

THEMIS Science Data Analysis Software Monthly Accomplishments – April 2010

THEMIS Science Data Analysis Software (TDAS) - v5.21

The THEMIS Project released Version 5.21 of the THEMIS Science Data Analysis Software. Version 5.20 contains New Features and Enhancements to the THEMIS Command Line and Graphical Users Interface (GUI) Software as well as to the THEMIS Web Site. Enhancements are the following:

1. TDAS bug reported by F. Plaschke, crash when loading multiple days of L1 STATE data for a particular time interval, has been fixed.
2. The FGM load procedure has been revised with the following two enhancements:
 - a. The default level for loading FGM data has been changed to L1 (from L2)
 - b. The auto-loading of STATE data has been added
3. Robust error checking has been added to the THEMIS GUI coordinate transformations.
4. Added "yes to all", "no to all" options to many GUI data processing panels.
5. Provided option to subset all panels with the GUI subset-marker feature.

THEMIS Science Data Analysis Software (TDAS) - Post v5.21

1. Enhanced programming to support loading, calibrating, and plotting survey FFTs for command-line and GUI.
2. The reported bug by the FGM Team with the spinmodel code loading and processing of long time intervals (months or years), has been fixed.
3. A right-click menu has been added to the GUI. A user can now right click in the widget tree to get information on variables in memory.
4. The following options have been added to tplot_gui using tplot_options, options, and/or keywords:

xistime	yistime	title(panel)	charsize	xcharsize	ycharsize
zcharsize	xrange	yrange	zrange	xlog	ylog
zlog	xticklen	yticklen	labels	thick	xthick
ythick	xticks	xminor	yticks	yminor	zticks
zminor	panel_size	ypanelsize	xpanelsize	xmargin	ymargin
title(page)	footer(page)	charsize(title)	ygap	!P.background(color)	
!P.color(panel)	colors(line)	var_label(keyword)		trange(keyword)	
5. Upgrades have been completed to allow L1 STATE and all L2 CDF files to be downloaded directly from SPDF's CDAWeb.
6. SCM L2 calibration parameters for initial release have been established.
7. Added file_search procedure to THM_LOAD_XXX, THM_LOAD_EFI to allow for graceful exit in cases where there is no data file

THEMIS Web

1. Data Processing History web pages have been created for EFI, SCM, SST, FIT and FBK.

THEMIS Data Products

1. V03 state reprocessed for entire mission, using latest spin attitude determination.
2. The THEMIS L2 cdfs for ESA, MOM, FIT, FGM, for the full mission, were reprocessed due to changes in the Spacecraft attitude calculations.