

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								
4846	Review PHP compatibility for upgrade to PHP 5.3	1/25/2013			All PHP devs	Any reason not to do this upgrade on danaid?		
4847								
4848								
Hannes								
4153	maintenance of gmag stations "Exclude List"	10/11/2010	David	0	Hannes	Exclude List up to date as of 9/20/2012		
4018a	New Calibration FGM parameters and spin axis offsets	5/10/2010	Hannes	1	Hannes	12/06/2012: Cal files updates, all probes from mid-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								
4840	bug in thm_crib_tplot_annotation	1/15/2013	Pat	1	Aaron	The example with filled symbols doesn't work, just get an empty plot.		
4795	thm_part_dist_array memory allocation optimization	11/13/2012	Pat	1	Aaron	Scan common blocks and preallocate all needed memory rather than doing incremental allocation/copies.		
4777	thm_part_dist_array modification	10/2/2012	Aaron	1	Aaron	The task would be to vectorize thm_part_dist_array by having it directly access the common blocks where particle data are stored instead of looping over thm_part_dist. This would mean writing some vectorized sub-fuctions that recreate the operations done in datatype-specific routines called by thm_part_dist. Also, for this to work and be most effective all background/contamination removal and other similar routines would need to work on arrays of data structures. May be rather complicated...assess level of effort, then prioritize.		
1301	The draw object takes a long time to render spectrograms when they are very zoomed in. It should be possible to put a special case in that would make this work more quickly.		Pat	4		Relatively easy partial workaround possible		
4841	Problem loading WIND data from SPDF	1/14/2013	Peter Schroeder		Aaron	URLs are structured differently now – reproduce with bleeding edge?		
4719	ESA energy table updates – TDAS mods (ESA packet processing, calibration, summary plots, etc)	8/2/2012	Jim L	1	Aaron	Support new ESA config word in TDAS code. After 4718 (Jim L).		
Cindy								
4845	Add new PG3 GMAG site	1/25/2013			Cindy			
4760	Add McMac magnetometer network (12 sites) to our data set.	9/17/2012	Vassilis		Cindy	ucla_rmd2all script modified, master CDFs created..database tables will need to be created with updates to the GMAG status pages.		
1125	Sometimes when the Annotate Last option is turned off (as it is by default) it will keep ticks relatively far away from the end of the axis from being annotated. If there are three or less ticks on an axis this may cause a large portion of it to be annotationless making it difficult to read.		Aaron	EL			4 hrs (? Done)	

