STEREO MOC Status Report Time Period: 2020:356 - 2020:362

STEREO Ahead (STA) Status:

- 1. The following Ground System anomalies/events occurred during this reporting period:
 - On day 359, the SWAVES instrument team discovered a problem with the MOC poc_cmd_acceptor software while sending commands to their POC queue dated for the year 2021. The software was coded with a default timeout date of 2020-365-23:59:59 for commands that do not have a timeout value in the command header. Therefore, the software rejects commands without timeout dates included, which have enable times after the default date. The MOC ground software engineer has located the date in the code and is working on the change now.
 - On day 360 (12/25), the RIONet network prime circuit began exhibiting errors at 0644z, therefore, Goddard Comms released the line for maintenance and switched to the backup circuit at 1604z. Subsequently, the RIONet backup circuit failed at 1757z because of the early morning explosion in Nashville TN. The primary circuit was restored at 361-1830z (12/26), and the backup circuit was restored at 362-0457z (12/27). The loss of both RIONet circuits for 35 hours prevented the MOC from making SLE binds with DSN for commanding and real-time telemetry.
 - On day 360, during the DSS-14 support, the MOC could not perform SLE binds with DSN because both RIONet primary and backup network circuits were red. This anomaly resulted in the loss 5.6 hours of real-time telemetry, commanding and monitor data. The station performed the track successfully, and DSN forwarded the telemetry files using the nominal process via the internet.
 - On day 361, during the DSS-63 support, the MOC could not perform SLE binds with DSN because both RIONet primary and backup network circuits were red. This anomaly resulted in the loss 2.4 hours of real-time telemetry, commanding and monitor data. The station performed the track successfully, and DSN forwarded the telemetry files using the nominal process via the internet.

- 2. The following spacecraft/instrument events occurred during this week. The Ahead observatory operated nominally during this week.
 - \bullet On day 356, the 56th SECCHI stepped calibration was executed at 1330z for midpoint in the Ahead orbit. This was the 25th SECCHI stepped calibration roll conducted without gyro use.
 - As of day 362, 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 6.3 Gbits during this week.