

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								
Review issues from GEM Sessions								
4632	Just had a question about pseudo-variables, Stefan was wondering about setting colors for pseudo variables. This is a features that we have not yet implemented. (You can set colors on pseudo variable components, but not at the top level).	5/21/2012	Pat	?	Aaron	4-8 hours with testing to add the custom colors feature for pseudo variables. Once in place it may be easier to add other similar features as well	4-8 hrs	
4669	(Not 8.2) The slices code should output percent progress to the status bar and/or IDL console. The processing times are usually short (< 1 second per cut for basic slices) but depending on data type and resolution they can be much longer. With the recent addition of averaging over multiple planes the time per slice can easily exceed 30 seconds, making progress reports necessary when taking multiple cuts.	6/7/2012	Aaron	?	Aaron		4-6 hrs	
4680	bug/feature annotation text justification	6/20/2012	Pat	1	Lydia	It looks like the text doesn't justify properly when doing annotations in the 10^x format. (In particular, it is right justified, which makes the text seem to bounce around. We should probably fix this, not sure about priority. Image showing the issue is attached. A brief note about the solution for whoever gets this: Using the left justify option for the IDLgrAxis object won't work because there is a bug with the left-justification such that the annotations will collide with the axis. Fixing this would probably entail guaranteeing that each exponent has the same number of characters. Right now, it clips trailing zeros, and doesn't do anything special for negative exponents. We would want a space added to any non-negative exponents and we would want to clip trailing zeros, only if it doesn't make the annotation shorter than any of the other annotations. Since the formatannotation routine isn't aware of how the other annotations are being formatted when it is being used as a callback by IDLgrAxis, we would probably need to add a preprocessing stage before the axis is drawn which would loop through all the annotations for the axis and determine how many zeros can be clipped and if a leading space needs to be inserted for non-negative exponents.	2-4 hrs	
4681	I came across some strange x axis tick behaviour and I'm not certain what is causing it. I can't reproduce it by repeating the same steps (but I do have a saved document), so it is probably not very important. I plotted some gmag data and set a marker on all panels and then chose subset-> marker. On the new page (page 4 of the attached THEMIS document), if I open y axis options and click apply (without changing anything) the tick labels change on the X axis.	6/20/2012	Lydia	?	?			
v7.0 QA Tasks for Review with Vassilis								
4551	Annotation precision with decimal notation was confusing for me eg. I had two ticks at 452.59 and 0.148 when the precision was set to 1.234. When you click auto without changing the precision it changes the annotations to 452.6 and 0.1484	3/15/2012	Lydia					

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4548	Panel options: But if I start by entering 99 for the Column value and click OK, I get the dialog message, and upon OK-ing it, the Panel options window will close. Now, returning to Panel options I see that the Column value is still 99, but changing it to anything else followed by an OK or APPLY doesn't change the actual plot. The only way now to change that Column value is via the "Cols Per Page" value in Plot/Layout Options.	3/15/2012	Ben			Formerly QA279. See also #4531 (consolidate layout options and panel options). Having this functionality in two places that must be kept synchronized is a bit complicated and error prone.		
QA280	Most option dialogs give a warning popup when invalid input is "OK"-ed, but close the option panel when the warning is dismissed.	3/15/2012	Ben			Formerly QA280. Original dialog should probably stay open so user can make the correction without having to reopen the dialog.		
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					
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			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.		
4533	Plotting spectra with "Show Data Components" checked -- It might be nice to be able to plot the spectra by shift-clicking a subset of the components, for example if you wanted to only plot some of the bins.	3/2/2012	Lydia			Came up during SCM GUI test suite, step 12. (Test instructions will be changed, but it would be nice if this worked more intuitively.)		
4537	Deletion of data not reflected in saved/reloaded THEMIS document. Formerly QA206.	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).		
Hannes								
4153	maintenance of gmag stations "Exclude List"	10/11/2010	David	0	Hannes	Exclude List to be updated week of 6/11/2012 6/18/12 Hannes: Attached is a new thd FGM cal-file. Please reprocess thd from 2012-03-23 on. 6/20/12 Jim M: reprocessing started.		
4018a	New Calibration FGM parameters and spin axis offsets	5/10/2010	Hannes	1	Hannes			
4080	Attitude Determination next few months	6/21/2010	Hannes	1	Hannes	Should be updated by end of June 2012.		
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		

