determined from the Kennicutt & Hodge (1986) digitized $H\alpha$ survey. As in Paper I, R_s represents the location of the shock at the outer edge of the shell. The shell densities were also determined as in Paper I, from the emission measures $EM = \int n_e^2 dl$, where l is the column depth of emitting material and n_e is its electron density. The EM through both the shell rim and center were used to estimate n_e for each superbubble. Assuming $n_H = n_e$, the shell density n_s corresponds to n_e .

Kinematic data for these superbubbles were compiled from a variety of sources, as shown in Table 1. One uniform dataset with observations for most of the objects, are the echelle observations taken by Chu & Kennicutt (1995), who kindly provided access to their data. Additional echelle data for DEM 25 and DEM 31 were very kindly obtained and reduced by S. Points, R.C. Smith, and Y.-H. Chu in January of 1995. Both these sets of echelle data were observations of $H\alpha$ taken at the CTIO 4-m. telescope. The remaining references for nebular velocities in Table 1 are from Fabry-Perot observations, mostly by Rosado and her Marseille colleagues; the only exceptions are Blades *et al.* (1980) and Dopita *et al.* (1981), who obtained kinematic data for DEM 301 with a conventional spectrograph. There are often conflicting reports in the literature for the shell expansion velocities v_s . For example, the extreme case of DEM 301 has measurements of v_s ranging from 23 km s^{-1} (Lasker 1977) to 70 km s^{-1} (Rosado *et al.* 1981). DEM 25 shows a similar range in reported kinematics between the same groups of authors. Much of this discrepancy can be explained by the different sensitivity and assumptions about velocity structure used in the different analyses, so it is important to examine how individual papers derive their reported values. Objects whose expansion velocities are marked with “:” have complex velocity structures whose v_s is not simple to assign. The shell expansion velocities given in Table 1 are best estimates based on the various available observations.

3. Superbubble Modeling

The census of the most massive stars in these superbubbles has been examined in detail and reported in Papers II and III. I will now use these data to estimate the input wind power L_w , to the superbubbles as a function of time t . These $L_w(t)$

and the observed nebular parameters can then be used to model the evolution of the superbubbles with the Weaver model code presented in Paper I. The $L_w(t)$ are estimated for individual stellar models computed by Schaerer *et al.* (1993), corresponding to LMC metallicity (see Paper I for details). It is then possible to sum the total $L_w(t)$ for a given stellar population.

The Weaver model code used in Paper I describes the evolution of an adiabatic, pressure-driven bubble with radiative outer shock. The evolution of $R_s(t)$ and $v_s(t)$ is then given by the solution of:

$$\frac{dR_s}{dt} = v_s \quad , \quad (1)$$

$$\frac{dv_s}{dt} = \frac{4\pi R_s^2}{M_s} (P_i - P_e - \rho_0 v_s^2) \quad , \quad (2)$$

and

$$\frac{dU}{dt} = L_w - P_i \frac{dV}{dt} \quad , \quad (3)$$

where M_s is the shell mass, P_i and P_e are the internal and external pressure, ρ_0 is the ambient mass density, U is the internal energy, and V is the bubble volume. These equations are then numerically integrated for the given input power $L_w(t)$. Paper I provides the details regarding the model and computation of $L_w(t)$.

Table 2 lists the numbers of massive stars currently observed in each of the superbubbles (Paper III), distributed into bins represented by the masses of Schaerer's *et al.* (1993) stellar models. Since it is likely that 1 or 2 of the most massive stars have already exploded as SNe in at least some of these associations, Table 2 also shows the original stellar population predicted by a Salpeter (1955) initial mass function (IMF). As found in Paper III, all of the resident OB associations have IMF slopes similar to Salpeter, within the errors.

The superbubble evolution models resulting from these observed stellar

populations fall into two categories. The first category includes objects which exhibit the same dynamical discrepancy with the Weaver model that was found in Paper I for DEM 152; as discussed at length in that paper, the observed shell expansion velocity for DEM 152 is a factor of two higher than predicted by the model, and there is no simple way to reconcile the model and observations. However, in the second category of models presented here, the shell parameters are in fairly reasonable agreement with predictions. These two categories of models are shown in Figures 1 and 2. The figures show the total $L_w(t)$ (long-dashed lines) from the tabulated current stellar populations (Table 2), assuming a coeval star formation event. The resulting predicted evolution of the superbubble radius $R_s(t)$ and expansion velocity $v_s(t)$ are shown with the continuous solid and short-dashed lines, respectively. The observed R_s and v_s (Table 1) are also indicated, by the horizontal solid and short-dashed line segments. The scale for the ordinate is logarithmic for L_w , in $10 \log(L_w/10^{35}) \text{ erg s}^{-1}$, whereas for R_s and v_s it is linear, in pc and km s^{-1} respectively. The form of L_w is similar for all the stellar models: it consists primarily of a H-burning phase with steadily increasing wind power, followed by a sudden decrease to a red supergiant and/or luminous blue variable phase, and ending with the SN explosion. The 60 and 85 $\mathcal{M}_\odot$ models include a powerful Wolf-Rayet phase before the SN. Keeping in mind this form of the wind power evolution, one can discern in the figures the individual contributions to L_w by the various stellar mass bins. The stellar data also constrain the age or time period during which we are observing the superbubble systems, in that we must be seeing them before the present stars expire as SNe. This “observation window” is denoted by the extent of the horizontal lines indicating the observed parameters.

3.1. A Dynamical Discrepancy: SN Impacts

3.1.1. Dynamical Evidence

It is clear that the models for DEM 25, 50, and 301, in the left column of Figure 1, are not consistent with the observed nebular radius and expansion velocities. In particular, the observed v_s are all at least a factor of two higher than predicted, for times corresponding to the observed R_s , so I will refer to these objects as “high-velocity” superbubbles. This is once again, the same discrepancy found in Paper I for DEM 152, and found by Saken *et al.* (1992) and Brown *et al.* (1995) for the Galactic superbubbles around Cygnus OB1 and Orion OB1. The models in Figure 1 assume a constant ambient density, such that when the shell grows to the observed R_s , it will also attain the observed shell density n_s . As discussed in Paper I, errors in the assumed density cannot reconcile the models with the observations because of the coupling between R_s and v_s through equation 1. An increase in v_s therefore requires a corresponding increase in R_s , which will only widen the discrepancy between the two at any given time. There is no simple way to account for the high shell velocity in view of the small radius. In Paper I, we also used the code to explore the possibility of ambient density gradients, which also turned out to worsen the problem.

