

STEREO MOC Status Report

Time Period: 2023:030 (Jan 30) - 2023:036 (Feb 5)

STEREO Ahead (STA) Status:

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

- On day 031 (Jan 031), the MOC conducted L3VPN SLE Portal Telemetry Bind testing with JPL from 1600z to 1730z. The MOC successfully bound with all eight portals (slegp 1-4 and testslegp 1-4) from the three MOC workstations. The MOC also conducted a track at 2225z with DSS-25, and received telemetry on the three MOC workstations. The MOC will be using the L3VPN network for telemetry and command (CMD switched in 2021) going forward.
- On day 032 (Feb 1), DSN conducted a Mission Network maintenance from 1230z through 2130z to replace networking equipment. After the maintenance, DSN experienced intermittent network connectivity issues with multiple projects. JPL Network Engineering resolved the issue by 2300z with a partial roll back of the routing protocol migration from the MNET Palo Alto to MNET Juniper Core.
- On day 032 (Feb 1), during the DSS-55 support, the beginning of track was delayed 32 minutes until 2202z, due to an uplink interface failure that was caused by the DSN scheduled maintenance on the WAN routers and core switches. This anomaly resulted in the loss of 32 minutes of real-time telemetry, commanding, tracking, and SSR data. The MOPs team repositioned the SSR pointers during the support and recovered all the affected data. See DRs #M115491 and #N112502 for more information.
- On day 033 (Feb 2), during the DSS-34 support, turbo decoder lock was lost briefly at 1010z and 1030z. This anomaly resulted in the loss of eleven frames of SSR data. Also, ranging dropped lock unexpectedly at 1132z to 1139z. See DR #C117093 for more information.
- On day 034 (Feb 3), during the DSS-54 support, turbo decoder lock was lost briefly at 1735z. This anomaly resulted in the loss of 22 frames of SSR data. The MOPs team repositioned the SSR pointers during the support and recovered all the affected data.
- On day 035 (Feb 4), during the DSS-56 support, the transmitter was declared red, due to a hardware problem. This anomaly resulted in the loss of 3.9 hours of real-time commanding and 2-way tracking data. See DR #G115515 for more information.

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

- As of day 036 (Feb 5), all PLASTIC systems are behaving well, except there is a moderate background count rate, which the team is continuing to monitor.
- The average daily science data return for Ahead was 6.3 Gbits during this week.