Science Objective Summary and Science Weekly Debrief

Science Objective Summary

NavCam 1 will acquire 42 images per day at a cadence of every 20 min (for 7 hours) to support particle monitoring and characterization.

Daily downlink slides for Day 139 (05/18/20). Click to enlarge.

[not to be shared outside the team] The decision to perform Matchpoint rehearsal on 11 August and TAG on 20 October was approved by Lockheed Martin and is hoped to be approved by NASA tomorrow in OKDP-2.

All systems and payloads are green. OD249 is onboard. OCAMS is powered on to support OpNavs. The partitions are empty. All OpNav and particle monitoring data from last week were received as expected, except over the weekend owing to a TAGCAMS anomaly:

An internal reset of TAGCAMS occurred between OpNav sets on Saturday (16 May, DOY 137), leading to an alarm but no missed data. On Sunday (17 May, DOY 138), TAGCAMS safed when an image was not written to memory, and as a result we only acquired 2 OpNavs and 24 particle images for that day. The OD team was able to proceed with the reconstruct using the coincident MapCam OpNav images. TAGCAMS is now back in operation, and we have received all of today's expected data. ISA-14597 has been opened.

Looking ahead: This week continues with the daily cadence of OpNavs (9 NavCam, 9 MapCam) and high-cadence particle monitoring (42 NavCam), except where reduced for operational purposes. Maneuvers R4P1 and R4P2 are currently scheduled for this week; a third maneuver, trim burn R4T3, has been waived. We have a split pass on Thursday (21 May, DOY 142); as a result, some OpNavs may stay on board until the next day. Otherwise, the partitions are expected to empty daily.

The spacecraft reboot originally scheduled for WOY 17 will now take place in WOY 26, the planning for which we are kicking off this week. The instruments will be powered off prior to the reboot.

There is no Science Weekly/Monthly this week. Next week, we will perform the Osprey low sortie, with downlink tag-ups occurring on the MWF cadence (including Memorial Day).