In contrast to the high-velocity superbubbles, the models for DEM 31, 106, and 226, shown in Figure 2, are in much better agreement with the observed shell parameters. For these “low-velocity” objects, v_s is usually less than a factor of 2 discrepant at the observed R_s , and more importantly, the observed expansion velocity is actually *less* than that predicted for two of the three objects, rendering the discrepancy in the opposite sense of the high-velocity objects. It is therefore possible to explain these less prominent disagreements by invoking errors in the

input wind power and/or assumed ambient density, as we shall see below. These superbubbles demonstrate that, with some adjustment in these parameters, the nebular kinematics *can* be consistent with the Weaver model on a detailed level, for at least some objects.

For the high-velocity objects, Paper I suggested three possibilities to explain the discrepantly small observed R_s and high v_s : (a) the ambient density has a non-spherical geometry, causing a non-spherical velocity structure such as an incipient chimney; (b) the form of the input $L_w(t)$ is substantially different; and (c) a SN blastwave(s) struck the shell, causing acceleration, in conjunction with an energy sink mechanism that inhibits shell growth. The high-velocity superbubbles examined here all have much more spherical morphologies (see images in Paper III) compared to the system studied in Paper I (DEM 152), hence (a) appears to be a less likely explanation. For (b), the most credible possibility is an alteration of the stellar population, or non-coeval age distribution for the stars. Paper I demonstrated that this is highly unlikely to resolve the problem; however, it is worth reexamining this possibility for these new objects.

The models in the right column of Figure 1 are the same as those on the left, but now including the few, additional high-mass stars predicted by a Salpeter IMF (Table 2). The inclusion of these stars greatly narrows the observation window, since the minimum age of the superbubble is now also constrained by the absence of the inferred stars. The models including these stars confirm the finding in Paper I, that the inclusion of additional high-mass stars cannot reconcile the models with the observations.

I shall now relax the assumption of coeval star formation. Shull & Saken (1995) show that differences in the star formation rate will significantly affect

the form of the input power with time, even during the stellar wind-dominated period. The H-R diagrams for DEM 25 and DEM 50 (Fig. 5 in Paper III) show the presence of one or two noticeably evolved, high-mass stars to the right of the main sequence. The models in Figure 1 are therefore not strictly compatible with the observations, since they assume that the entire population was born simultaneously (provided that the evolved stars are not foreground or background field stars). Schaerer's *et al.* (1993) evolutionary models indicate an age of 9.12 Myr for the evolved $20 M_{\odot}$ star in DEM 25. The left side of Figure 3 now shows the superbubble model for DEM 25, assuming this $20 M_{\odot}$ star was born 6 Myr before the rest of the currently observed stars. Similarly, the H-R diagram for DEM 50 shows one $20 M_{\odot}$ star and one $40 M_{\odot}$ star, with inferred ages of 9.13 and 4.82 Myr, respectively. Figure 3 also shows the superbubble model for DEM 50, with the $20 M_{\odot}$ star born at $t = 0$, followed by the $40 M_{\odot}$ star at $t = 4.31$ Myr, and finally the remainder of the currently observed stars at $t = 6$ Myr. It is apparent in Figure 3 that changing the star formation sequence also cannot resolve the discrepancy with the Weaver model. In particular, the shell expansion velocity cannot be reproduced, especially while maintaining the observed R_s . The models in Figure 3 do not include the additional, predicted high-mass stars, but since R_s is already within the observed range during the observation window, any additional high-mass stars would clearly cause R_s to blow up far beyond the observed value, especially if it were possible to match v_s . This confirms the results in Paper I, that changing the stellar population and star formation sequence cannot reconcile the observations of the shell kinematics to the Weaver model.

The remaining possibility for explaining the dynamical discrepancy is therefore (c), that a SN blastwave has struck the superbubble shell, accelerating it, while some factor simultaneously inhibits the growth of the shell. Although the $L_w(t)$

formulated here do include SN explosions, these are simply treated as enhancements in the continuous wind injection. As discussed in Paper I, this implies that the SN energy is thermalized at the inner, reverse shock, whereas in reality, the supersonic blastwave could reach the shell. It is clear in Figure 1 that the inferred high-mass stars that presumably lead to these SNe should cause all the superbubbles to grow much larger than is currently observed. An additional factor is therefore required to reduce the pre-SN growth. Although this dual-process nature of option (c) seems a bit more awkward, I show below in §3.2 that evidence is pointing in this direction.

3.1.2. Observational Evidence for SNR Impacts

As mentioned above, Chu & Mac Low (1990) and Wang & Helfand (1991) found an excess in the observed X-ray luminosities of several superbubbles. Both papers suggested that the excess emission is due to SNRs striking the shell walls. Chu & Mac Low (1990) demonstrated numerically that such an impact can easily provide an order of magnitude enhancement in the X-ray luminosity, although the specific increase is quite sensitive to the distance of the SN from the shell and the detailed density structure within the superbubble and shell. In the meantime, Chu *et al.* (1995) have also identified a number of superbubbles which do not display excess X-ray emission, and have luminosity limits consistent with the predictions of the Weaver model. If the X-ray bright objects are explained by SNR impacts, the X-ray dim objects would presumably be superbubbles with no recent SNR heating.

Table 3 shows the observed X-ray luminosities of the superbubbles in the sample, divided into the high-velocity objects that are dynamically inconsistent with the Weaver model as found in the preceding section, and low-velocity objects

that appear to be dynamically consistent with the model. Without exception, Table 3 shows that the two dynamical categories of superbubbles correspond exactly to the X-ray bright and X-ray dim categories. Among the X-ray bright superbubbles, DEM 301 was detected by *EINSTEIN* and appeared in the Chu & Mac Low (1990) and Wang & Helfand (1991) investigations reporting X-ray excess in superbubbles. *ROSAT* luminosities for DEM 25 and DEM 50 have been kindly provided by K. Dennerl, and Table 3 shows that these superbubbles also have X-ray luminosities $L_x > 1 \times 10^{35} \text{ erg s}^{-1}$. In the X-ray dim category, DEM 31 and 106 both appeared in the Chu *et al.* (1995) *ROSAT* study of X-ray dim superbubbles, and *ROSAT* observations of the area including DEM 226 visually show no evidence of X-ray detection (Y.-H. Chu, private communication).

The X-ray luminosity L_x in the 0.1–2.4 keV *ROSAT* bandpass is predicted by

$$L_x = 6.6 \times 10^{27} n_0^{10/7} R_s^{17/7} v_s^{16/7} \text{ erg s}^{-1} \quad (4)$$

(Chu *et al.* 1995), assuming a metallicity of 0.4 relative to solar. Approximating that a constant original ambient density n_0 has been swept into a shell of thickness ΔR , it is possible to infer n_0 by

$$n_0 \simeq 3 \left(\frac{\Delta R}{R_s} \right) n_s \quad . \quad (5)$$

However, equation 4 is derived directly from the Weaver model's analytic expressions. Since these expressions are not valid for the high-velocity superbubbles, the predicted L_x derived from equation 4 will be grossly overestimated due to the much larger observed value of v_s relative to R_s in these objects.

