

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E; crib; script; suite; UG; DevG; Qref; AdmG
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			
4468d	Add spinmodel loading code to thm_load_sst			1	Aaron			
4468e	Add eclipse delta-phi correction to ESA and SST common blocks			1	Aaron	10/12/2012 In progress for ESA		
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			
4706	Missing data from McGrath and Kiana magnetometer sites	7/18/2012	Cindy	1	Cindy	10/19/2012: File permissions problem fixed for Kiana and data is flowing, need to check back data too. McGrath: Firewall issue at their end (no incoming ports open so we can't get in), Stu Harris is working with admins on their end, but might take a while to resolve.		
4481	New data product, AE index from THEMIS+std sites	1/9/2012	Vassilis	1	Cindy	awaiting Russian data 7/2/2012: Still need data from 2007-2010. 7/27/2012: Getting current data again, still waiting for older data.		
4787	gbo_asi_rt_mirror.ksh reports unzip errors, but downloaded file was OK	10/19/2012	Cindy		Cindy			
4721b	Add NRCAN GMAG sites (EHB, actually chain of 5 GMAGs)	8/3/2012	Cindy	1	Cindy	In progress – working with Ian Schofield and Martin Connors to get data back to 2007. 8/24/2012: Vassilis is working with them to see if the data can be made available en masse rather than requesting individual plots.		
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	New server should be up and running week of Sept 26 2012. Some script problems at their end, they are working on it.		
4758	MACCS download script: ever since site name changed, extra components added to directory paths (also an issue with LRV)				Cnidy	Maybe related to wget options? In progress. After 3086b.		
	Jim L							
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.		

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E; crib; script; suite; UG; DevG; Qref; AdmG
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.		
4735	Socware ksh directory cleanup	8/24/2012	Jim L	1	Jim L	/disks/socware/thmsoc_dp_current/src/ksh out of sync with repository; some files/subdirectories not present in SVN; some junk files (emacs backups, etc)		
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.		
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							
4776	Update thm_sst_ps?? routines to handle L1 SST timestamps correctly (the CDF times already represent the spin midpoint so an additional ½ spin correction should not be applied.)	10/3/2012	Jim McT	1	Jim McT	Fixes checked in, SST L1->L2 reprocessing imminent.		
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		

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E; crib; script; suite; UG; DevG; Qref; AdmG
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							
2043	Refactor repeated CDF library code in CDF processing tools BugZid=50		Vassilis	1	Nick	e.g cdf_readall, cdf_writeall code is repeated in several of the tmttools programs that deal with CDFs. Should be pulled out into a new library.		
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	phase 1 - list for next Tips of the month, phase 2 - cdf or web page: To be done before the Map in early 2013. After 2043.		
4778	Developers guide update: how and when to enable or disable tabbing between user interface elements	10/9/2012		1	Nick	Current tabbing support various 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.		
810	Replace the Set All Panel checkbox, with an 'Apply All' button at the bottom of the window. More intuitive. Need to check all panels for consistency		Oldie	1	Nick	Exclude panel titles from "Apply All Panels" option, replace checkbox with button.		4 hrs
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	Still happens – possibly by design?	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			
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			
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 efflux.	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.		
4002	Document: SST File and Calibration Processing	3/5/2010	David	1	Pat	to be completed 9/30/12		

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E; crib; script; suite; UG; DevG; Qref; AdmG
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.		
4775	SPDF URL changes	10/4/2012	Tami	0	Pat	When ssl_general modifications are tested, make a TDAS 7.01 release including the patches (and nothing else), announce to themis-science-support-announce with instructions to change saved config files. Some URLs have changed due to merge with NSSDC, affecting some default pathnames under ssl_general, user configuration files, crib sheets, and command-line tests: The old top level ftp data directory was ftp://cdaweb.gsfc.nasa.gov/pub/cdaweb_data or ftp://cdaweb.gsfc.nasa.gov/pub/istp neither of these will work anymore. You must use:		
4627b	SST: Andrei did some work that makes it look like we may need to look at the inter-anode calibrations for probes B & C.(This may be more Drew than me)	5/17/2012	Vassilis	1	Pat	Complete 4627a - d by August 1		
4627c	SST: We need to generate a combined spectrum product that includes the FTO(low) channel. This would be adding the FTO(low) channel to the F+FT combined spectrum that we've already created.	5/17/2012	Vassilis	1	Pat			
4267c	Write code to remove proton and electron contamination from the electron and proton distributions using data and efficiencies from the F & O channels.	6/27/2011	Pat	1	Pat	Working on noise removal, etc.		
4627d	SST: After #a-c are done, we need to reprocess SST L2 with sun contamination removed and new calibrations applied.	5/17/2012	Vassilis	1	Pat	need 4267c to be completed		
4603	make new SST Cal standard	3/22/2012	Vassilis	1	Pat	Revisit in July ** on hold **		