

STEREO MOC Status Report
Time Period: 2020:321 - 2020:327

STEREO Ahead (STA) Status:

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

- On day 323, during the DSS-35 support, turbo decoder lock was lost briefly at 0331z. This anomaly resulted in the loss of six frames of SSR data. MOPs repositioned the SSR pointers on the subsequent DSS-63 support and recovered all affected DSS-35 data. Additionally, this track was conducted at the 720Kbps downlink rate to evaluate the 34-meter antenna performance. The performance was good with 4db of margin, and the increased downlink rate did not cause the reported dropped frames. Therefore, starting in week 50 (12/07/20) MOPs is increasing the default 34-meter downlink rate to 480Kbps below 25 degrees elevation and 720Kbps above 25 degrees.
- On day 323, during the DSS-63 support, turbo decoder lock was lost intermittently from 0403z to 0405z, and again at 0419z due to a sub-reflector problem. This anomaly resulted in the loss of 5360 frames of SSR data. MOPs repositioned the SSR pointers during this support and recovered all affected data. See DR #M112832 for more information.

2. The following spacecraft/instrument events occurred during this week. The Ahead observatory operated nominally during this week.

- On day 324, SECCHI SSR Partition 19 reached 100% full at 1956z for 10.5 hours (325-0628z). This was caused by the SSR pointer repositioning during DSS-63 track on day 323 to recover data lost during the DSS-35 and DSS-63 tracks.
- As of day 327, all PLASTIC systems are behaving well, except there is a high background count rate, which the team is continuing to monitor.
- The average daily science data return for Ahead was 6.0 Gbits during this week.