

Software Task Priorities (In Play / In the Queue) - 10/15/07

Jim L.

- ~~1.IDL Load routines for Spin Model L1 cdf's Awaiting Feedback~~
- ~~1. Utility routines for new Spin Model Awaiting Feedback~~
- ~~1. SST attenuator status bits not represented in SST CDF. BugzID=92. (For Davin) Awaiting Feedback~~
1. Setup v3.0 QA needs
1. Help out with Compression Flatsat Testing
1. Compress and Decompress routines for MOMs. BugzID=81
1. Compress and Decompress routines for Fields. BugzID=81
2. Modify lzp_wrapper and process_lzp_dir scripts. BugzID=49.
2. Clean-up current VC->L0 processing scripts temporary files. BugzID=50.
2. L0 to L1 processing: look ahead to the next packet before processing the current packet. BugzID=67
3. When FGM range changes in the middle of a packet. Post Proc maybe a solution to eliminate the spike. BugzID=44.
4. Unexpected transfer frames time matched packet time yet in the past. BugzID=38.
5. Provide Higher Cadence State Files
Spinper and spin phase - double precision. BugzID=91
6. Non Monotonic timestamps. BugzID=72
6. L1 File definitions Document. BugzID=xx.

Tim

- ~~1. Reprocess FGM Tohban Plots for all dates available.~~
1. Investigate retrieval of additional datasets from the Canadian (CARISMA) and Alaskan (GI) ground mag networks
1. downloading ground mag data from additional UAlaska sites
- ~~1. Mirror Sites - add section to the Administrator's Guide~~
2. Five probe overview for ESA and SST (Tohban scripts) on the web. BugzID=70
2. Mirror-image of the summary plots data to say "Key". BugzID=89
Add "Key" box to the right of the "Display" Box

Jim M.

1. GMOM's put into ESA files. (for Vassilis) Feedback requested.
1. GMAG Stack Plots - In progress
- ~~1. thm_part_moments puzzle (also Andrei)~~
- ~~1. Thm_cotrans bug.~~
1. Set-up v3.0 QA SVN
1. FIT/MOM (Onboard) in separate L2 cdf's - In progress
1. v3.0 QA Testing
2. Additional Ground Mag data from Alaska Network - processed into slightly different files
2. MOM L2 CDF put Coord Systems into metadata
2. SVD-FIT instead of POLY-FIT - from Vlademir
2. Default for Load FIT and MOM to be L1 (for Davin)
- ~~2. v2.02 fix efi program in trunk for Ferdinand~~
2. High-pass filter function. (for Vassilis)
2. gmag overview plots require reprocessing. gmagstackplot mod. Despake. BugzID=86
- ~~3. Sort out with Tim Interface Issues with production~~
3. tsmooth2 needs to accept a time keyword (say, seconds) rather than # of points. (for Vassilis, Davin)
3. Review Patches for CDF's to increase speed

4. GUI Mods

- a. thm_ui_config bug found by Davin
 - b. No dialogue box appears for save ascii, no file location in msg box
 - c. See email with history file ...231920 abort.
 - d. Upper flatfile button (for Vassilis, work with Kate / UCLA Splash)
- #### 5. GUI Mods
- a. current plot window - tell you which one (for UCLA)
 - b. Save Ascii - fix precision, add header (with Pat for UCLA)
 - c. Label S/C Position button (GSE or GSN - default) (for UCLA)
 - d. De-Gap widget add units
 - e. DP - Delete or Overview Plot or Clear History - warning message
 - f. Long Variable Names truncated in IDL-D
 - g. Lower flatfile button (for Vassilis / Chris Russell)

