THEMIS Science Data Analysis Software Monthly Accomplishments – February 2008

THEMIS Science Data Analysis Software – TDAS (Bleeding Edge Distribution - post v3.02)

1. Added *plotxy* and *tplotxy*. These tools allow the plotting of any 2-d projection of 3-d vector data as line plots. These tools have been design to make line visualization of 3-d data as easy as possible from the command line while still maintaining numerous options to give the user all the necessary flexibility they require to visualize their data. They will work with data stored in tplot variables or directly from arrays stored in idl memory. Additional new features include:
    a. multiple plots per panel
    b. allow replotting of previous plot without having to retype entire command
    c. Finalized cribsheets with additional examples demonstrating new features as well as examples, using fonts, colors, adjusting margins and layouts, using limits/dlimits to set titles. Plotxy crib demonstrates xy plotting from arrays, tplotxy demonstrates plotting from tplot variables.
    d. They will work with data stored in tplot variables or directly from arrays stored in idl memory.
2. Two new overview plots have been created. One of onboard fields and gmags and one of ground fields and moments.
3. The *thm_part_getspec* package now plots theta spectrograms.
4. The code has also been updated to handle the recent availability of 6-angle PSER data.

THEMIS Web

1. The Data Processing Status's web page (option on the Data drop down menu) was updated with additional content which will allow the user to more fully get the status of file recovery and data product inventory. Reference the link: http://themis.ssl.berkeley.edu/status.shtml.

THEMIS Data Products

1. New Versions of the Level 2 ESA, MOM and FIT master CDF files and processing routines have been tested. Reprocessing to create revise L2 cdf's will occur next month (March 2008).

THEMIS Science Data Processing

1. New scripts were added to determine when and if VC1/VC3 dumps occurred, the size of the dumps, and notify Flight Operations if any discrepancies are noted.
2. The Flight Operations team will now be notified of non-reception of data if files are not received by LOS+1hr.
3. The process to recover real-time ASI data from UCalgary was updated to speed up the process of recovery.