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4552	Right now, if the GUI automatically selects fewer ticks than the user requested it overwrites the value that the user requested. I'd recommend that we don't change the requested value even if the displayed number of ticks is less than the requested number.	3/15/2012	Pat			(See also #4508) Rewriting the ticks on each step can create a lot of odd problems with "tick mark creep". For example, if you request 5 ticks, the algorithm might only be able to fit 4 ticks nicely, and then it replaces the 5 in the panel with a 4. But if you request 4 ticks it might draw 3(because of rounding, it might just barely fail the test for 4), and then it writes 3 in the panel. Thus you get a situation where each time you hit apply you get fewer ticks than the last time. This problem exhibits in lots of other ways. So I think just not flush the draw object value back to the interface would be the safest fix. Lydia: we'll need to make it clear to the user somehow that the number of ticks in the box may not be the same as the number of the plot (I'm sure they could read it in the users' guide, but people might forget).		
1419	It is essentially impossible to get more aesthetic ticks on a log axis when ticks are spaced 1 order of magnitude apart. There is a fix that could fit more aesthetic ticks in		Pat	EL				
1420	We should add an option that allows the user to determine if minor ticks should be log-spaced or not. On plots with very large ranges, logarithmically spaced minor ticks are not helpful.		Pat	EL				
4761	Add STEP polar magnetometer network (6 sites) to our data set.	9/17/2012	Vassilis		Cindy	12/12/2012 Ian Schofield is gathering Dr. Hayashi's data for us, will get back to us after Jan 1.		
4706	Missing data from McGrath magnetometer site	7/18/2012	Cindy	2	Cindy	. 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.		
	Eric							
803	Would be nice to have a way to move different panels from one page to another	11/22/2011	Oldie	3	Pat	sort how level of effort to accomplish. On hold, after QA		
1061	Add capability to control Legend text, font, format, size, color			3		Vassillis reviewed on 7/20/09	4 days	
1266	Our numerical entry fields only accept exponential notation entries of the form (1.23e-3) but not the more traditional format(1.23*10^-3). We may want to leverage the code base from the mini language so that we can interpret these entries as numbers.		Pat	EL		Still happening?	3 days	
1225	Spinner for zoom control redraws every key stroke		Jim L	EL			1 hr	
	Jim L							
4834	Add additional links to instrument configuration history pages	1/10/2013	Bob McGuire		Jim L	1) From ESA, SST, other instrument pages 2) L1/L2 master CDFs 3) Possibly from one of the "Data" dropdown menu items? Hold until Nick's task 4804 is done. Ask Bob McG to look at website and suggest other useful changes.		
4831	Admin guide updates: eclipse spin corrections, chk_bfds_archive	1/3/2013			Jim L			
4815	Developer guide updates for GUI API, placeholders for rest of SPEDAS to plugin interface	12/7/2012	Vassilis					
4816	Eclipse spin model processing: some eclipses not being processed with current code, but Ferdinand's code is giving results?	12/7/2012	Ferdinand		Jim L	Ferdinand has updated eclipse model parameters for inner probes		
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.		

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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. After 4764		
2266	Timing of Spin Fit data	10/16/2009	Jim McFadden	1	Jim L	See 4142 After 4764		
	Jim M							
4836	Add IUGONET plugin code to scripts to built bleeding edge and official releases.				Jim M	Uncomment IUGONET line in config file when IUGONET starts showing up in bleeding edge.		
4799	Possible issue with onboard moments, or transform to GSM coords			1	Jim M	Problem fixed, reprocessing in progress.		
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?		
4820	Need IDL-only FITS reader code suitable for inclusion in SPEDAS	12/11/2012	Mini-GEM		Jim M			
4821	Use improved IDLDOC procedure to generate TDAS HTML documentation?	12/11/2012	Mini-GEM		Jim M	better format, more web-friendly? IDL 8.0+ versions OK since it won't be distributed with TDAS, only the HTML output.		
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. 1/18/2013: Ready for FLATSAT testing		
	Nick							
	Update FBK, FFT, ESA, SST configuration history HTML pages				Nick	Update monthly for now.		
4843	Cron job to update configuration history database	1/24/2013		1	Nick			
4542	If you create an x-versus-y plot, instead of a time series plot in the gui, then make the x-axis logarithmic, it will autoscale to the entire range of the data, instead of just the visible data set. I'm not entirely sure if this problem is specific to log x-axis or just to any x/y plot	3/14/2012	Pat			Exact instructions for replication: load tha_state_pos in gui, default day Open Layout Select "show data components" select tha_state_pos_x for x_var select tha_state_pos_y for y_var select line-> and hit "ok" Open x-axis options select "log10" and hit "ok" zoom in on data. The x-axis will adjust, but the y-axis will not(even through the range of the displayed data is being reduced by the zoom operation)		
1178	I accidentally tried to plot wavelets as lines and got a memory error. I do not know if there is any way of intercepting this, but it would be nice if there were. Traceback Report from THM_UI_LAYOUT_OPTIONS_EVENT: Unable to allocate memory: to make array		Michael	EL		need to talk with michael		
1125	Var options - would be nice to have Panel droplist return to the Panel that was last modified. Right now it always opens with Panel 1.		Cindy	EL		Not sure where to store last modified panel information. Discuss w	1/2 day	

