

February 11 - 17, 2005

The Terra spacecraft is operating nominally in science mode.

Terra automation design is proceeding at a faster rate now that the effort has been split

between system development and operations development. System development will involve GMSEC developers meeting GMSEC component level requirements. This includes designing/updating/testing key GMSEC utilities needed for this effort. Operations development will involve key FOT members developing the processes needed to realize (decompose) automated operations scenarios. GMSEC developers will collaborate in this effort.

A Drag Make Up Maneuver (DMU) scheduled for February 15, 2005, was waived off due to problems with one of the backup FDS computers. The Terra MD and FOT lead agreed performing this maneuver was not worth the risk given we are not projected to exceed ground track error requirements until March 6. The backup FDS computer in question is being restored and is projected to be fully operational by February 17, 2005.

We have re-scheduled this DMU for February 22, 2005.

Spacecraft Activities/Anomalies/Issues: MIR = Mission Impact Report
Four MIRs occurred this week having to do with the High Gain Antenna Motor Drive Assembly (MDA2) BITE failures while in the South Atlantic Anomaly (SAA). In three of the cases, there was no impact to science objectives and no data loss. In one of the cases, it appears that a small amount of MISR data (about 170k CADUs) was lost. MISR and MODIS were nearly full before the MDA failure. Before a partial playback (after MDA recovery) of both MODIS and MISR data could be commanded, MISR disabled its buffer resulting in said data loss.

Ground System and Data Processing System Anomalies/Issues:
One MIR occurred this week having to do with late acquisitions with the TDRSS network. The MISR buffer was nearly full before this problem and it took longer than normal to resolve. Therefore, this delay caused a small amount of MISR data loss (about 18k CADUs).

One MIR occurred this week during an X-band EPGN proficiency contact with SKS. Although RF and carrier lock were verified at SKS, they were unable to de-modulated X-band data. Since this contact used old science data, there was no impact to current science objectives.

One MIR occurred this week because there was a delay in receiving ATC late change approval from MODIS.

One MIR occurred this week because the GSIF matrix switch was not configured properly. This simply caused the FOT to replay affected instrument buffers to ensure data capture. Therefore, there was no impact to current science objectives and no science data loss.

