

Sample Collection Mission Phase Weekly Summary

At this time (11/17/2020) there is no consolidated Sample Collection Mission Phase Narrative. The Phase Plan Narrative will be assembled in the future. A summary of activities performed each week is presented below:

2020 Week 14: 3/30/2020 (DOY 90) T13:30:00 – 4/6/2020 (DOY 97) T13:30:00

Science Activities:

- NavCam1 images for particle monitoring every 20 minutes for 7 hours per day
- OpNavs: NavCam and OCAMS OpNavs every 2 hours throughout the week

2020 Week 15: 4/6/2020 (DOY 97) T13:30:00 – 4/13/2020 (DOY 104) T13:10:00

Science Activities:

- NavCam1 images for particle monitoring every 20 minutes for 7 hours per day
- OpNavs: NavCam and OCAMS OpNavs every 2 hours throughout the week

2020 Week 16: 4/13/2020 (DOY 104) T13:10:00 – 4/20/2020 (DOY 111) T13:30:00

Activities:

- Checkpoint Rehearsal
- Sample Mass Measurement Rehearsal
- OpNavs: NavCam and OCAMS OpNavs throughout the week

2020 Week 17: 4/20/2020 (DOY 111) T13:30:00 – 4/27/2020 (DOY 118) T13:30:00

Activities:

- Post-CP Reboot/Recovery
- TR1R2 Burn to initiate Orb Insertion
- OpNavs: NavCam and OCAMS OpNavs (scheduled around spacecraft activities)

2020 Week 18: 4/27/2020 (DOY 118) T13:30:00 – 5/4/2020 (DOY 125) T13:30:00

Science Activities:

- NavCam images for particle monitoring after orbit insertion

Other Activities:

- TR1R3 target insertion point
- TR1R4 orbit insertion
- OpNavs: NavCam and OCAMS OpNavs

2020 Week 19: 5/4/2020 (DOY 125) T13:30:00 – 5/11/20 (DOY 132) T 13:30:00

Science Activities:

- NavCam1 images for particle monitoring
- OpNavs: NavCam OpNavs

2020 Week 20: 5/11/20 (DOY 132) T13:30:00 – 5/18/20 (DOY 139) T13:30:00 UTC

Science Activities:

- NavCam1 images for particle monitoring
- OpNavs: NavCam and MapCam OpNavs

2020 Week 21: 3/30/2020 (DOY 90) T13:30:00 – 4/6/2020 (DOY 97) T13:30:00 UTC

Science Activities:

- NavCam1 images for particle monitoring every 20 minutes for 7 hours per day

2020 Week 22: 5/25/2020 (DOY 146) T13:30:00 – 6/1/20 (DOY 153) T13:30:00

• Science Activities:

- 5/26/2020 (DOY 147) – OCAMS, OTES, OVIRS, and OLA elliptical raster scans for Osprey
- NavCam1 images for particle monitoring every 20 minutes for 7 hours per day throughout the week except the sortie day which contains no particle monitoring. The day after the sortie contains particle monitoring ride-alongs with the 3x1 OpNav mosaics, which take place every two hours.

2020 Week 23: 6/1/20 (DOY 153) T13:30:00 – 6/8/20 (DOY 160) T13:30:00 UTC

• Science Activities:

- NavCam1 images for particle monitoring

2020 Week 24: 6/8/20 (DOY 160) T13:30:00 – 6/15/20 (DOY 167) T13:30:0 UTC

• Science Activities:

- NavCam1 images for particle monitoring

2020 Week 25: 6/15/20 (DOY 167) T13:30:00 – 6/22/20 (DOY 174) T13:30:00 UTC

• Science Activities:

- NavCam1 images for particle monitoring until orbit departure

2020 Week 26: 6/22/20 (DOY 174) T13:30:00 – 6/29/20 (DOY 181) T13:30:00 UTC

• Science Activities:

- None, spacecraft reboot and recovery to prepare for TAG.

2020 Week 27: 6/29/20 (DOY 181) T13:30:00 – 7/6/20 (DOY 188) T13:30:00 UTC

• Science Activities:

- None, spacecraft reboot and recovery to prepare for TAG.

2020 Week 28: 7/6/20 (DOY 188) – 7/13/20 (DOY 195) T13:30:00 UTC

• Science Activities:

- NavCam1 images for particle monitoring after orbit insertion.

