

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E; crib; script; suite; UG; DevG; Qref; AdmG
To be Assigned or Discussed								
4793								
4794								
General								
	Tips of the Month		David		Jim L	Next Candidates: Lynn Wilson Routines; Eclipse auto processing; FGM Reprocessing, CDF library 3.4.1 released (fixes memory issue for Linux users), Simplified eclipse spin model corrections, new SST calibrations, specplot datagap		
4792	2013 MAP for Senior Review	11/1/2012			Jim L			
4647	I am reviewing a paper for GRL that uses THEMIS data incorrectly. Basically, the authors are trying to publish solar array switch spikes as evidence for DLs. I am sorry that I cannot give you more details. I will notify the editors of this problem. However, it is entirely possible that such a paper could have been published and I want you to be aware of this problem. Perhaps a warning should be posted on the web site: (1) Axial boom data are not necessarily valid, particularly in the subsolar region. (2) THEMIS EFI data have unwanted "spikes" which come at four times per spin. These spikes are removed in released THEMIS data analysis programs, but the removal process can leave a residue.	6/1/2012	Bob Ergun - Colorado U	1	David/Emmanuel	Will discuss with David 6/18. All changes need to be approved by John Bonnell (very busy with RBSP at the moment). David will wrap up. Emmanuel made changes in beta site 7/5/2012. JB pinged week of Aug 10, no response yet.		
Hannes								
4153	maintenance of gmag stations "Exclude List"	10/11/2010	David	0	Hannes	Exclude List up to date as of 8/20/2012		
4018a	New Calibration FGM parameters and spin axis offsets	5/10/2010	Hannes	1	Hannes	10/03/2012: Cal files updates, all probes from August 2012 on.		
4080	Attitude Determination next few months	6/21/2010	Hannes	1	Hannes	10-22-2012 Updated for 2012-04-01 – 2012-06-30		
4472	Inter-spacecraft FGM calibration for ARTEMIS.	1/4/2012	Vassilis	1	Hannes	6/4/12 from Hannes: Artemis inter spacecraft differences show good results with current calibration		
Aaron								
4468	Ongoing - Review all commits by Davin, Peter, etc for impact to TDAS.	3/27/2012	David	0	Aaron	Provide weekly report and spreadsheet		
4468	Modify ESA packet loading code to use standard spinmodel routines rather than deprecated ASCII files.		Jim L	1	Aaron	After TDAS 7.0.	1 day	
4468a	Routine to dump common block data to tplot variables (for regression testing)			1	Aaron			
4468b	Replace ESA time tagging code with std spinmodel routines			1	Aaron	Reduced mode first (always 1 spin/sample), then other modes, using tmttools L0->L1 processing as reference implementation. Testing full and reduced modes, timestamp differences very minor and expected (on the order of 100 usec or less).		
4135a	Write some TDAS routines that take an apid and a configuration word, and return a structure with all the relevant properties of that configuration. This is basically reimplementing some logic that's already in the L0->L1 processing code (written in C). If anyone ever needs other attributes of the instrument configuration (for example: the angle maps corresponding to each configuration), we would update these routines to return the additional information.	9/10/2010	Jim L	1	Aaron			
4468c	Verify ESA data correctly time-tagged			1	Aaron			

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4468d	Add spinmodel loading code to thm_load_sst			1	Aaron	10/26/2012 In progress		
4468e	Add eclipse delta-phi correction to ESA and SST common blocks			1	Aaron	10/26/2012: ESA done, SST in progress		
4034a2	thm_parts_moments update (spin moments mods)	11/22/2010	Vassilis	1	Aaron	initial simple way, final fix is to fix esa and sst 3D data structures. Probably a good idea to make a THEMIS-specific moment calculation routine, to avoid extensive changes to WIND code currently being used. Jim McFadden (as of 3/26/12) said he would review what Jim L sends him. After 4468.		
4509	Some array accesses still use () instead of [].	2/6/2012	A. Breneman	1	Aaron	ESA packet loading code fixed, probably some other occurrences to be updated.		
Cindy								
4358	Every 6 months check that the UCLA Mag Cal have not changed.	9/6/2011	David	0	Cindy	Next March 2013		
4781	GMAG station status: troubleshoot stations with no data reported				Cindy			
4789	Process Kiana GMAG back data	10/19/2012	Cindy		Cindy	Just started receiving data from site after permissions problem fixed by Harald. Fixing some problems with processing script.		
