

November 29 - December 4, 2003

<P>The Terra spacecraft is in nominal mode, and all five instruments are operating nominally.

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<P>On Sunday, November 30, an apparent issue with the Science Formatting Equipment (SFE) on Terra resulted in impairment of the MODIS Direct Broadcast (DB) capability. An Anomaly

Team isolated the problem to a specific FIFO chip (#116) that may have experienced a single

event upset (SEU) as the spacecraft passed through the South Atlantic Anomaly (SAA). Analysis continues to determine options for fixing the problem (including workarounds to repair the corrupted MODIS DB data) and to assess the risks associated with potential course(s) of action. A power recycle of the Science Formatting Equipment is under analysis and a risk/benefits assessment is being conducted on this option.</P>

<P>An investigation of the ASTER problem that initially was thought to be due to not following the late change procedure was discovered to be a ground system problem that has been in the system since launch. This problem resulted in an error in the Absolute Time Command (ATC) load uplinked on November 25, 2003, (DOY 329) which caused the ASTER instrument to be placed in an incorrect observing mode, necessitating the real-time setting of Inhibit IDs to inhibit specific commands downstream in the load. The root cause of this problem was determined to be an erroneous load uplink message generated by the on-line system in the EOS Operations Center (EOC) as a result of the load being transmitted to the simulator for testing. This messaging capability is being modified to eliminate the potential for this type of error in the future. There was no risk to the

instrument or long-term degradation of data, and the problem was resolved with the next ATC load uplink on the afternoon of November 26. Late Change submissions were not permitted for ASTER for five days until the root cause of the problem was fully understood.

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<P><B>Plans:</B>

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Resume conduct of lunar rolls for MODIS calibration in December

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