For the high-velocity objects, X-ray predictions consistent with the Weaver model can be made by estimating the value for v_s that would be expected, had these high-velocity superbubbles followed the model evolution. Based on the

models on the right side of Figure 1, Table 3 also shows the predicted v_s for the observed R_s of the high-velocity superbubbles. Note that these v_s are still likely to be overestimates, since the predicted shell radii grow much faster than the observations imply (Figure 1). For the high-velocity superbubbles, the expected X-ray luminosities based on these predicted expansion velocities are shown in Table 3, along with the derived ambient densities and predicted v_s . For the low-velocity objects, L_x is computed from the observational v_s , and also tabulated in Table 3.

The values of L_x based on the expected values of v_s imply an X-ray enhancement in the high-velocity superbubbles, contrasting with the X-ray dim objects. While adoption of the predicted v_s vs. the observed v_s renders the calculation of L_x rather speculative, it is nevertheless meaningless to use the observed v_s in equation 4 for these high-velocity objects, since the kinematics have diverged from the Weaver model. Regardless of the predicted luminosities, however, the observed values of L_x in Table 3 show a correspondence with the dynamical partition.

Table 3 also lists the [S II]/H α ratios for the sample. Most of these ratios were measured by Lasker (1977). There are no measurements for DEM 106 and DEM 226, but the large-scale, narrow-band images of the LMC taken by Lasker (1979) show that the [S II]/H α ratio for these objects is less than that for DEM 301, and perhaps similar to that for DEM 31. The [S II]/H α ratios in Table 3 also fall neatly into the bimodal partition: objects with [S II]/H $\alpha \gtrsim 0.5$ correspond to the high-velocity, X-ray bright superbubbles, while the low-velocity, X-ray dim superbubbles exhibit lower values. The high [S II]/H α ratios again suggest recent shock heating, plausibly by SNRs, in the high-velocity superbubbles.

Previously studied superbubbles also fit these patterns. DEM 152, as shown in Paper I, is also a high-velocity ($v_s \sim 35 - 40 \text{ km s}^{-1}$), X-ray bright object. The mean [S II]/H α ratio from 28 measurements of the main shell reported by Hunter (1994) is 0.46. Similarly, the Orion-Eridanus X-ray enhancement was one of the earliest identifications of X-ray emission from a superbubble (Reynolds & Ogden 1979), being linked to the Orion OB 1 association. The shell turns out to have a high expansion velocity ($v_s \sim 30 - 40 \text{ km s}^{-1}$) and is also a dynamically discrepant object (Brown *et al.* 1995). Burrows *et al.* (1993) and Reynolds & Ogden (1979) have already suggested that its X-ray emission can be explained by a wind-blown bubble with possible reheating by SNe. If the hot gas is centered on the Orion OB 1 association (though its centroid could be nearer), the inferred $L_x = 6.3 \times 10^{35} \text{ erg s}^{-1}$ (Burrows *et al.* 1993) in the 0.1–1.0 keV *HEAO-1* A-2 bandpass. This luminosity is already well within the range of X-ray bright objects, even without correcting to the broader 0.1–2.4 keV *ROSAT* bandpass.

There is thus a clear correspondence between the strong X-ray and [S II] emission, and the high-velocity superbubbles whose dynamics are inconsistent with the standard Weaver model. Likewise, the superbubbles that show no signatures of SN activity remain consistent with the model. This is strong testimony supporting the hypothesis of SNR impacts to explain the deviations from the model. The discrepantly high expansion velocities would then result from acceleration due to the SNR collision with the shell. From 2-D simulations of such collisions, Tenorio-Tagle *et al.* (1991) find that the shells gain a kinetic energy contribution of $0.1 - 0.3 E_{sn}$ (Franco *et al.* 1991), where E_{sn} is the supernova energy, $\sim 1 \times 10^{51} \text{ erg}$. According to this estimate, an SNR uniformly colliding with a $10^4 \mathcal{M}_\odot$ shell with an initial $v_s \sim 15 \text{ km s}^{-1}$ yields a new expansion velocity of $\sim 47 \text{ km s}^{-1}$ (Paper I). For the high-velocity superbubbles, which have shell masses ranging

from $1 - 3 \times 10^4 \mathcal{M}_\odot$, their observed $25 - 60 \text{ km s}^{-1}$ range in v_s is easily consistent with these estimates, especially given that the acceleration is naturally dependent on the specific geometry and other parameters. It is clear that the observations are energetically consistent with SNR acceleration.

3.2. A Scalar Discrepancy

Returning now to the low-velocity superbubbles, Figure 2 shows that the observed expansion velocities are actually higher than predicted for two of the three objects. The left column of Figure 4 shows the models for the low-velocity superbubbles with L_w reduced by a factor of 10. For DEM 106 and DEM 226, the observational parameters are now completely consistent with the models, both in terms of v_s and R_s simultaneously agreeing, and furthermore agreeing within the permitted observation window. These models demonstrate the possible dynamical validity of the Weaver model, although a scalar adjustment appears to be necessary.

The outstanding problem in these low-velocity objects is the apparently large overestimate in effective L_w . However, the substantial overestimates in predicted R_s in the high-velocity superbubbles also suggest that this is a general problem with the application of the Weaver model in both categories of objects. I will refer to this second discrepancy as the “scalar discrepancy,” that corresponds to an overestimate in the predicted shell growth rate. The right column of Figure 4 shows the models for the high-velocity superbubbles, now also with L_w reduced by a factor 10. These are otherwise the same as the models seen on the right side of Figure 1. It is remarkable that, in keeping with our hypothesis of SNR acceleration, these models now also show a predicted R_s that is consistent with the observations, at the time of the first SN explosion! This time is indicated by the

vertical dotted line in Figure 4. The pattern is consistent with the expectation that the SNR impact disrupts the shell, allowing the interior to depressurize and preventing further growth.

For the high-velocity superbubbles, the coincidence of the observed and predicted shell radius at the time of the first SN relies on the extrapolation of the expected high-mass stars from a Salpeter IMF (Table 2). Another, but unlikely, possibility is that one or two lower-mass stars, perhaps $15\text{--}20\mathcal{M}_{\odot}$, were the primary agents generating the superbubble, with the accelerated shell resulting from the SN of one of these. This scenario requires that the superbubble be $\gtrsim 10$ Myr old in order for the SN explosion to occur. It also implausibly requires that all of the remaining high-mass stars in the observed OB association were born recently, within the last 3 or 4 Myr, and are dynamically unimportant for the shell growth. Otherwise, the stellar winds from these stars would again have caused the shell radius to be larger than currently observed. The models in Figure 3 can be used to demonstrate this scenario, with a single $20\mathcal{M}_{\odot}$ star responsible for the shell growth over most of its lifetime, and the rest of the association born 6 Myr later. It is apparent that R_s is already at least 50 pc by the time of the first SN explosion. For the superbubbles studied here, the mass of the isolated, precursor stars responsible for the shell growth cannot exceed $20\text{--}25\mathcal{M}_{\odot}$, and again, all the currently observed high-mass stars must be energetically unimportant. It would seem extremely unlikely that the observed groups of high-mass stars seen in almost all superbubbles (*e.g.*, Paper III; Braunsfurth & Feitzinger 1983; Rosado 1986) are irrelevant to the growth of the shell.

