

October 11 - October 17, 2001

The Terra spacecraft is in nominal mode. All instruments are in nominal science mode.

Operations are nominal for all five instruments. Commands were issued last week to change the scan rate rate for CERES. However, an error in the bit pattern for the command sync mode caused the result to be unsatisfactory, even though the command was accepted by the instrument. Commands will be issued from the EOS Operations Center on October 19 to issue the rate command in the correct mode. This calibration exercise was conducted on the Aqua instruments.

A third meeting was held on Tuesday, October 9, to discuss the S-band Transponder issues. Additional test and flight data, as well as system component specifications, are being examined to confirm suspicions that an autonomous flight software refresh occurring on the transponder in combination with the turn-on command may have resulted in the anomaly by causing the transponder command (issued from the Absolute Time Command load) not to execute.

The telemetry spikes that were observed starting on Day of the Year 216 have been determined to be present in the past. These spikes are believed to be related to the transponder "refresh cycle" which occurs when the transponder has not received a forward RF signal for 10 minutes.

The target date for the next Drag Make-up Maneuver keeps moving as a result of poor drag predictions because of varying solar activity. The original date moved from Tuesday, October 23 to Tuesday, October 30.

Tracking and Data Relay Satellite contacts continue to be pulled from Terra on short notice, resulting in the need for rescheduling in order to acquire all data from the Solid State Recorder.

Several MDA2BITE trips (High Gain Antenna Motor Drive Assembly opto-coupler Single Event Upsets) occurred during this reporting period with no resultant non-recoverable data loss.

Plans:

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- <li>Next Drag make-up Maneuver on October 30
- <li>Next MODIS Calibration Roll Maneuver on November 5
- <li>Continued certification testing with commercial Polar Ground Stations
- <li>Testing of Direct Downlink capability over Norway Ground Station to acquire data for ASTER team