STEREO MOC Status Report Time Period: 2019:308 - 2019:314

STEREO Ahead (STA) Status:

- 1. The following Ground System anomalies/events occurred during this reporting period:
 - On day 309, during the DSS-43 support, the station was not able to acquire turbo decoder lock and provide telemetry due to a low SSNR. The antenna is orange due to a Z-axis problem with the sub-reflector (fixed at 45 degrees) with an estimated return to operations on DOY 316. This anomaly resulted in the loss of 20 hours of SSR data. See DR #C114579 more information.
 - On day 309, during the DSS-74 (ESA New Norcia) support, a SLE bluebook V4 Bind and Dataflow test was conducted successfully to verify SLE V4 Bind configurations, telemetry and command operations with ESA. The SLE telemetry bind operations were delayed by 50 minutes due to a configuration issue with the JPL SLE telemetry server. While SLE telemetry binds were successful, the MOC did not receive the simulated telemetry due to a suspected problem with the ESA PSS (portable satellite simulator).
 - On day 310, DSS-25 conducted a successful Project Interface Test for the three links per operator (3-LPO) process.
 - On day 311, during the DSS-43 support, the downlink rate was reduced from 720 Kbps to 240 Kbps to improve the downlink performance. The antenna is orange due to a Z-axis problem with the sub-reflector (fixed at 45 degrees) with an estimated return to operations on DOY 316.
 - On day 312, during the DSS-83 (ESA Cebreros) support a SLE bluebook V4 Bind and Dataflow test was conducted successfully with real-time spacecraft data to verify SLE V4 Bind configurations, telemetry and command operations with ESA. This was the last ESA SLE V4 Bind connectivity test and the three stations have been verified successfully.

- On day 313, during the DSS-24 support, the transmitter was declared red due to inability to calibrate the transmitter. This anomaly resulted in the loss of 230 minutes of command and tracking data. See DR# G120625 for more information.
- 2. The following spacecraft/instrument events occurred during this week. The Ahead observatory operated nominally during this week.
 - On day 311, due to reducing the downlink rate from 720 Kbps to 240 Kbps for the degraded DSS-43 support, the SSR science partitions filled as follows:

SWAVES (Part 13) reached 100% full at 1646z for 8.7 hours. PLASTIC (Part 17) reached 95% full at 1721z for 8.2 hours. SECCHI (Part 19) reached 100% full at 1555z for 9.6 hours.

• The average daily science data return for Ahead was 4.6 Gbits during this week.