The astute reader will notice that the overestimate in predicted growth rate apparently does not apply to DEM 31. However, this object is a somewhat more

complicated system. The putative $120 \mathcal{M}_{\odot}$ star is Br 5, a WN6-A star, discussed in §2.2.1 and §3.3 of Paper III. Its initial mass, like those of any Wolf-Rayet star, is highly uncertain, and the evolution of the superbubble is critically dependent on its mass. The morphology of DEM 31 itself is the most asymmetric of the sample, and Br 5, along with the rest of the OB association LH 6, is located very close to the south side of the shell, and not in the center as one might expect. Furthermore, the shell does not appear whole, and exhibits a possible blowout on the northeast side. As indicated in Table 1, the velocity structure of this superbubble is complex. It is therefore unclear how the kinematics of this system are related to the bimodal pattern found in the rest of the sample.

With the sole exception of DEM 31, both the low-velocity and high-velocity objects therefore suggest a sizeable overestimate in effective input power. Figure 4 shows L_w reduced by an order of magnitude, but a factor of several could bring the models within a comfortable range of the observational parameters. As discussed in Paper I, the assumptions for the wind power of individual dominant stars could be uncertain to even an order of magnitude, although it seems hard to believe that the estimates for the entire sample are overestimated by such a large factor. Furthermore, the discrepancy is not necessarily due to an overestimate in L_w itself, but could also result from an underestimate in the ambient density. Also, it may well be that the superbubbles are not adiabatic, and that an energy loss mechanism is operating to drain a significant fraction of the input power. A combination of these factors could also conspire to produce this effect. I will now consider the possible explanations.

The scalar discrepancy could be due to an identical order-of-magnitude underestimate in the assumed shell density, and thereby in the ambient density.

However, the ionizing fluxes of most of these OB associations make it unlikely that a substantial neutral shell exists around these superbubbles, and Meaburn *et al.* (1984) found no evidence of corresponding H I expanding shells for four of the objects in this sample. Resolved H I mapping of the superbubble environment is desirable to determine the existence of surrounding neutral shells.

Several authors (*e.g.*, Shull & Saken 1995; Weaver *et al.* 1977) discuss the potential importance of radiative cooling from the bubble interior, which depends strongly on the amount of material available for this cooling. However, a comparison of Table 3 with Figure 2 for the pre-SN superbubbles shows that the observed X-ray luminosity is 1–2 orders of magnitude or more, below the inferred L_w . In fact, even for the X-ray enhanced objects, only in the case of DEM 25 does the X-ray luminosity approach the same order of magnitude as the current L_w . It therefore appears unlikely that radiation from the hot interior constitutes an important energy sink for the younger superbubbles studied here. However, radiation at other, unobserved wavelengths are not entirely ruled out.

In the models presented above, the mass-loss rates $\dot{M}$ used to estimate L_w are the same as those adopted by Schaerer *et al.* (1993) in the stellar models, and are scaled for LMC metallicity. Since the evolutionary tracks are quite sensitive to the adopted $\dot{M}$, a self-consistent formulation for $L_w(t)$ based on these models required adoption of these same $\dot{M}$. The $\dot{M}$ have been scaled with metallicity as $(Z/Z_\odot)^{0.5}$, which appears to be consistent with the available observations in the Magellanic Clouds (*e.g.*, Garmany & Conti 1985; Leitherer 1988; Garmany & Fitzpatrick 1988). The terminal wind velocities v_∞ have been computed with the empirical parameterizations of Howarth & Prinja (1989) for Galactic O stars, and have not been adjusted for LMC metallicity. The predicted lower v_∞ could account

for an overestimate in L_w by a factor of 0.25–0.5, although the observed v_∞ for the hottest stars appear comparable to those in the Galaxy (Walborn *et al.* 1995).

Lamers & Leitherer (1993) and Castor (1993) discuss the high degree of uncertainty in mass-loss rates for massive stars. In particular, Castor points out that the parameterizations of de Jager *et al.* (1988) which are used by Schaerer *et al.* (1993), may assume too much variation in $\dot{M}$ during the H-burning phase, which can vary by an order of magnitude or more. Also, Moffat & Robert (1994) provide evidence that the measurements themselves, of $\dot{M}$ derived from radio observations of Galactic stars, could be overestimated by a factor of $\gtrsim 3$, which would improve agreement with the bubble models.

The inference of an order of magnitude scalar discrepancy is based on two factors: first, the observed R_s of the high-velocity shells are apparently too small to accommodate a SN progenitor; and second, the observed v_s of the two, “clean” low-velocity shells are apparently too high. If both factors are in error, this scalar discrepancy may not exist. The first factor could be dismissed by the rejection of the SNR impact hypothesis. Even with the occurrence of SNR impacts, the first factor can be avoided with the perhaps implausible, but possible, scenario discussed in §3.2, in which a single lower-mass SN progenitor dominated the shell formation, with the remainder of the association born later, thus dynamically unimportant to the shell. The second factor above can be avoided if the masses of the most luminous stars in DEM 106 and DEM 226 have been overestimated by one stellar mass track: I assigned masses from the set of Schaerer’s *et al.* (1993) evolutionary tracks, and although the positions on the H-R diagram are fairly robust for stars with spectral types, it is possible that a slightly different stellar model is more appropriate (see, *e.g.*, , Paper III). The initial mass of the most luminous star

in DEM 106, in particular, is more uncertain since it is the B[e] supergiant S22. Likewise, if blowouts perpendicular to the line of sight have actually occurred in DEM 106 and DEM 226, the shells may be stalled, and the observed v_s would be lower than expected. This may be suggested by the nebular morphology of DEM 106, although not by DEM 226. Thus, it may be possible, through erroneously concluding that the high-velocity shells are too small, *and* that the low-velocity shells are expanding too slowly, that there may be no scalar discrepancy with the Weaver model as currently applied.

Nevertheless, the simplest conclusion is that there is a discrepancy in equivalent effective L_w/n_0 to the superbubbles, and its magnitude is puzzling. Certainly a number of factors could conspire to produce this effect, and if the superbubbles are actually non-adiabatic, the adiabatic Weaver model used here would not apply. Instead, we would expect a momentum-conserving model (*e.g.*, Steigman, Strittmatter, & Williams 1975) or a partially-radiative bubble model (Koo & McKee 1992a, b). Whatever the actual reason(s), the superbubble growth rate seems to be less than predicted by the standard Weaver model, using stellar winds as parameterized here.

