

July 26 - August 1, 2002

The Terra spacecraft is in nominal mode. All instruments are functioning in Science Mode.

The Terra Flight Operations Team is investigating difficulties encountered in the EOS Operations Center while attempting to command Terra through the Tracking and Data Relay Satellite (TDRS) 275 during MA contacts. During one particular contact on July 31, the Flight Ops Team was unable to command at all. However, no science data were lost as a science playback was not mandatory during this contact. Previous MA events on TDRS 275 earlier in the day were entirely successful.

The MODIS Anomaly Team personnel held a meeting on July 29 to formulate plans for diagnosing the high number of TAXI overflow errors observed by the Terra Flight Ops Team on Friday, July 26, 2002. At approximately 21:19 GMT on that day, the Team reported seeing TAXI overflow errors in the MODIS data stream. Analysis showed that the errors occurred only during the MODIS black body calibration, while the duty cycle was set to FULL, and heater temperatures had reached a plateau. While the blackbody was continuously heating, no overflow errors were detected.

A TAXI overflow occurs when there is an input packet size violation. A packet is defined by a "start packet" delimiter and an "end packet" delimiter. It can have a maximum size of 1024 bytes. An overflow happens when the MODIS packet size of 1024 bytes is exceeded before the "end packet" delimiter is received. Data continues to be accepted, but not processed, until another "start packet" delimiter is sent.

ESMOS Project and the Project Scientists for both Terra and Aqua are continuing the development of a coordinated plan between Terra and Aqua for execution of the Deep Space Calibration Maneuver(s). Analysis factoring in lunar constraints and other issues is under way, and preliminary results suggest an early November date for beginning implementation of the series of maneuvers for the Terra spacecraft.

#### TERRA PLANS:

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<li>The next Drag Make-up Maneuver is planned for August 7

<li>The next MODIS lunar calibration roll maneuver is scheduled for August 27

<li>The next Inclination Adjust Maneuver is planned for mid-September

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