STEREO MOC Status Report
Time Period: 2011:353 - 2011:359

STEREO Ahead (STA) Status:

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

   - On day 354, during the DSS-14 support, turbo decoder lock was lost at 1341z. This anomaly resulted in the loss of 268 frames of SSR data. See DR# N107829 for more information.

   - On day 354, a test track was conducted with the ESA 35 meter New Norcia station (DSS-32), via the DSN, to the STEREO MOC using the Ahead observatory. The station locked to the 160 kbps downlink telemetry with a good received power level for the duration of the support. A test command was sent successfully. The MOC received the SSR playback data over the RIONet and processed it successfully. As it was a test track, SSR pointers were repositioned to ensure no science data loss. Two minor issues occurred; telemetry was received 35 minutes late in the MOC due to a DSN/ESA configuration issue and the station could not maintain ranging lock.

   - On day 355, a test track was conducted with the ESA 35 meter Cebreros station (DSS-62), via the DSN, to the STEREO MOC using the Ahead observatory. The station locked to the 160 kbps downlink telemetry with a good received power level for the duration of the support. The MOC received the SSR playback data over the RIONet and processed it successfully. As it was a test track, SSR pointers were repositioned to ensure no science data loss. The command RF link could not be tested as the STEREO project has not received frequency authorization from Spain yet, however, the MOC successfully tested the command bind from all three command workstations.

   - On day 359, for the DSS-14 support, telemetry lock was lost beginning at 1746z due to the antenna brakes being set. Due to a hydraulic leak the antenna was declared red and the remaining 3.4 hours of the track was lost. SSR pointers were reset to minimize science data loss. This anomaly resulted in the loss of an hour of SSR data for each instrument. See DR# G112208 for more information.

2. The following spacecraft/instrument events occurred during this week:

- On day 354, the 43rd momentum dump was successfully executed at 1700Z, which imparted a delta V of 0.0726 m/sec.

- On day 354, MOps permanent macro release 1.1.14 was loaded to C&DH EEPROM. This release modified a star tracker contingency macro to collect more diagnostic data during a star tracker reset.

- The average daily SSR playback volume for Ahead was 5.4 Gbits during this week.

STEREO Behind (STB) Status:

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

- On day 353, during the DSS-63 support, turbo decoder lock was lost briefly at 1543z. This anomaly resulted in the loss of one frame of SSR data. See DR# N107824 for more information.

- On day 354, a test track was conducted with the ESA 35 meter Cebreros station (DSS-62), via the DSN, to the STEREO MOC using the Behind observatory. This test track was shadowing an operational track with DSS-15. The station locked to the 160 kbps downlink telemetry with a good received power level for the duration of the support, however, telemetry was never received in the MOC due to a DSN/ESA configuration issue. After the support, the DSN corrected the configuration problem and a successful telemetry bind to DSS-62 was established. The command RF link could not be tested as the STEREO project has not received frequency authorization from Spain yet, however, the MOC successfully tested the command bind from all three command workstations.

- On day 355, a test track was conducted with the ESA 35 meter New Norcia station (DSS-32), via the DSN, to the STEREO MOC using the Behind observatory. The station locked to the 160 kbps downlink telemetry with a good received power level for the duration of the support. Test commands were sent successfully from all three command

workstations. The MOC received the SSR playback data over the RIONet and processed it successfully. As it was a test track, SSR pointers were repositioned to ensure no science data loss. Two minor issues occurred, telemetry was received 35 minutes late in the MOC due to a DSN/ESA configuration issue and the station could not maintain ranging lock.

- On day 355, during the DSS-63 support, turbo decoder lock was lost briefly at 1759z. This anomaly resulted in the loss of one frame of SSR data. See DR# N107828 for more information.

2. The following spacecraft/instrument events occurred during this week:

- On day 353, the 37th momentum dump was successfully executed at 1600Z, which imparted a delta V of 0.06 m/sec.

- On day 354, MOps permanent macro release 1.1.14 was loaded to C&DH EEPROM. This release modified a star tracker contingency macro to collect more diagnostic data during a star tracker reset.

- The average daily SSR playback volume for Behind was 5.4 Gbits during this week.