A similar, order-of-magnitude discrepancy in effective input power compared to observed nebular kinematics was identified over a decade ago by Treffers & Chu (1982) for bubbles of Wolf-Rayet stars. More recently, García-Segura & Mac Low (1995) arrived at the same conclusion in their detailed study of the Wolf-Rayet bubble NGC 6888, which exhibits this energetic discrepancy with their analytic models. These authors also found radiative cooling an unlikely agent, and García-Segura & Mac Low suspect an order of magnitude overestimate in L_w of the central star, despite direct observational measurements of the wind parameters.

In addition, Drissen *et al.* (1995) also identify this energetic discrepancy in a small bubble containing 3 Wolf-Rayet stars in NGC 3603. They estimate over an order of magnitude disagreement in the inferred L_w to the bubble. This scalar discrepancy is thus appearing in both superbubbles and the single-star bubbles of Wolf-Rayet stars.

4. Conclusion

It is apparent that for the high-velocity superbubbles, SN impacts can cause a major deviation from the model predictions. High-velocity superbubbles with $v_s \gtrsim 25 \text{ km s}^{-1}$ are very common, with about as many of these known as the low-velocity objects (*e.g.*, Rosado 1986). The models in §3 demonstrate that it is essentially impossible to obtain expansion velocities $\gtrsim 25 \text{ km s}^{-1}$ in superbubbles with radii of a few tens of pc without acceleration by the presumed SNR impacts. Since these post-impact superbubbles are so commonplace, it is vital to better understand the role these SNRs play in their evolution. Do these impacts permanently disrupt the shell structure with the expected Rayleigh-Taylor instabilities, as implied by the simulations of Tenorio-Tagle *et al.* (1991)? It seems likely; for example, DEM 152 shows large quantities of hot, X-ray-emitting gas leaking out of the superbubble through just such a blowout feature (Chu *et al.* 1993; Magnier *et al.* 1995), presumably depressurizing the bubble. If SN disruption of superbubbles is commonplace, as suggested by the numbers of high-velocity objects, this would imply that large quantities of coronal gas are released into the ISM. I will speculate on these consequences in a future paper (Oey 1995c).

It is also worth noting that, while the complicated form of $L_w(t)$ during massive star evolution already limits the utility of the Weaver model's analytic

formulations in computing superbubble parameters such as age, the large deviations from the model render such formulations virtually inapplicable in the high-velocity objects. Indeed, the typical anticipated lifetime of superbubble growth is now several times shorter than previous estimates of $\gtrsim 10$ Myr, which were determined by the ambient interstellar pressure or termination of the stellar winds. In the picture implied here, shell disruption probably occurs with the explosion of the first SNe of the parent association, at ages of ~ 3 Myr. Therefore, analytic expressions must be applied with great care if used to derive superbubble parameters.

In summary, I have used the census of the enclosed stellar populations (Papers II, III) to estimate the wind power $L_w(t)$ input to these superbubbles, and model their dynamical evolution as predicted by the Weaver *et al.* (1977) model. The results are as follows:

(1) There are two categories of superbubbles in the sample: the “high-velocity” superbubbles, which are dynamically inconsistent with the Weaver model, such that the expansion velocities are too high for the observed radii; and the “low-velocity” objects, which are essentially dynamically consistent with the model.

(2) Elevated X-ray emission in the high-velocity superbubbles suggests acceleration by SNR impacts to explain their anomalous dynamics.

(3) Both categories of superbubble models predict much faster shell growth than can be accounted for with the observations. This implies one or more of the following factors: an overestimate in the input wind power, an identical underestimate in the ambient density, and/or an energy sink mechanism. The discrepancy is the equivalent of up to an order of magnitude reduction in effective input power.

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TABLE 1
OBSERVED SUPERBUBBLE PARAMETERS^a

DEM	Henize	LH	R_s (pc)	ΔR (pc)	n_s (cm ⁻³)	v_s (km s ⁻¹)	Reference ^b for v_s
25	N185	...	43	2.5	6.5	60:	This work, Rosado <i>et al.</i> (1982), L77
31	N9	6	50	5	4.0	30:	This work, CK, L93, G83
50	N186 CE	...	50	6	4.0	25	CK, Rosado <i>et al.</i> (1990), L77
106	N30 BC	38	30	6	5.5	$\lesssim 10$	CK
226	N148 GI	73	28	7	4.5	$\lesssim 5$	CK
301	N70	114	53	4	6.5	40:	CK, Dopita <i>et al.</i> (1981), Rosado <i>et al.</i> (1981), Blades <i>et al.</i> (1980), G83, L77

^aIdentifications: DEM = Davies, Elliott, & Meaburn 1976; N = Henize (1956); LH = Lucke & Hodge (1970).

^bCK = Chu & Kennicutt (1995)

G83 = Georgelin *et al.* (1983)

L77 = Lasker (1977)

L93 = A. Laval, as quoted in Chu *et al.* (1995)

This work = new data kindly obtained by S. Points, R.C. Smith, & Y.-H. Chu

TABLE 2
STELLAR POPULATION MODELS^a

DEM	120 $M_\odot$ $\tau = 3.12$	85 $M_\odot$ $\tau = 3.48$	60 $M_\odot$ $\tau = 4.12$	40 $M_\odot$ $\tau = 5.26$	25 $M_\odot$ $\tau = 7.84$	20 $M_\odot$ $\tau = 9.96$	15 $M_\odot$ $\tau = 14.2$	12 $M_\odot$ $\tau = 19.58$
High-velocity superbubbles ^b								
25	0	0	0 (1)	0 (1)	2	2	2	8
50	0	0 (1)	0 (1)	3	1	7	6	9
301	0	0	0 (1)	3	3	1	4	2
Low-velocity superbubbles								
31	1	0	0	1	4	2	1	3
106	0	1	0	2	0	4	1	3
226	0	0	1	1	0	1	2	1

^aTable represents numbers of stars in each mass bin. The stellar model lifetime in Myr is also shown in the column heading.

^bValues in parentheses show inferred original number of stars based on a Salpeter IMF.

TABLE 3
X-RAY LUMINOSITIES AND [S II]/H α RATIOS

DEM	Observed L_x^a (10^{35} erg s $^{-1}$)	[S II]/H α^b	n_0 (cm $^{-3}$)	Predicted L_x (10^{35} erg s $^{-1}$)	Predicted v_s (km s $^{-1}$)
High-velocity superbubbles					
25	1.8 (1)	0.64	1.1	0.34	15
50	4.2 (1)	$\sim 1.$	1.4	1.3	20
301	5.4 (2)	0.52	1.5	0.76	14
Low-velocity superbubbles					
31	$\lesssim 1.0$ (3)	0.29	1.2	2.7	...
106	< 0.9 (3)	$< 0.4^c$	3.3	0.3	...
226	(see text) (4)	$< 0.4^c$	3.4	0.05	...

