STEREO MOC Status Report
Time Period: 2009:166 - 2009:172

STEREO Ahead (STA) Status:

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

- On DOY 166 - 172, APL is still recovering from the temporary suspension of its Internet connection (began DOY 165 at 1800Z) to thwart a cyber attack. The Restricted IONet, the network that is used for real-time S/C operations, is unaffected. All tracks were staffed.

- On DOY 166, IMPACT was unable to perform commanding from POC due to network outage. The network issues were corrected and IMPACT successfully performed POC commanding on DOY 167.

2. Ahead spacecraft performance continues to be very good with all subsystems performing nominally. The following spacecraft/instrument events occurred during this week:

- On DOY 168, the 5th SECCHI HI 180 degree roll to observe the L4 libration point was executed successfully.

- On DOY 170, IMPACT successfully performed POC commanding.

- The average daily SSR playback volume for Ahead was 5.7 Gbits during this week.

STEREO Behind (STB) Status:

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

- On DOY 166 - 172, APL is still recovering from the temporary suspension of its Internet connection (began DOY 165 at 1800Z) to thwart a cyber attack. The Restricted IONet, the network that is used for real-time S/C operations, is unaffected. All tracks were staffed.

- On DOY 167, during the DSS 54 support, TLM lock was intermittent from 1731 to 1738Z due to an unknown reason. This resulted in the loss of SSR data from DOY 167 for all instruments. A Discrepancy Report (DR) has been requested.

2. Behind spacecraft performance continues to be very good with all subsystems performing nominally. The following spacecraft/instrument events occurred during this week:

- On DOY 167, the 10th SECCHI Stepped Calibration was executed successfully

- On DOY 168, the 5th SECCHI HI 180 degree roll to observe the L5 libration point was executed successfully.

- On DOY 170, PLASTIC successfully performed POC commanding.

- On DOY 172, Autonomy Rules 19, 62, and 63 fired respectively at 00:00:33, 00:00:47, and 00:00:59, after G&C Inertial Attitude Knowledge transitioned to invalid for 30 seconds. The rules performed as designed and loaded the S/C and Earth coarse ephemeris from EEPROM, reset the Star Tracker and promoted it back to AAD (autonomous attitude determination) mode. The S/C remained in Operational Mode with no problems. Early analysis indicates that the Earth RAM ephemeris expired earlier than expected at 2009-172-00:00:00. This situation was caused when the coarse ephemeris was loaded from EEPROM to RAM, as designed to happen, during the Behind system reset on DOY 132. MOPS planned to use the normal planning process for the next Earth RAM ephemeris, which was scheduled to expire originally on 2009-178-00:00:00 without the interruption of the system reset. Mission Ops was able to perform a HIL simulation with the same Earth RAM ephemeris span loaded and reproduced the same Autonomous behavior. The System and G&C Engineers were notified, and the anomaly is under investigation (Anomaly Record No. ST-A-2131).

- The average daily SSR playback volume for Behind was 6.4 Gbits during this week.