

STEREO MOC Status Report  
Time Period: 2009:250 - 2009:256

STEREO Ahead (STA) Status:

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

- On day 252, during the DSS 26 support, the antenna stopped tracking at 1657z for 31 minutes due to a power glitch. SSR pointers were repositioned and all SSR data was recovered. See DR# G109680 for more information.
- On day 253, during the DSS 25 support, concurrent with the fault isolation for the AHEAD G&C attitude anomaly (see below), the received signal on DCC7 was found to be 4 dBm lower than the backup DCC5 at 1845z. The station switched to DCC5. See DR# G109684 for more information.
- On day 256, during the DSS 55 support, telemetry lock was lost at 1229z for 13 minutes due to heavy rain at the station. This resulted in the loss of less than an hour of SSR data for each instrument. See DR# M105480 for more information.

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

- On day 253, the 10th SECCHI stepped calibration, at the aphelion/perihelion midpoint, was executed successfully.
- On day 253, during the DSS 25 support, the received signal strength started to decrease at 1630z and telemetry lock was lost at 1715z due to a G&C attitude anomaly. Uplink and downlink communications were re-established at 1845z. The SSR playback was disabled and the newly added G&C algorithm to use Guide Telescope data to update the quaternion was disabled. RF communications were lost again briefly from 1942z to 1944z. After the downlink signal stabilized, the SSR playback was restarted. G&C performance has been nominal since this anomaly. This resulted in the loss of several hours of SSR data for each instrument. G&C is investigating the cause of the anomaly.
- On day 255, the AHEAD S/C reached the L4 libration point.
- The average daily SSR playback volume for Ahead was 5.0 Gbits during this week.

STEREO Behind (STB) Status:

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

- On day 252, during the DSS 45 support, telemetry lock at BOT, 0610z, was 11 minutes due to a failed DCC3 receiver assembly. All SSR data was recovered. See DR# C107084 for more information.
- On day 255, during the DSS 55 support, telemetry lock was lost at 1405z for 9 minutes due to heavy rain at the station. This resulted in the loss of less than an hour of SSR data for each instrument. See DR# M105479 for more information.

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

- On day 251, began routine use of the 360 kbps downlink rate.
- On day 253, autonomy rule version 2.3.11 was loaded to C&DH RAM & EEPROM. This version removed the response to the G&C software bug, for the loss of GT rate usage, for which the recently loaded G&C FSW 3.2.6 corrected.
- The average daily SSR playback volume for Behind was 6.8 Gbits during this week.