

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							
4782								
4783								
4784								
4785								
	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	10-08-2012: Next three months of attitude determination in progress		
4472	Inter-spacecraft FGM calibration for ARTEMIS.	1/4/2012	Vassilis	1	Hannes	6/4/12 from Hannes: Artemis inter spacecraft differences		
	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			
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.		
4463	file_http_copy support for proxy servers	12/12/2011	IUGONET	1	Aaron	Verified correct headers when going through local proxy. Email sent to IUGONET team to test under their configuration, waiting to hear back from them. Aaron to ping again 9/28/2012 IUGONET team says it's working!	1-3 hrs	

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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	Sites are reported as working, but no recent files at the other end, so nothing for wget to pick up. 10/12/2012: Katherine and Hannes now involved, will check back in a few weeks to see if any problems still unresolved. Trouble reaching Emma Spanswick, the POC for the McGrath and Kiana stations.		
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.		
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.		
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)				Cindy	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.		
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.		
4718	ESA energy table updates – L0->L1 processing mods (tmtools)	8/2/2012	Jim L	0	Jim L	Modified tables will need a new ESA config word – tmtools 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 ready to commit, SST L1->L2 reprocessing will be needed.		

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4774	file_http_copy issue for RBSP data	10/4/2012	Peter Schroeder	1	Jim McT	<p>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.</p> <p>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:</p> <pre>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</pre> <p>As you can see here, the first argument (sub_pathname+links) produces strings that I don't think were intended.</p>		
4779	SVN commit hooks for updating "Help->About" screen with current revision number. Possible for TDAS version string as well?	10/9/2012		1	Jim McT	<p>It might be a good idea to add some functions like "get_tdas_revision" or "get_tdas_version_string", so that only a couple of files would be subject to version string updates, rather than having version string literals scattered around the TDAS code base that would all have to be updated. Will try making an ASCII file in bleeding_edge and release builds, see how that works before implementing SVN hooks.</p>		
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	<p>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</p>		
	Nick							
2043	Refactor repeated CDF library code in CDF processing tools BugZid=50		Vassilis	1	Nick	<p>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.</p>		
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	<p>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.</p>		
4778	Developers guide update: how and when to enable or disable tabbing between user interface elements	10/9/2012		1	Nick	<p>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.</p>		

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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	Made change in Panel Options. Checkbox control and supporting code still exists (control is hidden), will remove when sure it's safe to do so. There are several other panels that could use the same update.		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	
1063	Axis Options: #1 When I turn off show-line and turn on mirror, the mirror doesn't show. This is not important, because it is not incorrect that it doesn't show, but we could maybe gray out the mirror check box + others when the show flag is not checked.		Pat	1	Nick	Still an issue.	1 day	
1133	When I am removing panels in the layout panel, it always resets the selection to the bottom panel in the list after I remove a panel. This can be annoying if there are several panels because I have to keep scrolling up and clicking.		Pat	1	Nick	Still an issue.	1/2 day	
1139	We should turn on the hourglass and/or include a progress indicator when we generate angular spectra.		Pat	EL		Still an issue.	get spec overhaul - 2 hr	
1177	The above Axis Annotation tab buttons should probably get changed from "first/last" to "range min/max". They used to apply to tick positions, but now are really just the plot box (range) min/max.		Michael	EL		Still open.	for discussion, 2 hrs	
1298	One item that I think we forgot about when discussing the spinner issues is that it returns strings in it's event structures but doubles when using get_value from widget_control. We should make it more consistent by returning doubles in the event structu		Aaron	BL		Nick to check spinner widget to see what it returns.		
1315	Issues with Loaded Data - need routines built for configuration/save for ACE, WIND, IST. Currently, only have configuration routines for THEMIS and GOES.		Pat	EL		Only ACE is missing, but it uses the ISTP configuration. Do we need a separate configuration for ACE?		
	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.		

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4773	Redo SST calibrations with new scheme: match intervals during quiet periods early in the mission, to establish relative efficiencies, then later in the mission to estimate degradation.	10/1/2012	Vassilis	0	Drew			
4771	Writeup for new SST calibration	9/28/2012		0	Pat/Drew	For senior review. After 4773.		
4724	Issues with implementation of specplot datagap keyword	8/9/2012	Pat	0	Pat	The way that the keyword is implemented is that it breaks the main spectrogram into smaller spectrograms, using any time gaps bigger than the parameter provided in the datagap keyword as the condition for splitting spectrograms. It then loops over each spectrogram and draws it separately. The problem is that the code it is looping over is basically a copied and pasted version of the single spectrogram version. Some of the parameters that are determined inside each iteration of the loop are then used outside the loop. What this means is that the parameters that get used after the loop are basically set arbitrarily depending on the loop order and on how each parameter is set. Probably need a pre-pass to determine global max/min and then use that for each subinterval.		
4775	SPDF URL changes	10/4/2012	Tami	0	Pat	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: ftp://cdaweb.gsfc.nasa.gov/pub/data or ftp://spdf.gsfc.nasa.gov/pub/data		
4737	calc enhancements	9/3/2012	Vassilis	1	Pat	For newly created variables, ytitle should default to the variable name; scale should reset to automatic and forced to be linear. Or, maybe better if it takes the lin/log options from a variable on the right hand side, if that's feasible.		
4519	getspect (CL) rewrite for maintainability	2/21/2012	Pat, Aaron, Jim M	1	Pat/Vassilis	Code has become prone to bugs, very difficult to understand and maintain, would benefit greatly from rewriting from scratch with "lessons learned" up to this point. Level of effort? Pat and Vassilis to go over code, improve documentation, and identify areas that could be improved.		