4787	gbo_asi_rt_mirror.ksh reports unzip errors, but downloaded file was OK	10/19/2012	Cindy		Cindy	11-02-2012 Errors have gone away, maybe a transient problem at other end?		
4783	OMNI load routine for GUI	10/15/2012	Vassilis	2	Cindy	Test case for new GUI load tab API		
4695	GUI API for other missions to add GUI tabs, load routines, etc	7/6/2012	Jim L	2	Cindy	Proposed GUI load tab registration routine has required arguments for status bar, history window, and other GUI objects. That makes them part of the API; expand writeup to include documentation for most useful methods (excluding "internal-use-only" methods) on each of these objects. 10/12/2012: In progress, writing dummy load routine to demo data tree manipulation from GUI load panel.		
3086b	MACCS download server moving to new hostname, download scripts will need an update	9/11/2012	Cindy	2	Cindy	Will activate download scripts after gaps are filled on MACCS server. Will ping Eric for ETA.		
4758	MACCS download script: ever since site name changed, extra components added to directory paths (also an issue with LRV)				Cindy	Maybe related to wget options? In progress. After 3086b.		
Jim L								
4791	Build TDAS 7.01 release with SPDF URL patches only	10/22/2012	Jim L		Jim L	10/26/2012: In progress, need to fix a few structural issues in repository		
4764	Steps/Sawtooth pattern in FGS data near perigee	9/24/2012	Vassilis	1	Jim L	Sudden changes at packet boundaries, probably a spin fit timing issue.		
4709	Manual eclipse processing resets "last processed" date for automated processing; some processing logs not preserved	7/24/2012	Jim L	1	Jim L	If the automated processing is up to date, and I manually reprocess a time range early in the mission, the "last processed" date will get reset to the earlier date, which could trigger an unintended reprocessing of the full mission. "last processed" date should only be updated if it moves forward in time.		
4716	Add examples of eclipse spin model corrections to crib sheets (fgm, efi, scm, fit, mom)	7/27/2012	Vassilis	1	Jim L	fgm, fit, mom, updated; efi, scm, new eclipse crib in progress.		
4786	Merge IUGONET code into TDAS	10/17/2012	Jim L		Jim L	Some modified TDAS routines were provided in order to support IUGONET load routines and GUI tab – TDAS code may have been modified since then, need to ensure no regressions from taking IUGONET mods.		
4718	ESA energy table updates – L0->L1 processing mods (tmttools)	8/2/2012	Jim L	0	Jim L	Modified tables will need a new ESA config word – tmttools L0->L1 code needs to be updated to recognize it as a valid ESA mode. Waiting for Jim McFadden to help us update the mode spreadsheet with new config words and table configuration. 9/28/2012: New modes & config words may already be present in latest ETC spreadsheet.		

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4142	issue with FGS processing - timestamps	9/30/2010	Vassilis	1	Jim L	not trivial		
2266	Timing of Spin Fit data	10/16/2009	Jim McFadden	1	Jim L	see 4142		
	Jim M							
4784	Add RBSP orbit data to THEMIS plots	10/16/2012	Vassilis		Jim M	10/26/2012: John B will provide link for RBSP orbit data. I received a request to plot RBSP data on the THEMIS plots. Maybe as a fourth click to show both inner probes and RB?		
