

Software Task Priorities (In Play / In the Queue) - 10/22/07

Jim L.

~~1. Setup v3.0 QA needs~~

1. v3.0 QA Testing
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. Update beta site pointer to v3.0.~~

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
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) To be sent to SPDF and QSAS~~

1. GMAG Stack Plots - In progress few more Spikes, limits changed, reprocess.
- ~~1. SCM FBK bug fixed. Need to reprocess.~~
- ~~1. Set up v3.0 QA SVN~~
1. v3.0 QA Testing - In progress
1. FIT/MOM (Onboard) in separate L2 cdf's - In progress
2. Additional Ground Mag data from Alaska and Canada 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. High-pass filter function.(for Vassilis)
2. gmag overview plots require reprocessing. gmagstackplot mod. Despike. BugzID=86
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. v3.0 QA Testing
1. IDL Geopack Testing. T96, T01 and T04. BugzID=87
Pat will use his machine with a floating license.
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
2. VMO Deliverables: data product description files
Step 1 - fgm L2 cdf for one probe, Step 2 - fgm L2 cdf for all probes
2. "th?_fgs_sigma" and "th?_efs_sigma" to the FIT CDFs (L1) and this should make it to the L2 CDFs as well,
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.~~
- 1b. Create angular spectra using thm_part_moments - add keyword
- 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 - In progress
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 (thm_part_moments)~~
2. ~~SST attenuator~~

Harald

1. Validate Tsygenko work from Pat

Vladimir

1. Zero order step to create pre-processed solar wind data
2. Shue MP routine

Christine and Jiang

1. v3.0 Testing - In progress

UCLA

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

LASP

1. FBK Overview plot mods (Chris Cully)

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 - Administrator's Guide complete by mid December