

Software Task Priorities (In Play / In the Queue) - 10/01/07

Ken

1. SCM Reconciliation - Merge Chris C. and Oliver's latest version of thm_cal_scm with the trunk version. This will accomplish: clean up the power ripples, and the 8/32Hz noise for SCM
2. Themis SCM CAL File Processing - produce table of contents and assign sections with Patrick R.
2. Themis System Administrators Guide
3. Themis Developers Guide
4. Tweaks for _dot0 and _0 for subspin resolution (for John - tbd)
4. implementation of the removal of the spin-independent and -dependent offsets (for John)

Jim L.

1. IDL Load routines for Spin Model L1 cdf's
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. Five probe overview for FGM, ESA and SST (Tohban scripts) on the web. BugzID=70

Jim M.

1. Interface with QSAS with latest L2 cdf's.
2. FIT/MOM (Onboard) in separate L2 cdf's GMOM's put into ESA files. (for Vassilis)
2. SVD-FIT instead of POLY-FIT - from Vlademir
2. MOM L2 CDF put Coord Systems into metadata
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 cdf's -Resilution dropped to 1 sec from 1/2 sec.
2. gmag overview plots require reprocessing. gmagstackplot mod. 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. Field Tracing. BugzID=80 Awaiting Feedback.
1. IDL Geopack Testing. T96, T01 and T04. BugzID=87
2. Five probe overview for FGM, ESA and SST (Tohban scripts) on the web. BugzID=70 .
Vassilis to review FGM plots. Work can begin on ESA and SST.
ESA final completion awaiting fix from Davin. ESA plots can be generated and sent to Vassilis.
2. Mirror-image of the summary plots data to say "Key". BugzID=89
2. Code to add magnitude of a vector into a vector structure.
3. FileTracker - turn off email notification (requested by Tim by 10/12)
3. bug:plotting colors/options for stored data coming from multiple tplot vars
3. boundary normal coordinates. On Hold. BugzID=59.
4. Tplot auto scaling. BugzID=41.
4. invalid inputs to the version keyword

Bryan

1. Using thm_load_efi as a guide incorporate thm_load_xxx functionality into thm_load_state
 - a. place the thm_load_state_vload and thm_load_state_post functionality directly into the thm_load_state procedure.
 - b. get rid of the two separate loops over levels, filetypes, snames. get rid of files_ptrarr.
 - c. get rid of loops over levels and filetypes, since they are irrelevant for thm_load_state
 - d. keep loop over snames, but change sname to probe
1. Modify thm_load_state to load highest version file, no suffix BugzId=51.
1. 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)
2. 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'
3. upgrade thm_load to work with probe assignments
4. make a b/w colormap for a single tplot panel.
5. move functionality of thm_load_state2 into thm_load_state and delete thm_load_state2
5. Shadow Indicator (for Vassilis - using functionality in ...load_state2 and tplot roi)
6. Multiple enhancements concerning keywords, valid_names and thm_load routines

David

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

Davin

1. Create Angular spectrograms
2. Z-Buffer plotting bug. BugzID=85.

Jim McFadden

1. Function get_tha_peir issue (for Kate - UCLA)
2. Various clean-up issues in thm_load_esa_pkt. BugzID=88 (Pat reported)

UCLA

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

Software Tasks (UnPrioritized / To Be Discussed (TBD))

1. TBD - Software Repository Open to the Public
2. TBD - Mini Language to operate on tplot variables
- 3. TBD - Fix for Ferdinand's issue as an incremental**
4. TBD - makepng and makegif