4774	file_http_copy issue for RBSP data	10/4/2012	Peter Schroeder	1	Jim McT	10/19/2012: Initial fix didn't work for maven, need to add robust directory globbing capability. No impact on THEMIS mirror sites, SPDF. Anyway, this morning I had to make a tweak to the path on their server and now loading data does not work. I think I have traced the problem to line 341 of file_http_copy, but I'm unclear what the heck is supposed to happen in the lines just before this. When I run my current version of rbsp_load_emfisis, file_http_copy at line 341 does something nonsensical. The arguments in strmatch look like this: rbsp_emfisis> print,w -1 rbsp_emfisis> print,sub_pathname Flight/RBSP-A/Quick-Look/2012/09/21/ rbsp_emfisis> print,links[0] http://emfisis.physics.uiowa.edu/Flight/RBSP-A/Quick-Look/2012/09/21/rbsp-a_HFR-spectra-burst_emfisis-Quick-Look_20120921_v1.2.2.cdf rbsp_emfisis> print,sup_pathname Flight/RBSP-A/Quick-Look/2012/09/21/rbsp-a_magnetometer_emfisis-Quick-Look_20120921_v*.cdf rbsp_emfisis> print,sub_pathname+links[0] Flight/RBSP-A/Quick-Look/2012/09/21/http://emfisis.physics.uiowa.edu/Flight/RBSP-A/Quick-Look/2012/09/21/rbsp-a_HFR-spectra-burst_emfisis-Quick-Look_20120921_v1.2.2.cdf		
4152b	change the ESA tables such that the minimum magnetospheric electron energy becomes lower (about 3eV, or lower). McFadden can specify the lower energy	10/20/2011	Vassilis	0	Jim M	only ARTEMIS probes - Need to talk to Jim McFadden. Also need MOC Support. 8/10/2012: FLATSAT energy weights don't match Jim McFadden's spreadsheet, need to discuss with him, possibly 8/10/2012. 9/10/2012: Energy weight table discrepancy resolved, flatsat and probe EEPROM tables are fine. 9/28/2012: New modes & config words may already be present in latest ETC spreadsheet		
2224	thm_load_mom: for quantities like velocity, the coordinate system isn't stored in the meta data, and none of the units are stored in the place we normally try to store them (from Pat - Vassilis concurs) Will take a look.		Vassilis	2	Jim M			
	Nick							
4286	Create and maintain a list of FBK and FFT (and possibly other?) configuration parameters versus time, to be used by other researchers to located time intervals containing data that was acquired in a particular configuration. Examples (totally made up): THEMIS A Filter Bank Source Selections: 2007-02-23 - 2008-01-01 e12dc, scm3; 2008-01-01 - 2008-05-01 scm2, e34ac; THEMIS A FFT configuration: 2007-02-23 - 2008-01-01 16 frequency bins, e12dc, e56dc, scm1, scm3; 2008-01-01 - 2008-05-01 32 frequency bins, e12dc, e56dc, scm1, scm3	7/15/2011	SPDF - Jim L	1	Nick	10/26/2012: FBK in progress (bash script and C program), FFT next.		

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4778	Developers guide update: how and when to enable or disable tabbing between user interface elements	10/9/2012		1	Nick	Current tabbing support varies throughout the GUI. Sometimes you can tab to controls that don't accept input (e.g. frames or borders). Document IDL widget keywords pertaining to tab order.		
959	When removing a middle panel with locked axes on and you have more than 2 panels, the space the removed panel occupied is drawn blank, rather than moving the panels below it up.		Cindy	1	Nick	By design. Document in User's Guide.	2 days	
960	Add a change all pages option in the Page Options panel		Aaron	1	Nick	Still needed (see 810).	2 days	
	Pat							
	Updated FGM calibrations for solar array currents, ADC nonlinearity available?	5/30/2012	Vassilis	0	Pat	Last Recieved - May 2012. May need to remind FGM team if we go a long time without updates.		
4780	Additional SST energy extrapolation tasks	10/11/2012	Drew/Vassilis	0	Pat			
4780a	Implement keyword to add energies to the existing set of energies instead of requiring the full array of energies to be specified.	10/11/2012	Drew/Vassilis	0	Pat	In progress – tricky to combine energies across mode changes.		
4780b	Either implement logic to automatically remove the ESA retrace bin or add a keyword to allow end-users to remove bins.	10/11/2012	Drew/Vassilis	0	Pat	10/26/2012: Jim M/Jim McF to provide clarification on ESA retrace bins		
4780c	Make a log-log fit the default.	10/11/2012	Drew/Vassilis	0	Pat			
4780d	Add option to perform least squares fit on specific bins.	10/11/2012	Drew/Vassilis	0	Pat			
4780e	In the crib, the extrapolation should be done on counts/sec instead of en eflux.	10/11/2012	Drew/Vassilis	0	Pat			
4780f	Add a "see also" section to the cribs.	10/11/2012	Drew/Vassilis	0	Pat			
4713	Since the diode degradation will be modeled as shifting the minimum energy of the SST up, we'll need to interpolate the SST efficiency parameters to the new energy bins.	7/24/2012	Vassilis	0	Pat	This may not actually be done by someone on the software team, but I thought I'd report it anyway, so that it doesn't get lost in the shuffle once the other calibrations are completed.		
4782	Statistical error (based on counts) for SST data	10/15/2012	Christine G	1	Pat	Already exists for ESA, add equivalent feature for SST After 4775 but before 4780s.		