^aReferences for X-ray luminosities shown by numbers in parentheses:

- (1) K. Dennerl, private communication
- (2) Chu & Mac Low (1990); scaled by factor of 3 to adjust to *ROSAT* bandpass
- (3) Chu *et al.* (1995)
- (4) Y.-H. Chu, private communication

^bFrom Lasker (1977), unless otherwise indicated.

^cVisually estimated from images in Lasker (1979).

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Fig. 1.— Models for high-velocity superbubbles. Continuous lines represent input L_w in $10 \log L_{35}$ (long-dashed), and resultant R_s (pc) (solid) and v_s (km s $^{-1}$) (short-dashed). The horizontal line segments correspond to observed R_s (solid) and v_s (short-dashed), with extent of the segments indicating the permitted observation window (see text). Models on left are for L_w computed from the currently observed massive star population, and on right for the original population predicted by a Salpeter IMF. The stellar census is shown at the top of each model.

Fig. 2.— Superbubble models for low-velocity superbubbles. Note the highest mass star for DEM 31 is $120 M_{\odot}$, not $85 M_{\odot}$.

Fig. 3.— Models for DEM 25 and DEM 50, relaxing the assumption of coeval star formation. The formation of the OB association at 6 Myr is preceded by a $20 M_{\odot}$ star in DEM 25, and by a $20 M_{\odot}$ and $40 M_{\odot}$ star in DEM 50 (see text). Line types are same as in Figure 1.

Fig. 4.— Left column shows the same models for low-velocity superbubbles as in Figure 2, but reducing L_w by a factor of 10; right column shows same reduction of L_w for high-velocity models shown in the right column of Figure 1.

Appendix F

BURSTING SUPERBUBBLES, SUPERGIANT SHELLS, AND THE HOT IONIZED MEDIUM

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**Bursting Superbubbles, Supergiant Shells,
and the Hot Ionized Medium**

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ABSTRACT

Recent evidence suggests that impacts by supernova blastwaves frequently disrupt the superbubbles generated by massive star winds. I find that for a superbubble to survive the first SN explosions typically requires input wind power of $\log L_w \sim 37.8 \text{ erg s}^{-1}$, which corresponds roughly to a radius $R_U \sim 60 - 70 \text{ pc}$. Superbubbles with radii $< R_U$ are therefore likely to be disrupted if struck by an internal SNR, while larger ones are more likely to evolve into supergiant shells with radii of $\gtrsim$ a few hundred pc. This threshold radius is consistent with the observed size distribution of shell structures in the LMC. For superbubbles that are burst by SNR impacts, the interior coronal gas is ejected upon disruption by the pressure differential with the environment. This may provide an important mechanism for high-efficiency dispersal and networking of the hot ionized medium.

1. Introduction

The evolution of superbubbles created by the stellar winds and supernovae of OB associations has a critical bearing on the distribution and energetics of the hot component in the interstellar medium (ISM). Models for the ISM are strongly dependent on whether the coronal gas is the pervasive, dominant component, as envisioned by *e.g.*, McKee & Ostriker (1977), or whether it plays more of a minor role as favored by *e.g.*, Slavin & Cox (1993), returning to a paradigm closer to the two-phase ISM of Field, Goldsmith, & Habing (1969). Since this hot gas is generated primarily in superbubbles and Type Ia supernova remnants, the evolution of these structures determines whether and how this gas is released into the hot ionized medium.

The standard model for understanding the evolution of superbubbles and other shell structures is that of Weaver *et al.* (1977), which assumes an adiabatic, pressure-driven bubble, with continuous wind energy injection. It has generally been assumed that in later stages, successive supernovae (SNe) can be treated as an approximate continuous energy injection, and are able to power the growth of supergiant shells (*e.g.*, McCray & Kafatos 1987; Mac Low & McCray 1988). Such supergiant shells, having radii of hundreds of pc, could then blow out of the galactic disk, releasing hot gas into the halo, possibly in a galactic fountain cycle.

However, I recently found that many superbubbles exhibit expansion velocities that are too high to be consistent with the “Weaver model” evolution, and that the correlation of bright X-ray emission with these anomalous velocities suggests acceleration by supernova remnant (SNR) impacts (Oey 1995a; Oey & Massey 1995). Two-dimensional simulations by Tenorio-Tagle *et al.* (1991) suggest that such impacts by SNR blastwaves permanently disrupt the shells. These disruptions could well provide a means for releasing the hot gas into the surroundings. Indeed, *ROSAT* observations of the superbubble DEM 152 (N44) show a clear example of such hot gas escaping through a “blowout” feature (Chu *et al.* 1993; Magnier *et al.* 1995). This superbubble also belongs to the class exhibiting the high, accelerated velocities (Oey & Massey 1995).

A large fraction of superbubbles appear to exhibit these accelerated velocities: Rosado (1986) and Georgelin *et al.* (1983) show that about a third of the superbubbles in the Large Magellanic Cloud have expansion velocities v_s in excess of $\sim 25 \text{ km s}^{-1}$. As demonstrated in Oey (1995a), such expansion velocities are extremely difficult to achieve without sudden acceleration, presumably by SNR impacts, when observed in objects only a few tens of pc in radius. At most, it is

possible to attain $v_s \sim 20 - 30 \text{ km s}^{-1}$ with $R_s \sim 20 - 30 \text{ pc}$ only at a special time in the early stage of shell evolution, and only if extremely massive, $85 - 120 \mathcal{M}_\odot$ stars are currently present. Any expansion velocities in excess of $v_s \sim 30 \text{ km s}^{-1}$ are therefore most likely due to SNR impacts, unless the shell is powered by an extremely rich association with tens of $85 - 120 \mathcal{M}_\odot$ stars.

What would such SN disruptions imply for the distribution of coronal gas in the ISM? I will now speculate on some possible consequences. These suggestions will rely on the assumption that the standard Weaver model is applicable, and that superbubbles are therefore pressure-driven. As shown in Oey (1995a), the applicability of the Weaver model has not been conclusively demonstrated, thus it is important to bear in mind this caveat.

