

STEREO MOC Status Report
Time Period: 2011:178 - 2011:184

STEREO Ahead (STA) Status:

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

- On day 178, during the DSS 65 support, the support ended 15 minutes early at 0800z to support the THEMIS-B lunar orbit insertion. The SSR pointers were repositioned during the next track. All SSR data was recovered.
- On day 179, during the DSS 15 support, monitor data and the command link were lost at 1445 due to a RIONet communication link anomaly between GSFC and JPL. After RIONet link was switched back to the primary side at 1501z, monitor data was received and the command link was re-established. Later in the support, the turbo decoder lost lock briefly at 2146z. This anomaly resulted in the loss of 16 minutes of monitor and command data and one frame of SSR data. See DR# N107450 for more information.
- On day 182, during the DSS 26 support, real-time telemetry was lost beginning at 1450z through 1508z due to DCD anomaly. This anomaly resulted in the loss of 18 minutes of real-time telemetry. All SSR data was recovered. See DR# N107461 for more information.
- On day 184, during the DSS 43 support, initial telemetry acquisition was delayed seven minutes due to rain at Canberra and low elevation. Telemetry lock was established at 1932z after elevation increased and precipitation diminished. This anomaly resulted in the loss of seven minutes of real-time telemetry. All SSR data was recovered. See DR# C108107 for more information.

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

- On day 178, the IMPACT IDPU reported a bit-flip in RAM at approximately 1300z which affected science data collection. At 2030z, real-time commands were sent to correct the anomaly.

- On day 178, the AHEAD S/C switched to routinely using the 160 kbps downlink rate for 34 meter antenna tracks and 480 kbps for 70 meter antenna tracks.
- On day 179, a flight software patch to the IMPACT IDPU was conducted to prevent the LET instrument from resetting during high rate particle events.
- The average daily SSR playback volume for Ahead was 4.7 Gbits during this week.

STEREO Behind (STB) Status:

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

- On day 178, during the DSS 63 support, turbo decoder lock was lost briefly beginning at 1930z. This resulted in the loss of one frame of instrument SSR data. A DR has been requested.
- On day 181, during the DSS 63 support, turbo decoder lock was lost briefly beginning at 1936z. This resulted in the loss of two frames of instrument SSR data. A DR has been requested.
- On day 182, during the DSS 63 support, real-time telemetry was lost beginning at 1526z through 1730z due to DCD anomaly. The SSR pointers were repositioned and all SSR data was recovered. This anomaly resulted in the loss of 124 minutes of real-time telemetry. See DR# M106390 for more information.

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

- On day 179, a flight software load to the IMPACT IDPU was conducted for the PLASTIC instrument flight software update (Version 32A) to provide user control to reduce the overall telemetry rate contributed by the PLASTIC instrument. With this update, PLASTIC can control which ApIDs are to be downlinked and the accumulation period for the Heavy Ion products. IMPACT executed a soft reset of the IDPU, which is shared with PLASTIC, to activate the new flight software

loaded at 1930z. IMPACT completed configuring their instruments during the same track by 2100z.

- On day 180, PLASTIC completed configuring their instrument after the IDPU soft reset at 0157z.
- On day 180, the MOC SDS workstation lost connectivity to its disk drive at 0500z. Connectivity was restored 1400z and the daily data products placed on-line by 1700z.
- On day 181, a flight software patch to the IMPACT IDPU was conducted to prevent the LET instrument from resetting during high rate particle events.
- On day 183, the IMPACT SEP experienced a SEU which affected operations. Real-time commands were sent to correct the error on day 184.
- The average daily SSR playback volume for Behind was 6.6 Gbits during this week.