Pat

1. IDL Geopack Testing. T96, T01 and T04. BugzID=87
Intel Mac needs to be completed. (Whose got the Mac?)
1. Five probe overview for ESA and SST (Tohban scripts) on the web. BugzID=70 .
ESA - added feature plot energy flux (Ready for Jim M. and Tim)
SST plots awaiting thm_part_moments issue resolution.
1. Mirror-image of the summary plots data to say "Key". BugzID=89
Provide plots with labels for each quantity
1. FileTracker - turn off email notification (requested by Tim by 10/12)
1. v3.0 QA Testing
2. VMO Deliverables: data product description files
Step 1 - fgm L2 cdf for one probe, Step 2 - fgm L2 cdf for all probes
2. Mini language to operate on tplot variables - first provide concept writup
3. bug:plotting colors/options for stored data coming from multiple tplot vars
3. boundary normal coordinates. On Hold. BugzID=59.
4. Christine's code to rotate the XY coord's along Earth direction was very effective. Also it was used by others. We need to streamline it, and its very similar to the others you've already written.
4. Tplot auto scaling. BugzID=41.
4. invalid inputs to the version keyword
4. Clean-up of makepng and makegif

Bryan

- 1a. thm_spin_phase bug.
1. v3.0 QA testing
- 1b. Create angular spectra using thm_part_mom_calc or thm_part_moments?
- 1c. Create plotting routine for angular spectrograms
2. Modify thm_load_state to load highest version file, no suffix BugzId=51.
3. thm_load_state - phase I
 - a. hardcode (units = "km/s" or "km", or "deg")
 - b. finish "no_update" loading option (consult with Davin)
 - c. Finishing the coordinate transformation of the thm_load_state data at input, to include transformation of spinaxis attitude, need to determine keyword switch, implement the rotation of the spinaxis elevation/azimuth from gei to arbitrary coordinates (consult with Pat, Vassilis and Ken)
4. thm_load_state - phase II (consult with Ken)
 - a. For STATE CDF files, the following variable attributes should be defined, consistent with they way they are defined in the L2 FGM file: units, coordinate_system (consult with Jim L.)
 - b. Once defined in the CDF, thm_load_state should take the values from the dlimits.cdf.vatt to set the metadata for the tplot variables: dlimits.data_att.units, dlimits.data_att.coord_sys
 - c. For thm_load_state, the suffix gets added to support data, but support data is not transformed: if you call thm_load_state, coord='gse', suffix='_gse', /get_support_data only the pos and vel get transformed, but

all get the _gse suffix.

- d. in thm_load_state, the code to delete support data that was loaded for coordinate transformation should be just del_data, '*_state_temp'

5. upgrade thm_load to work with probe assignments
5. make a b/w colormap for a single tplot panel.
6. move functionality of thm_load_state2 into thm_load_state and delete thm_load_state2
6. Shadow Indicator (for Vassilis - using functionality in ...load_state2 and tplot roi)
7. Multiple enhancements concerning keywords, valid_names and thm_load routines

Ken

1. Themis SCM CAL File Processing - produce table of contents and assign sections with Patrick R.
2. Themis System Administrators Guide
3. Themis Developers Guide

David

1. v3.0 QA Testing
1. button for postscripts (for Stephen Mende)
2. Add new coord transf options GSM2SM and SM2GSM into GUI

Davin

1. Electron moments from SST seem to have an issue.

Jim McFadden

1. Various clean-up issues in thm_load_esa_pkt. BugzID=88 (Pat reported)

Christine and Jiang

1. v3.0 Testing

UCLA

1. Clean-up the power ripples from the FGM data. (Krishan)

Software Tasks To Be Discussed (TBD) / To Be Assigned (TBA)

1. TBA - Tweaks for _dot0 and _0 for subspin resolution (for John - tbd)
2. TBA - Implementation of the removal of the spin-independent and -dependent offsets (for John)
3. TBD - Thomas Moreau - Assign tasks, Davin to think about
4. TBD - print, dprint, msg continue, verbose options for a standard
5. TBD - Mini Language to operate on tplot variables
6. TBD - Target for v3.0 pull off to QA 10/19.
7. TBD - Administrator's Guide complete by mid December