2. The Formation of Supergiant Shells

If disruption is the typical fate of superbubbles due to the inevitable SN action, it might well preclude the formation of the larger, supergiant shells powered predominantly by successive SNe (*e.g.*, Mac Low & McCray 1988; McCray & Kafatos 1987). Yet, structures identified as supergiant shells, with radii of hundreds of pc, are well known to exist. The most prominent examples in the LMC were identified by Goudis & Meaburn (1978), including the famous Shapley's Constellation III (*e.g.*, Dopita *et al.* 1985) and LMC-2 (*e.g.*, Caulet *et al.* 1982). Supergiant shells in other nearby galaxies are also routinely reported, *e.g.*, Hunter *et al.* (1993). It therefore remains to understand how superbubbles continue to evolve after experiencing SNR impacts, and how kpc-sized supergiant shells attain their sizes, if they originated as smaller superbubbles.

It may be that the stellar complexes that induce supergiant shells are so enriched in high-mass stars that their stellar winds alone cause the shell to attain a larger radius, with greater internal energy U , before the first SN explosions. In this case, even these first SNRs could become subsonic before striking the shell, and the superbubble would not be disrupted by any of the SN action. The growth would then proceed as predicted by *e.g.*, Mac Low & McCray (1988), powered predominantly by thermalized SN energy. This scenario is, after all, the way all superbubbles have hitherto been presumed to evolve.

Mac Low & McCray (1988) show that the SNR becomes subsonic at a fractional bubble radius

$$\frac{r}{R_s} \approx 0.47 \left(\frac{E_{sn}}{U} \right)^{1/3} . \quad (1)$$

Equation 1 shows that the SN blastwave becomes subsonic at about half the superbubble radius for $U \sim E_{sn}$. This fractional radius is a reasonable upper limit to use for $\frac{r}{R_s}$ of the first SN explosion. We can then take $U \sim 10^{51}$ erg as an approximate upper limit to the internal energy required to suppress the disruptive effect of SNR impacts. Whether the stellar winds of the enclosed stars can provide this U depends on the input wind power L_w and available time before the first SN event.

Oey & Massey (1995) presented a numerical version of the Weaver model that predicts the evolution of a superbubble for an arbitrary, continuous $L_w(t)$. There appears to be substantial uncertainty, even up to an order of magnitude, in the effective input power in well-studied bubbles and superbubbles (Oey 1995a; Drissen *et al.* 1995; García-Segura & Mac Low 1995), so estimates for effective $L_w(t)$ of various stellar models is not reliable. However, examining the approximate shell radius R_s at which U typically reaches E_{sn} provides a parameter that can be

compared to observations. With the Weaver model code, using $L_w(t)$ estimated as in Oey & Massey (1995), the minimum numbers of high-mass stars required to attain $U \gtrsim E_{sn}$ during the H-burning lifetime are 1 120 $\mathcal{M}_\odot$, 2 85 $\mathcal{M}_\odot$, or 4 60 $\mathcal{M}_\odot$ stars. The correspondence of stellar numbers with equivalent wind power is quite uncertain, and possibly underestimated by factors of several due to the scalar discrepancy mentioned above. But these $L_w(t)$ do produce the required $U \sim E_{sn}$, at shell radii of 58, 62, and 68 pc respectively, for a typical ambient density of $\rho_0 = 2 \text{ cm}^{-3}$. The range of R_s at which $U \sim E_{sn}$ is quite limited and dependent on the form of $L_w(t)$ and ambient density.

The sensitivity to these quantities is apparent upon inspection of the analytic expressions for the shell evolution, given by Weaver *et al.* (1977). The shell growth is given by

$$R_s = \left(\frac{250}{308\pi} \right)^{1/5} L_w^{1/5} \rho_0^{-1/5} t^{3/5} \quad (2)$$

and the interior pressure P_i is

$$P_i = \frac{7}{(3850\pi)^{2/5}} L_w^{2/5} \rho_0^{3/5} t^{-4/5} \quad (3)$$

With $\gamma = 5/3$:

$$U = \frac{3}{2} P_i V \quad , \quad (4)$$

where $V = 4/3\pi R_s^3$ is the shell volume. Equations 2–4 then yield

$$U = \frac{14\pi^{1/3}}{(154)^{2/3}} L_w^{2/3} \rho_0^{1/3} R_s^{5/3} \quad (5)$$

Likewise, the shell radius R_U corresponding to a given U_0 is then:

$$R_U = \frac{(154)^{2/5}}{14^{3/5}\pi^{1/5}} U_0^{3/5} \rho_0^{-1/5} L_w^{-2/5} \quad (6)$$

It is apparent that the shell radius corresponding to a given U_0 varies only as $\rho_0^{-1/5}$ and $L_w^{-2/5}$. In practice, L_w is further constrained by the requirement that $U_0 \sim E_{sn}$

be attained before the relevant star(s) expire. For the stellar wind models run here, $L_w(U_0)$ varied by less than a factor of 2 around $\log L_w = 37.8$. This would then correspond to the 60–70 pc range of R_U found above.

Richer OB associations with effective stellar wind power of $\log L_w \gtrsim 37.8$ should thus be capable of producing superbubbles with the threshold internal energy U_0 , which would therefore be less likely to be disrupted by the first SN explosions. Most of the subsequent SN energy therefore contributes to heating the superbubble interior and can be treated as an enhancement in the stellar winds, as done by *e.g.*, Mac Low & McCray (1988). Subsequently, SNe will almost immediately begin to dominate the energy input and drive the growth of the shell to even larger sizes (*e.g.*, McCray & Kafatos 1987). Of course, supersonic SNR impacts are still possible if SNe explode close to the shell, but these become less likely as the shell expands away from the parent association. However, the observed superbubble kinematics suggest that this situation is not the usual evolution for ordinary star formation events. Most superbubbles result from ordinary OB associations, such as those found in Oey (1995b), and as alluded to above, a large fraction of these superbubbles show shell velocities suggestive of disruptive SNR impacts.

It has been noted that giant shells may fall into a bimodal size distribution, with superbubbles generally having radii $\lesssim 100$ pc and supergiant shells having radii $\gtrsim$ a few 100's of pc (*e.g.*, Meaburn 1980). This size distribution can be explained by the different role of SNe for shells with radii below and above the threshold radius R_U . Meaburn (1980) has compiled the histogram of LMC shell diameters in his Figure 3b, which I reproduce in Figure 1, converted to radius. This figure clearly shows a vast majority of superbubbles, with only 8 supergiant

shells. The most typical radius for the superbubbles is ~ 50 pc, with a fall-off to a maximum of ~ 120 pc. The handful of supergiant shells are evenly distributed in size, with radii of 300 to 600 pc. R_U , which corresponds roughly to the size below which SNR collisions will disrupt the shell, is indicated by the vertical line in Figure 1. It is apparent that R_U coincides with the fall-off in the superbubble radius distribution. This supports the hypothesis that most superbubbles are disrupted by SNR impacts. Furthermore, we should expect that post-impact superbubbles would continue to grow temporarily as high-velocity superbubbles, coasting in a momentum-conserving phase. These would presumably comprise many of the remaining superbubbles seen with radii $> R_U$, while also keeping in mind that the actual disruption radius will vary for individual objects.

