

STEREO MOC Status Report

Time Period: 2024:022 (Jan 22) - 2024:028 (Jan 28)

STEREO Ahead (STA) Status:

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

- On day 022 (Jan 22), during the DSS-35 support, turbo decoder lock was lost briefly at 1527z. This anomaly resulted in the loss of two frames of SSR data. The MOPs team repositioned the SSR pointers during the support and recovered all the affected data.
- On day 028 (Jan 28), during the DSS-65 support, the command modulation toggled offline from 03:55:05z to 03:55:19z, due to a hardware communication error. This anomaly caused the MOC Command Bind to abort, and the spacecraft uplink sub-carrier to drop lock from 03:56:12z to 03:56:24z. The command bind was reestablished at 0722z. See DR #M116705 for more information.

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

- On day 022 (Jan 22), the MOPs team successfully conducted the 15th battery discharge event at 1525z to redistribute the electrolytes within the nickel hydrogen battery cells.
- On day 023 (Jan 23), the 69<sup>th</sup> SECCHI stepped calibration was executed at 0545z for aphelion in the Ahead orbit. This was the 38<sup>th</sup> SECCHI stepped calibration roll conducted without gyro use.
- On day 025 (Jan 25), the SECCHI instrument reset at 16:28:11z. The SECCHI team reconfigured the instrument to operational mode by 1646z. This was the 80th reset of the SECCHI instrument on the Ahead observatory.
- As of day 028 (Jan 28), 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 6.6 Gbits during this week.