Day of Year

Day 308 (11/4/19)

Status Summary:

OCAMS is powered on. OD199 is on board. Today's pass is complete. All expected data have come down nominally; the partitions are empty.

We are now in Orbital R. Part 1 of the OCAMS absolute color calibration is taking place today. Part 2 will execute tomorrow (along with the weekly OCAMS reset) before the HGA pass.

Looking ahead: Later this week, we will perform the OCAMS nonlinearity calibration (DOY 312, Friday 8 November) and the OVIRS solar calibration (DOY 313, Saturday 9 November). Otherwise, we will continue to collect OpNavs with ride-along particle imaging every 2 hours. Other payloads will be powered on toward the end of the week for Orbital R Global Mapping next week.

Downlink tag-ups have returned to a MWF cadence.

Day 310 (11/6/19)

Status Summary:

OCAMS is powered on. OD200 is on board. Today's pass is complete. All expected OCAMS, OpNav, and particle monitoring data have come down, except as noted below. The partitions are empty.

Parts 1 and 2 of the OCAMS absolute color calibration using opportunistic observations of Vega are complete, and the data have been downlinked. The activity was executed twice because we were unsure what the spacecraft's position would be and it was important to avoid stray light from Bennu, so separating the two executions by 12 hours maximized the chances of good conditions. Christian d'Aubigny reported that neither dataset is contaminated by stray light (i.e. all data are usable). Good sampling of pixels and good signal level were achieved for the MapCam color filters and the "pan 30" filter. The MapCam color filters were well centered; Vega is nearly out of the frame in the "pan 30" images due to a miscalculation but luckily was still captured. The MapCam PAN filter data are in a nonlinear region, but this was an expected

possibility. PolyCam images are deliberately out of focus to help address the aliasing issue. See Christian's slides for details and images.

A small gap of 8 frames was identified in the OCAMS data from DOY 307. We will not request a retransmit as these data are non-critical and the gap does not exceed the 20-frame threshold.

A TAGCAMS alarm occurred today during the daily reset, but the team has confirmed that there are no concerns and that this alarm is seen on occasion. The list of active ISAs has shortened; see the slides.

Looking ahead: There will be no HGA pass tomorrow, so the OpNavs and particle monitoring images collected over the next 24 hours will not downlink until Friday. Activities for the rest of this week include the OCAMS nonlinearity calibration, the OVIRS solar calibration, and continued OpNavs with ride-along particle monitoring. OTES and REXIS will be powered on toward the end of the week for Orbital R Global Mapping next week.

Downlink tag-ups have returned to a MWF cadence. There is no Science Weekly meeting tomorrow.

Day 312 (11/8/19)

Status Summary:

OCAMS is powered on. Today's pass is complete. An issue occurred with DSN station 26, but no impacts to science or telemetry data are reported. All expected data have come down; the partitions are empty.

The OCAMS nonlinearity calibration is currently executing. Each of the three cameras will collect 60 images for this activity. The data are expected to come down tomorrow. OCAMS will subsequently perform its weekly reset.

SPOC SAs are working to resolve an issue affecting mapping of one of our main file servers, orfs4. Some degree of functionality has been restored, but performance is slow. The SAs will avoid tinkering with anything that is currently working during the SSB meeting taking place today. Full functionality may not be back until after the holiday weekend.

The count limit has been updated on the TAGCAMS alarm noted at the previous tag-up (no concerns).

Looking ahead: OVIRS will power on in the next 24 hours for its solar calibration tomorrow. The OVIRS Earth comm cal will be updated during the pass on Sunday (10 November, DOY 314; effective for solar cal data). OTES and REXIS will power on Monday (11 November, DOY 315) for Orbital R Global Mapping. During this subphase, which will span WOY 46 and 47, global data will be collected daily by OCAMS, OTES, OVIRS, and REXIS. OpNavs and ride-

along particle monitoring by NavCam 1 will continue over the weekend and into next week. The partitions are expected to empty each this weekend.

Monday’s downlink tag-up is canceled for Veteran’s Day. Charts will be sent out only if something is not nominal.