2020 Week 29: 7/13/20 (DOY 195) – 7/20/20 (DOY 202) T13:30:00 UTC

• Science Activities:

- NavCam1 images for particle monitoring.

2020 Week 30: 7/20/20 (DOY 202) – 7/27/20 (DOY 209) T13:30:00 UTC

• Science Activities:

- NavCam1 images for particle monitoring.

2020 Week 31: 7/27/20 (DOY 209) – 8/3/20 (DOY 216) T13:30:00 UTC

• Science Activities:

- NavCam1 images for particle monitoring.

2020 Week 32: 8/3/20 (DOY 216) – 8/10/20 (DOY 223) T13:30:00 UTC

- Science Activities:
 - NavCam1 images for particle monitoring.
- Other Activities:
 - Spacecraft sequence to perform a checkout of Star Tracker 1 and 2, NavCam2, and take StowCam images of SRC
 - TR2P1, TR2T5, TR2P2 phasing and trim maneuvers
 - Downlink rate drops to 412 kbps towards the end of the week

2020 Week 33: 8/10/20 (DOY 223) – 8/17/20 (DOY 230) T13:30:00 UTC

- Science Activities:
 - OCAMS (MapCam, SamCam) and OTES for Matchpoint Rehearsal
- Other Activities:
 - Matchpoint Rehearsal and post-MP SMM
 - TR2D, TR2CP, TR2MP, TR2BO, and TR2R1 maneuvers

2020 Week 34: 8/17/20 (DOY 230) T13:30:00 – 8/24/20 (DOY 237) T13:30:00 UTC

- Science Activities:
 - None
- Other Activities:
 - Reboot/recovery
 - TR2R2 maneuver
 - TAGCAMS contamination checkout

2020 Week 35: 8/24/20 (DOY 237) T13:30:00 – 8/31/20 (DOY 244) T13:30:00 UTC

- Science Activities:
 - None
- Other Activities:
 - TR2R3 and TR2R4 maneuvers for orbit insertion

2020 Week 36: 8/31/20 (DOY 244) T13:30:00 – 9/7/20 (DOY 251) T13:30:00 UTC

- Science Activities:
 - NavCam1 images for particle monitoring.

2020 Week 37: 9/7/20 (DOY 251) T13:30:00 – 9/14/20 (DOY 258) T13:30:00 UTC

- Science Activities:
 - NavCam1 images for particle monitoring.

2020 Week 38: 9/14/20 (DOY 258) T13:30:00 – 9/21/20 (DOY 265) T13:30:00 UTC

- Science Activities:
 - NavCam1 images for particle monitoring.

2020 Week 39: 9/21/20 (DOY 265) T13:30:00 – 9/28/20 (DOY 272) T13:30:00 UTC

- Science Activities:

- None

2020 Week 40: 9/28/20 (DOY 272) T13:30:00 – 10/5/20 (DOY 279) T13:30:00 UTC

- Science Activities:
 - None
- Other Activities:
 - Pre-SMM Outgassing

2020 Week 41: 10/5/20 (DOY 279) T13:30:00 – 10/12/20 (DOY 286) T13:30:00 UTC

- Science Activities:
 - None
- Other Activities:
 - T1T3 and T1T4 maneuvers
 - SMM

2020 Week 42: 10/12/20 (DOY 286) T13:30:00 – 10/19/20 (DOY 293) T11:30:00 UTC

- Science Activities:
 - None
- Other Activities:
 - T1P1, T1T5, T1P2 maneuvers
 - Spacecraft Checkout

2020 Week 43: 10/19/20 (DOY 293) T11:30:00 – 10/26/20 (DOY 300) T13:30:00 UTC

- Science Activities:
 - TAG!
- Other Activities:
 - TAG!
 - TAGSAM Imaging
 - SMM Canceled due to concerns about sample leakage from TAGSAM head

2020 Week 44: 10/26/20 (DOY 300) T13:30:00 -11/2/20 (DOY 307) T13:30:00 UTC

- Science Activities:
 - None
- Other Activities:
 - STOW! Sample stow accelerated to occur this week due to material leakage from TAGSAM head. SamCam and StowCam imagery taken during the stow activity. Originally scheduled instrument checkouts deferred to WOY 47.