THEMIS Science Data Analysis Software Monthly Accomplishments – August 2009

THEMIS Science Data Analysis Software (TDAS) - Post v5.1

1. Themis load routines now limit the amount of data loaded according to the requested time range using either the timerange keyword or timespan routine.
2. Time_clip.pro now better handles multi-dimensional tplot variables.
3. thm_load_mom.pro DATATYPE keyword now works for Level 1 data requests.
4. A new SSE (Selenocentric) coordinate system has been added to thm_cotrans. A crib can be found at themis/examples/thm_crib_slp_sse.pro.
5. A new routine has been added to load the themis pseudo AE index (thm_load_pseudoAE.pro).
6. The THEMIS GUI has a reorganized Layout Panel and Widget Tree to make the GUI faster and easier to use.

THEMIS Web

1. ASI overview plots have been updated with full resolution data for all of 2008.
2. Digital Fields Board (DFB) data web pages for Filter Bank (FBK) and Fourier Power Spectra (FFT) are now on the THEMIS beta site and will be on the official site shortly. To review link to http://themis.ssl.berkeley.edu/beta/instrument_dfb.shtml

THEMIS Data Products

1. ASI full resolution data CDF's are now complete for 2008.
2. New variables in L1 state CDFs for probe positions and velocities in GSE and GSM coordinates have been added.
3. New variables to support spin axis attitude and spin phase corrections for V03 state CDFs have been added.
4. Improved processing of L1 FGM waveforms and spin fits caused by sensitivity range changes in the middle of a packet are now detected and corrected, improving the data quality of the L1 FGM and FIT CDFs.
5. Data quality flags have been added to the ESA L2 files for solar wind while not in solar wind mode, density mismatches, and counter saturation. In addition data quality flags have been added to the MOM L2 files,
6. All L2 CDF's referenced in #2-#5 have been released to SPDF or are in reprocessing and will be released to SPDF shortly.