

THEMIS Science Data Analysis Software Monthly Accomplishments – July 2008

THEMIS Web

1. All overview plots for THEMIS web site have been reprocessed to show full resolution images.
2. Nuggets of THEMIS research have been expanded.
3. News and Photos have been brought up to date.

THEMIS Data Products

1. Rsync has been completed for full resolution raw data between U Calgary and UCB.
2. Completed creation of all asf- and ask-cdf files for THEMIS tail season December 2007 to April 2008.
3. Processing of the THEMIS STATE v02 cdf's has been automated and streamlined.
4. Reprocessed ESA and MOM L2 cdf's to add ion moments for times with no S/C potential.
5. Reprocessed FIT L2 cdf's with improved metadata.

THEMIS Science Data Analysis Software – TDAS (Bleeding Edge Distribution - post v4.00)

1. Solar Wind Ingest Software, developed by Vladimir Kondratovich at GSFC, has been added.
It uses the OMNI HRO and OMNI-2 databases with one-minute, five-minute, and one-hour resolutions, as well as the WIND data. The latter is propagated to the bow-shock nose.
Data can be convolved to desired time resolution. Examples of usage can be found in solarwind_crib.pro which is in the /external/developers/solarwind directory.
2. tplot_ascii has been modified to handle data with 3 dimensions.
3. Created a new process to generate L2 FFT files (Data Product will be available in August).
4. Keywords are now available in thm_part_moments, thm_part_moments2, thm_part_getspec, to remove electronic noise and sun contamination from sst moments and angular spectrograms.
Examples of usage can be found in thm_crib_sst_contamination.pro.
5. The EFI programs have been enhanced as follows:
 - a. Thm_cal_efi.pro now allows the COORD keyword to be set to "gse".
 - b. EFI datatype will now be despun for all valid inputs of the COORD keyword (no longer case sensitive).
 - c. Thm_cal_efi.pro now has despun EFI datatypes labeled correctly with boom (spinning) subscripts.