

January 4 - January 9, 2002

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

A number of network problems affecting Terra ground elements within the EOS Operations Center (EOC) have occurred in recent days, starting on December 29, 2001. Intermittent router problems and other network issues were investigated by GSFC Network Operations Center. It is believed that a combination of factors is causing the problems, and late on January 10 telemetry dropouts were traced to overflows on a VMS server within the EOC.

No science data have been lost and a planned Drag Make-up Maneuver was successfully executed with Terra Flight Operations Team (FOT) personnel standing by in the backup EOC to take over operational responsibility in the event of any problems. There were no network issues during the maneuver.

A decision will be made in the next few days to either proceed with the next Inclination Adjust Maneuver (currently planned for January 16, 2002) or to delay the maneuver in order to continue network diagnostics.

Terra Flight Dynamics personnel produced an animation depicting the orbital geometries and line of sight from the MODIS field of view to the Sun in support of the next Inclination Adjust Maneuver. The purpose of this was to model and demonstrate the lack of solar impingement risk for MODIS if the Nadir Aperture Door were to fail to close per procedure after orbital sunrise and completion of the maneuver. Solar impingement is no longer seen as an issue for MODIS.

A 16-second Drag Make-up Maneuver was successfully executed on January 8, 2002.

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.

Terra Plans:

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- <li>Commercial Ground Site Validation will continue once the DataLynx antenna is declared operational;
- <li>Continued planning for additional Polar Ground Station Science Data Downlink proficiency demonstrations (commencing in early February); and
- <li>MODIS calibration roll maneuver (early February).