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4493	2D slices, 1.5D Pitch Angle Distributions - command line in progress; GUI?	1/23/2012	Vassilis	1	Aaron	Andrei will look at this after GEM. Xuzhi: looks good		
4494	2D slices, 2D Pitch Angle Distributions - command line in progress; GUI?	1/23/2012	Vassilis	1	Aaron	Andrei will look at this after GEM. Xuzhi: looks good		
4463	file_http_copy support for proxy servers - talk to Lydia	12/12/2011	IUGONET	1	Aaron	item 3.3 from presentation - in progress	1-3 hrs	
4464	mods for file_retrieve, determine remote & local parts from URL returned by query from metadata DB	12/12/2011	IUGONET	1	Aaron	item 3.4.2 from presentation - in progress	5-10 minutes	
4536	GUI Slices:Step 8 g) Annotation precision only changes z axis labels (not x, y) . Is that as intended?	3/1/2012	Lydia	1	Aaron	Aaron completed analysis - it can be done.	4 hrs	
4673	Resolve duplicate/conflicting remove_zeros procedures	6/8/2012	Lydia	1	Aaron		4-6 hrs	
4653	version tests (win): save/load: The cadence spinner on the Time Interpolate Options window should be increased to 1.	6/4/2012	Aaron	1	Aaron		5-10 min	
4675	Excessive console messages from getspec. Example: "THM_SST_ATTEN_SCALE(63): Attenuator flags are invalid: 0" was repeatedly printed when producing a gyro spectrum for THA.	6/11/2012	Aaron	1	Aaron	Some may have been fixed post-TDAS 7.	1 hr	
4676	(Not 8.2) The fixed min/max spinners in the z-axis options window are slightly too large for their base, resulting in their labels being clipped a bit.	6/11/2012	Aaron	1	Aaron		10 min	
Ben								
3093	Automate processing of eclipse sunpulse data from FGM team	2/22/2010	Jim L	1	Ben	Once prod reprocessing complete send announcement.		
3093f	Update Admin Guide	2/22/2010	Jim L	1	Ben	in progress (document automated processing)		
3093g	production cron job	2/22/2010	Jim L	1	Ben	testing in progress		
3093i	reprocess entire mission - notify Jim M and Tami before doing	2/22/2010	Jim L	1	Ben			
4613	Prevent Email Storms when data servers go down	4/25/2012	Jim L	1				
4613c	Modify existing processing scripts to log to the database rather than send their own emails; Send email to Lydia, Cindy and Jim M	4/25/2012	Jim L	1	Ben	cronwatch script converted, next will be VC, L0->L1, ephemeris, state V02, overview plot scripts.		
4316d	Admin guide update	6/8/2012	Jim L	1	Ben	Document log database, PHP scripts, and cron job for generating email notifications from database.		
Cindy								
2027e	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)	7/1/2010	Vassilis	2	Cindy	In progress 6/15/2012.		
Jim L								
4667	(Not 8.2) If the user selects "No" on the prompt to overwrite an existing themis document a second dialog window pops up with the message "Save cancelled by user". This seems unnecessary.	6/7/2012	Lydia	1	Jim L	in progress - eta 6/22	10 min	