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1576	I was thinking it would be nice if we enabled resize on the overview plot key window. That way on larger monitors, users could extend the window so that they can see the whole key at once.		Pat	4		Discuss with team.		
4611d	Nightly thmsoc cron job to check/install updates to SPDF leap second table on SSL data server. Lower priority; probably won't be another update for at least a year.	4/17/2012		4		Complete by April 2013		
4042	Script to run every two weeks to runs IDL TDAS and checks if a file can be loaded from THEMIS SPDF file (s)	4/19/2010	Pat	3		see Pat		
	Pat							
	Updated FGM calibrations for solar array currents vs. spin phase?	5/30/2012	Vassilis	0	Pat	Last Recieved - May 2012. May need to remind FGM team if we go a long time without updates. David Fischer will probably have updates after Jan 1.		
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.		
4844	Different SST look directions no longer line up in energy with original calibration factors	1/24/2013	Pat	0	Pat	What we came up with is to interpolate the esa to match SST(in time & look direction), then smooth the ESA data to account for poor count statistics, then interpolate between the SST and the ESA to shift the SST to a regular energy grid. This will be a decent amount of effort to code up, but it seems promising. Will probably not make it into TDAS 8.		
4839	SST psir bug, energy bins off by factor of 4 during slow survey	1/15/2013	Shanshan	1	Pat	PSIF and PSIR agree during fast survey		
4771	Writeup for new SST calibration	9/28/2012		0	Pat/Drew	For senior review. After 4844. (But 4844 will likely not be ready for TDAS 8 release...ready when senior review is due?)		
4842	GUI API – Plugin access to GUI configuration settings dialog (remote, local data dirs, etc)	1/18/2013		1	Pat	Another item for the master plugin config file (add a new mission to the dropdown in the configuration settings dialog)		
4611e	Add support to GUI configuration settings panel for editing/saving cdf_leap_second configuration. (See also: tasks 4516 and 1315 for ACE, WIND, ISTEP).	4/17/2012		1	Pat			
4832	Allow keywords in calc function calls	1/7/2013	Vassilis	1	Pat	e.g. calc,'a=total(b,/nan)'		
4711	GUI cotrans error checking	7/24/2012	Pat	1	Pat	When looking at the replay/overwrite logic in the GUI, I noticed a small issue. If you try to cotrans a variable that is not a 3-vector, it still asks you if you want to load the support data that is necessary for the transformation. I'm wondering if it might be better for it to check whether the variable can be transformed at all, before it tries to load the support data needed to run the transformation.		
4550	Major ticks by number/major ticks by interval: It might be nice to have major ticks by interval default to something logical rather than 1 n^1. If you change 'Major ticks every' then 'Major ticks by number' is updated to something that closely matches that interval, but the reverse isn't true. I'm not sure if we necessarily need 'Major ticks every' to update when 'Major ticks by number' is changed, but it might be good to have it default at the beginning to something that sort of matched.	3/15/2012	Lydia	2	Pat			

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4537	Deletion of data not reflected in saved/reloaded THEMIS document. Formerly QA206. Also remember to overwrite prompt setting (yes to all, etc)	3/2/2012	Lydia		Pat	I loaded data for probes b and c and then went to plot the data and realised I should have loaded a and b for the tests. I returned to the load data panel and loaded the probe a data before deleting the probe c data. After saving as a themis document and reopening, the c data was loaded but not deleted. The data that was loaded and deleted using delete all data following the testscript does not appear when you reopen the document (as you'd expect).		
4545	Axis options: Major ticks by interval/Annotate every: For a non-time axis, switching between log/linear doesn't update the major tick every field as might be logical. ie. if you set to every 10000 n^1 on linear then switch to log it still tries 10000 10^n. Usually this means it fails to place any ticks/annotations if you switch between log/linear with either major ticks by interval or annotate every set.	3/14/2012	Lydia	1	Pat	Formerly QA271. If you have major tick every set and a mix of log and linear axes on the page and then use set all panels, you're bound to end up with no ticks on the panel with different scaling.		