STEREO MOC Status Report
Time Period: 2023:261 (Sep 18) – 2023:267 (Sep 24)

STEREO Ahead (STA) Status:

1. The following Ground System anomalies/events occurred during this reporting period:

   - On day 262 (Sep 19), during the DSS-26 support, the uplink was unavailable between 1220z and 1247z due to a transmitter issue at the station. This anomaly resulted in the loss of 27 minutes of commanding, 2-way tracking, and 16603 frames of SSR data. After the uplink was reestablished, the MOPs team repositioned the SSR pointers and recovered all of the affected data. See DR #G124001 for more information.

   - On day 263 (Sep 20), APL network engineers successfully replaced the DMZ network firewall equipment.

   - On day 265 (Sep 22), during the DSS-14 support, the beginning of track was delayed six minutes until 1026z, due to an antenna hardware problem. The station could not calibrate the transmitter for the uplink, so the track was downlink only. This anomaly resulted in the loss of six minutes of real-time telemetry and SSR data, and 3.4 hours of commanding and 2-way tracking data. See DR #G124010 for more information.

2. The following spacecraft/instrument events occurred during this week. The Ahead observatory operated nominally during this week.

   - On day 262 (Sep 19), the 160th momentum dump was executed successfully at 1400z, which imparted an estimated delta V of 0.045 m/sec. This was the 79th momentum dump conducted without gyro use. After thruster operations completed, there was a 0.7 degree of roll angle error. Fine pointing stabilized 3.1 minutes after completion of the momentum dump.

   - On day 266 (Sep 23), the first week of the SECCHI high downlink campaign (HDC) commenced. During the HDC, SECCHI will collecting hi cadence COR2 images in conjunction with the Parker Solar Probe perihelion pass. Extra DSN track coverage has been planned for the HDC (Sep 23 - Oct 3, 2023) to increase the daily science data return to 10-11 Gbits per day (normally 5-6 Gbits).

   - As of day 267 (Sep 24), all PLASTIC systems are behaving well, except there is a moderate background count rate, which the team is continuing to monitor.

   - The average daily science data return for Ahead was 7.5 Gbits during this week.