

STEREO MOC Status Report

Time Period: 2023:226 (Aug 14) - 2023:232 (Aug 20)

STEREO Ahead (STA) Status:

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

- None.

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

- On day 228 (Aug 16), during the closest approach slow roll there were two small spacecraft off-points of ~0.12 degrees at 053143z - 053209z and 053318z - 053352z. During the first off-point, the PLASTIC instrument Entrance System was shut down and the IMPACT instrument STE-D door was closed at 0532z by their DPU internal software (as designed). Also during this period, the spacecraft had a series of five single bit errors in G&C memory (cosmic ray hit), which may have contributed to the off-pointing errors. The anomaly is still under investigation.
- On day 229 (Aug 17), the spacecraft went through closest approach to Earth. The slow roll, which began on day 219 (Aug 7), will continue until day 233 (Aug 21).
- On day 230 (Aug 18), the PLASTIC instrument team successfully rebooted the Entrance System at 0330z and returned to nominal operations. The IMPACT instrument team successfully opened the STE-D door at 1927z and returned to nominal operations.
- On day 230 (Aug 18), fine pointing was lost intermittently beginning at 1334z through 1934z. These occurrences were due to the reaction wheels operating at low speeds with no gyro operations. These transients can occur with no gyro operations and are not indicative of any problem with the spacecraft G&C.
- As of day 232 (Aug 20), 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 6.5 Gbits during this week.