STEREO MOC Status Report Time Period: 2013:007 - 2013:013

STEREO Ahead (STA) Status:

- 1. The following Ground System anomalies occurred during this reporting period:
  - On day 009, during the DSS-65 track, turbo decoder lock was lost intermittently beginning at 0724z through 0917z. This anomaly resulted in the loss of 109 frames of SSR data. See DR #N108599 for more information.
  - On day 010, during the DSS-32 (ESA) support, no commanding or ranging beginning at 0222z through 0645z due to an intermittent fault on the X-Band Uplink Amplifier. ESA later identified the issue as a faulty Fiber-Optic cable, which has been replaced. This anomaly resulted in the loss of several minutes of SSR data during the transition from two-way to one-way downlink receiver mode.
  - On day 013, during the DSS-24 track, turbo decoder lock was lost briefly at 1651z and again at 1754z. This anomaly resulted in the loss of two frames of SSR data. See DR #G113607 for more information.
- 2. The following spacecraft/instrument events occurred during this week:
  - On day 007, the SSR science partitions filled as follows:

SWAVES (Part 13) reached 100% full at 0240z for 4.4 hours. SWAVES (Part 13) reached 100% full at 1902z for 5.0 hours. IMPACT (Part 15) reached 95% full at 0027z for 7.0 hours. IMPACT (Part 15) reached 95% full at 1414z for 1.2 hours. IMPACT (Part 15) reached 95% full at 1724z for 1.2 hours. PLASTIC(Part 17) reached 95% full at 0244z for 4.6 hours. PLASTIC(Part 17) reached 95% full at 1907z for 4.9 hours. The primary cause was the accumulated shortage of track time throughout the week.

• On day 008, the MOPS permanent macro release 1.1.15 was loaded to C&DH RAM to increase the SSR housekeeping playback by four minutes to downlink more G&C black box data during the 120Kbps tracks only.

• On day 008, the SSR science partitions filled as follows:

SWAVES (Part 13) remained 100% full at 0000z for 15.1 hours. IMPACT (Part 15) remained 95% full at 0000z for 15.4 hours. PLASTIC(Part 17) remained 95% full at 0000z for 15.2 hours. The primary cause was the accumulated shortage of track time throughout the week.

- On day 009, the 17<sup>th</sup> HGA Calibration was successfully executed at 1800Z.
- On day 009, the SSR science partitions filled as follows:

SWAVES (Part 13) reached 100% full at 0618z for 0.9 hours. IMPACT (Part 15) reached 95% full at 0336z for 3.8 hours. IMPACT (Part 15) reached 95% full at 1455z for 0.6 hours. PLASTIC(Part 17) reached 95% full at 0658z for 0.3 hours. The primary cause was the accumulated shortage of track time throughout the week.

• On day 010, the SSR science partitions filled as follows:

SWAVES (Part 13) reached 100% full at 0457z for 2.3 hours. SWAVES (Part 13) reached 100% full at 1907z for 1.6 hours. IMPACT (Part 15) reached 95% full at 0124z for 5.8 hours. IMPACT (Part 15) reached 95% full at 2007z for 0.8 hours. PLASTIC(Part 17) reached 95% full at 0535z for 1.6 hours. The primary cause was the accumulated shortage of track time throughout the week.

- On day 011, the 53th momentum dump was executed successfully at 1800Z, which imparted a delta V of 0.086 m/sec.
- The average daily SSR playback volume for Ahead was 3.5 Gbits during this week.

STEREO Behind (STB) Status:

- 1. The following Ground System anomalies occurred during this reporting period:
  - On day 007, during the DSS-65 track, turbo decoder lock was lost intermittently beginning at 1426z through 1615z. This anomaly resulted in the loss of 33 frames of SSR data. See DR #N108596 for more information.

