

STEREO MOC Status Report
Time Period: 2020:293 - 2020:299

STEREO Ahead (STA) Status:

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

- On day 295, during the DSS-25 support, command bind aborted at 295-2050z and 296-0138z due to an unknown reason, which is under investigation by DSN. This anomaly had no impact on operations and command bind was reestablished at 295-2312z and 296-0238z respectively. See DR #N11594 for more information.
- On day 296, during the DSS-36 support, command, telemetry and monitor data services were lost in the MOC at 0717z due the DSN network's CORE switch being reset by network engineers. This emergency reboot was an attempt to rectify the sporadic command system aborts that have been occurring over the last week. This anomaly resulted in the loss of 2.1 hours of real-time telemetry and command services. SSR data recovery was not affected during this outage. See DR #C115260 for more information.
- On day 297, during the DSS-34 support, the transmitter tripped offline at 0748z. This anomaly resulted in the loss of 826 frames of SSR data when the receiver transitioned from two-way to one-way mode. Also during this support, turbo decoder lock was lost briefly on several occasions that resulted in the loss of 19 frames of SSR data. MOPs repositioned the SSR pointers on the subsequent DSS-63 and DSS-35 supports and all affected DSS-34 data was recovered. See DR #C115253 for more information.
- On day 297, during the DSS-63 support, turbo decoder lock was intermittent between 1245z (BOT) and 1352z as the antenna was operated in ENC mode as MSI status was RED (suspect encoder systematic error model as the cause of this issue). This anomaly resulted in the loss of 97405 frames of SSR data. MOPs repositioned the In-situ instrument SSR pointers on the subsequent DSS-35 support and all affected DSS-63 data was recovered. See DR #M112757 for more information.

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

- As of day 299, 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 5.9 Gbits during this week.