STEREO MOC Status Report
Time Period: 2019:140 – 2019:146

STEREO Ahead (STA) Status:

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

   - On day 142, the MOC transitioned to the new command and control workstations using CCSDS SLE version 4. As STEREO has daily track coverage, one of the old command workstations will remain on the RIONet through June 21st (day 172) as a contingency.

   - On day 144, the MOC switched back to SLE version 1 for commanding only due to an intermittent loss of command bind that occurred while using SLE version 4 on day 143. This switch back to version 1 is preventative to ensure commanding occurs during each track. A fix has been developed and will be tested with DTF-21 on day 148.

   - On day 145, during the first DSS-14 support that day, initial telemetry in the MOC was nine minutes late at 0324z due to a configuration problem at the station. This anomaly resulted in the loss of seven minutes of real-time telemetry and SSR data. See DR #G120238 for more information.

   - On day 145, during the second DSS-14 support that day, turbo decoder lock was lost briefly at 2321z. This anomaly resulted in the loss of four frames of SSR data.

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

   - On day 141, the 119th momentum dump was executed successfully at 1930z, which imparted an estimated delta V of 0.086 m/sec. This was the 38th momentum dump that did not use the IMU. After thruster operations completed, there was a 0.36 degree of roll angle error. Fine pointing stabilized 2.3 minutes after completion of the momentum dump.

- The average daily science data return for Ahead was 6.6 Gbits during this week.