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 IDPU 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.