- On day 011, during the DSS-63 track, initial telemetry lock was established late at 1638z due to maintenance working on the Hydrostatic Bearing Assembly. This anomaly resulted in the loss of one minute of SSR data. See DR #M107063 for more information.
- 2. The following spacecraft/instrument events occurred during this week:
  - On day 007, the MOPS permanent macro release 1.1.15 was loaded to C&DH RAM to increase the SSR housekeeping playback by four minutes to downlink more G&C black box data during the 120Kbps tracks only.
  - On day 007, the SSR science partitions filled as follows:

SWAVES (Part 13) reached 100% full at 1222z for 3.1 hours. SWAVES (Part 13) reached 100% full at 2339z for 0.4 hours. IMPACT (Part 15) reached 95% full at 1233z for 3.1 hours. IMPACT (Part 15) reached 95% full at 2224z for 1.6 hours. PLASTIC(Part 17) reached 95% full at 1414z for 1.4 hours. PLASTIC(Part 17) reached 95% full at 2244z for 1.3 hours. The primary cause was the accumulated shortage of track time throughout the week.

• On day 008, the SSR science partitions filled as follows:

SWAVES (Part 13) remained 100% full at 0000z for 0.3 hours. SWAVES (Part 13) reached 100% full at 1407z for 2.6 hours. IMPACT (Part 15) remained 95% full at 0000z for 0.5 hours. IMPACT (Part 15) reached 95% full at 1216z for 4.5 hours. PLASTIC(Part 17) remained 95% full at 0000z for 0.5 hours. PLASTIC(Part 17) reached 95% full at 1239z for 4.1 hours. The primary cause was the accumulated shortage of track time throughout the week.

• On day 009, the SSR science partitions filled as follows:

SWAVES (Part 13) reached 100% full at 0131z for 13.9 hours. SWAVES (Part 13) reached 100% full at 2350z for 0.2 hours. IMPACT (Part 15) reached 95% full at 0225z for 13.3 hours. IMPACT (Part 15) reached 95% full at 2208z for 1.9 hours. PLASTIC(Part 17) reached 95% full at 0253z for 12.7 hours. PLASTIC(Part 17) reached 95% full at 2244z for 1.3 hours. The primary cause was the accumulated shortage of track time throughout the week.

- On day 010, the 17<sup>th</sup> HGA Calibration was successfully executed at 2100Z.
- On day 010, the SSR science partitions filled as follows:

SWAVES (Part 13) remained 100% full at 0000z for 18.5 hours. IMPACT (Part 15) remained 95% full at 0000z for 19.1 hours. IMPACT (Part 15) reached 95% full at 2157z for 0.9 hours. PLASTIC(Part 17) remained 95% full at 0000z for 18.7 hours. PLASTIC(Part 17) reached 95% full at 2231z for 0.1 hours. The primary cause was the accumulated shortage of track time throughout the week.

• On day 011, the SSR science partitions filled as follows:

SWAVES (Part 13) reached 100% full at 1040z for 6.5 hours. SWAVES (Part 13) reached 100% full at 2218z for 1.7 hours. IMPACT (Part 15) reached 95% full at 0822z for 8.8 hours. IMPACT (Part 15) reached 95% full at 2238z for 1.4 hours. PLASTIC(Part 17) reached 95% full at 0844z for 8.5 hours. PLASTIC(Part 17) reached 95% full at 2259z for 1.0 hours. The primary cause was the accumulated shortage of track time throughout the week.

• On day 012, the SSR science partitions filled as follows:

SWAVES (Part 13) remained 100% full at 0000z for 0.3 hours. SWAVES (Part 13) reached 100% full at 1141z for 8.3 hours. SWAVES (Part 13) reached 100% full at 2352z for 0.1 hours. IMPACT (Part 15) remained 95% full at 0000z for 0.5 hours. IMPACT (Part 15) reached 95% full at 1026z for 9.9 hours. IMPACT (Part 15) reached 95% full at 2300z for 1.0 hours. PLASTIC(Part 17) remained 95% full at 0000z for 0.5 hours. PLASTIC(Part 17) reached 95% full at 1026z for 9.7 hours. PLASTIC(Part 17) reached 95% full at 2315z for 0.8 hours. The primary cause was the accumulated shortage of track time throughout the week.

• On day 013, the SSR science partitions filled as follows:

SWAVES (Part 13) remained 100% full at 0000z for 13.8 hours. IMPACT (Part 15) remained 95% full at 0000z for 13.8 hours. PLASTIC(Part 17) remained 95% full at 0000z for 13.8 hours. The primary cause was the accumulated shortage of track time throughout the week.

• The average daily SSR playback volume for Behind was 2.3 Gbits during this week.