The growth of the supergiant shells, on the other hand, is limited only by exhaustion of the SN power supply or disruption by the large-scale galactic gas distribution and kinematics. In fact, the sizes of the very largest supergiant shells may require conditions such as extended star formation (Chu & Kennicutt 1994). The large-scale supershell dynamics have been studied in some detail, for example, with respect to blowout from the disk (*e.g.*, Mac Low & McCray 1988; Mineshige *et al.* 1993) and galactic shear (*e.g.*, PalouVs *et al.* 1990). It is also quite possible that a fraction of ordinary superbubbles also result in blowouts from the galactic disk, but the large number of high-velocity superbubbles mentioned above, suggests that the majority are burst by SNR impacts.

3. The Hot Component of the Interstellar Medium

A significant consequence of the disruption of normal, OB superbubbles is that the hot interior gas escapes into the surrounding ISM, no longer preferentially

in the direction perpendicular to the galactic plane. The observations of hot gas around DEM 152 (Chu *et al.* 1993) show a substantial lateral distribution of X-ray emitting gas, which could well be interpreted as expulsion in lateral directions. Hence under normal circumstances, disk blowout and related phenomena should result from primarily the larger, supergiant shells. Direct injection of hot gas into the halo as envisioned in galactic fountain models therefore essentially results from the major star formation events, such as those associated with giant H II regions, although a fraction of ordinary superbubbles could also contribute. Note that coronal halo gas can still be supplemented by the buoyant expansion of additional gas in the galactic plane, however.

It is equally important that the “bursting” of the superbubbles takes place while the hot interior is pressurized, *expelling* the coronal gas into the surroundings. The pressure differential between the interior and exterior depends on the prior input power to the superbubble. As can be seen in equation 3, the interior pressure P_i is dependent on $L_w^{2/5}$. Hence, if the scalar discrepancy alluded to above is due to an underestimate in L_w by a factor of 5 – 10, the corresponding P_i will be underestimated by a factor of 2 – 2.5. The superbubble models in Oey (1995a) that are uncorrected for the scalar discrepancy show that the internal pressure P_i/k is typically $5 - 10 \times 10^4 \text{ cm}^{-3} \text{ K}$ at the time of disruption, which is a few times larger than even the recent estimates for the interstellar pressure of $P_0/k \simeq 2 - 2.5 \times 10^4 \text{ cm}^{-3} \text{ K}$ (*e.g.*, McKee 1990; Boulares & Cox 1990). However, if the models have overestimated P_i by a factor of 2 and the interstellar pressure is indeed high, some of the superbubbles may not provide a significant pressure differential, although the majority probably would still have $P_i/P_0 \sim 2$. On the other hand, if P_0/k is closer to the traditional value of $3000 \text{ cm}^{-3} \text{ K}$ (Jenkins *et al.* 1983), then the typical pressure differential is closer to an order of magnitude.

This pressurized expulsion of coronal gas differs from ISM models of *e.g.*, Slavin & Cox (1992, 1993) in which the hot gas remains *in situ* within isolated SNRs, which are assumed to evolve undisturbed until pressure equilibrium with the surrounding ISM occurs. An important parameter for the dispersal and distribution of the hot ionized medium (HIM) is therefore the expulsion pressure of the hot gas from superbubbles. This initial pressure imbalance facilitates the expansion of the hot gas into low-density, inter-cloud regions, with a greater likelihood for interconnection, or “tunnels” (Cox & Smith 1974) between individual pockets, including those created by Type Ia SNe. This could conceivably revive the expectancy of such interconnection between hot gas pockets, which Cox has dubbed the “porosity imperative” (*e.g.*, Cox 1990). With superbubbles occupying about 20% of the interstellar volume, ejected gas from these structures may well provide a proactive mechanism for HIM distribution, in addition to, or perhaps even dominating, the statistical occurrence of SNR and superbubble overlap in the standard porosity paradigm (*e.g.*, McKee 1990; Cox & Smith 1974).

Note that once a superbubble has been “burst,” subsequent SNe that explode in the interior of the shell will also have SNRs that would presumably expel their coronal gas through the shell rupture. This may be occurring in DEM 152, which Oey & Massey (1995) found likely to be $\gtrsim 10$ Myr in age. Since the disruptive SNe should be among the first to explode in a superbubble, these will usually occur after only 3–4 Myr, the lifetime of $60\text{--}120 M_{\odot}$ stars. Thus the X-ray emission observed in DEM 152 may not be due to the first SN to occur in this system, but the hot SNR gas is still pouring into the surrounding ISM (Chu *et al.* 1993). In addition, while I suggest here that a majority of superbubbles are burst by SNR impacts, “blowouts” due to steep density gradients or discontinuities could have similar effects.

Whether or not the HIM pervades the ISM as envisioned by McKee & Ostriker (1977) is still unclear. As usual, the filling factor of the HIM depends on the Type Ia SN rate and the massive star formation rate. “Tunneling” of the hot superbubble gas through low-density regions could substantially increase the likelihood of interconnection through the ISM, in the galactic plane. The degree of this networking will affect the relative importance and interplay of the HIM with the other interstellar phases (McKee & Ostriker 1977; Cox & Smith 1974)

As a final note, this proposed process for the dispersal of the HIM also bears upon the enrichment of the ISM. The hot superbubble contents carries with it most of the stellar wind material, and a sizeable fraction of the SN ejecta. Jura (1987) reviews the evidence that metal depletion onto grains is not restricted to the outflows of red giant stars, but that depletion must also take place in the ISM at large. The forcible expulsion of superbubble contents, bearing stellar Wolf-Rayet and SNR material, provides a source for these heavy elements.

4. Summary

If disruption of superbubbles by SNR impacts is a common occurrence, as suggested by Oey (1995a), some intriguing consequences could result, which I have explored in this contribution:

(1) Most superbubbles apparently do not acquire enough internal energy through stellar winds alone to prevent disruption by the inevitable SNe. I find the typical threshold wind power is about $\log L_w = 37.8$, roughly corresponding to a threshold radius $R_U \sim 60 - 70$ pc, below which disruption would occur. This mechanism provides an explanation for the size distribution differentiating

superbubbles and supergiant shells.

(2) This scenario suggests that most superbubbles are “burst” by SNR impacts while the interiors are still pressurized, forcibly expelling the hot gas into the surrounding ISM. This could greatly facilitate the dispersal and distribution of the hot ionized medium.

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Fig. 1.— Histogram of LMC shell radii, adapted from Meaburn (1980). The large contiguous group with small radii are the superbubbles, and the remainder are supergiant shells. $R_U \sim 60 - 70$ pc is the radius within which the occurrence of SNe will disrupt the shell.

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