STEREO MOC Status Report Time Period: 2009:334 - 2009:340

STEREO Ahead (STA) Status:

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

• On day 336, the DSS 15 track times were shifted 2.75 hours earlier to assist the NExT (Stardust) mission with safe mode recovery. The 26th momentum dump ignition time was moved to 1500z. All SSR data was recovered.

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 335, the EEPROM in both IMU units was refreshed.
- On day 336, the 26th momentum dump was successfully executed at 1500Z, which imparted a delta V of 0.0795 m/sec.
- The average daily SSR playback volume for Ahead was 6.4 Gbits during this week.

STEREO Behind (STB) Status:

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

- On day 337, the transmitter was declared red on DSS 45 before the start of the support. This resulted in the loss of all commanding, ranging, and two-way Doppler data. Since commanding was unavailable, SSR space was not freed, which resulted in the loss of about 5 hours of instrument SSR data. See DR# C107172 for more information.
- On day 338, to provide a command uplink, DSS 15 support was added as an overlapping track with DSS 45, whose transmitter was still red. However, BOT was 14 minutes late for DSS 15 due to an antenna anomaly. Telemetry was received at 0104z. This resulted in the loss of a few minutes of S/C only SSR data. See DR# G109845 for more information.
- On day 338, during the DSS 45 support, telemetry was received late at 0439z to allow the for transmitter repair.

DSS 15 was providing support for STEREO BEHIND for this time. See DR# C107174 for more information.

• On day 339, during the DSS 55 support, turbo decoder lock was lost intermittently at 1345z through 1548z. This resulted in the loss of 186 SSR SECCHI telemetry frames. See DR# N105798 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 334, two new downlink rates, 120 and 240 kbps, were tested successfully. These will be used maintain daily science volume as the S/C range increases.
- On day 335, a seven hour in duration 240 kbps downlink rate test track was conducted satisfactory using DSS 15. The SWAVES, IMPACT, PLASTIC, SECCHI science, and SECCHI special event SSR partitions had respectively 22, 5, 14, 18, & 0% remaining at EOT.
- The average daily SSR playback volume for Behind was 5.9 Gbits during this week.