THEMIS and ARTEMIS Science Data Analysis Software Monthly Accomplishments
May 2011

THEMIS and ARTEMIS Science Data Analysis Software (TDAS) - Post v6.0
1. thm_gui has been modified so that it no longer re-prompts the user on whether they want to overwrite when loading a themis document. This should result in more reliable themis document reading but it will break compatibility with older themis documents.
2. The code to remove sun contamination from SST data has been made more user friendly through the addition of a new keyword method_clean that takes the values 'automatic' or 'manual'. Passing method_clean='automatic' to thm_part_getspec will perform basic sun contamination removal without the need to manually identify noisy bins or provide any other sun contamination keywords.
3. When creating multiple plots per window using plotxy, plotxyz, plotxyvec, or tplotxy, it is now possible to add an overall title and to create nonsymmetric plot layouts within the window.
4. Support for numerical month and T separator, in the "Save Data as ASCII" option for the THEMIS GUI has been added.
5. Basic contamination removal options have been added to the GUI slices functionality.
6. Added the ability to automatically removed bins falling below one count from slices plots.

THEMIS and ARTEMIS Data Products
1. Reprocessed THEMIS L2 ESA and SST files to remove data for times when the spin period was less than 2.5 seconds. For short spin periods, the IDPU incorrectly assigns time tags to particle distributions.
2. Reprocessed THEMIS L2 ESA and MOM files to remove problems with duplicate solar wind flag variables.
3. Data up to the beginning of May is now available for most sites in the Greenland/Denmark/Norway network. There are also some new sites for which data was not previously available through TDAS: Dombas (DOB), Tristan DaCunha(TDC), Rømø (ROE), Jackvik (JCK).
4. All Sky Imager (ASI) products are available as follows:
    a. L1 cdf's and Mosaics are up to date and available through 4/30/2011.
    b. Thumbnail cdf files and overview plots are available through 4/30/2011. Thumbnail movies are available through 4/30/2010.
    c. Full resolution raw data is available and complete for 2007-2009. 2010 complete through April 2010. Full resolution cdf's and keograms are available and complete for 2007-2009. 2010 complete through April 2010.
    d. Web site Mosaics and Movies have been reprocessed for 2007/2008 and 2008/2009 seasons. They are up to date and available through April 2010.

THEMIS Web Site
1. Revised magnetometer list to include latest mag coordinates and addition of complete Greenland and Europe sites.
2. The 2011 nuggets on home page (slideshow) and publications section have been updated.
3. New related site for Inter-university Upper atmosphere Global Observation NETwork (IUGONET) has been added.

Conferences, Collaboration and Trainings
1. The THEMIS Data Analysis Software (TDAS) was presented to the MMS science team on May 6th in Boulder Colorado. The science team is currently considering the TDAS distribution for use on the MMS mission.