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4451	operating the particle instruments in "accumulate" rather than "snapshot" mode. So we'd be getting into some unexplored territory. The time tagging code in the L0->L1 particle distribution processing would need some slight modifications to support "accumulate" mode. The ESA load routines use the L0 packets directly, and probably also assume "snapshot" mode, so that's another potential set of required modifications. I wouldn't be surprised if the ESA and SST calibration code also assumes snapshot mode. It would need to be tested with real data (since we have no way to generate a realistic particle data stream on FLATSAT).	12/1/2011	Vassilis	1	Jim L	5/21/12 as per Vassilis - give it a shot; Awaiting flatsat availability - after SST table updates and ESA energy table updates. Probably will have to wait until NuStar launch/EOC. In Progress		
4451b	Modify instrument scripts to enable accumulate mode, flatsat testing	6/12/2011	Jim L	1	Jim L / Ops	When MOC support available, probably after NuStar.		
4451c	tdas mods - if accumulate mode approved discuss at S/W meeting	12/1/2011	Vassilis	1	Jim L	double chech slices and getspec as per Aaron (next up)		
4451d	Put one probe in accumulate mode and verify correct L0->L1 and L1->L2 processing with live data.	6/12/2011	Jim L	1	Jim L			
Jim M								
4458	Horae (rsync server for mirror sites) is dying and needs to be migrated to a VM Astrea2. Once UCLA rsync done run SPDF test against UCLA Mirror Site.	12/8/2011	Jon L	1	Jim M	in progress - they have new rsync		
4458a	migrate Japan mirror site	40885	Jon L	1	Jim M	in progress - they have new rsync		
4458b	migrate France mirror site	40885	Jon L	1	Jim M	in progress - they have new rsync		Y
4458c	migrate Chile mirror site	12/8/2011	Jon L	1	Jim M	in progress - they have new rsync		
4152	verify the location of the sun-contaminated bins for each spacecraft and any change in location over time(they should change very slowly if at all). They would then re-activate the sun contamination masking. It was previously disabled because the masking was originally in the from place. Davin said that he wants to create the new configuration files that would be uploaded to the spacecraft.	10/8/2010	Vassilis and Davin	0	Jim M	Persons that can provide information are: Davin, Deron Pease/McDonald, Michael Luldam and Robert Abiad. Awaiting task 4365 (same process)		
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		
4152c	change the ESA tables such that electrons and ions can be changed separately into magnetospheric and solar wind modes.	10/20/2011	Vassilis	0	Jim M			

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4658	version tests (win): save/load:: Received the following error while loading a themis document that tested replay of data processing: "VALUE_LOCATE: Array X does not have enough elements." Last IDL Error: % VALUE_LOCATE: Array X does not have enough elements. % Execution halted at: INTERPOL 161 C:\Program Files\ITT\IDL706\lib\interpol.pro % SMOOTH_IN_TIME 302 C:\Documents and Settings\aflores\Desktop\tdas_7_00\idl\ssl_general\misc\smooth_in_time.pro	6/5/2012	Aaron	1	Jim M	in progress 6/15/2012		
4661	I tried to load 3dp datatype pm for 2012 - the testscript says to check availability at http://sprg.ssl.berkeley.edu/data/wind/3dp/ and test different combinations. There are cdfs for 3dp pm for 2012 on that site, but the have are _v05 and don't load. Should they load?	6/6/2012	Lydia	1	Jim M	Peter Schroeder says that the v03, v04, v05 files are structurally identical. When a higher version file is produced, the lower versions are deleted. Suggests load routine should look for highest version. Or we could wait for an upcoming reprocessing, then have the load routine look for that specific version. For QA we can just stick to older data. Need input from Vassilis: worth the effort to make enhancements to the load routine for WIND?		
Lydia								
4649	I see that the IDL 8.2 development environment now checks to see if there are multiply-defined routines on your IDL path. Below is a list of the duplicate definitions it finds in tdas_7_00. Many of them have more than one definition within TDAS, but some of the conflicts are with IDL 8.2 builtin routines.	6/1/2012	Jim L	1	Lydia	Most of these conflicts should be easily resolved: For conflicts between TDAS routines and IDL 8+ new features: Rename the TDAS routine and .pro file with a thm_ prefix, then find all references to the old name and update them by adding the prefix. For multiply defined routines within TDAS: Most of these are probably helper routines that didn't have their own .pro file; someone probably cloned the .pro file and left the helper function definition in place. For these cases, first check that the definitions are truly identical; if so, pull them out into their own .pro file and remove them from the two conflicting .pro files. If any of the "duplicate" routines have diverged since the fork, we would have to either merge both copies into a common routine that works for all call locations, or rename one of them and make sure the appropriate version is called everywhere. There may be references outside the originally conflicting .pro files, so that would have to be checked. 6/15/2012: Several conflicts resolved, asked Davin for input on what to do with ssl_general routines.		
4665	Laura confirmed that teachers used both the EPO jpg files from the data archive at http://sprg.ssl.berkeley.edu/themis/GEONS/ and also data in ascii format (though she was not certain from what website they obtained that).	6/6/2012	Laura P (EPO)	1	Lydia	ASCII file list processing restarted. Needs to be more efficient:. option 1: only generate lists for current year. Option 2: Replace filesystem search with database inserts/queries. Lydia to investigate feasibility of (2). 6/15/2012: Probably a hybrid approach (use database, restrict filesystem searches to current year) will be best. In progress. Also, we were missing some "joined" files from 2007, reprocessing in progress.		
Pat								

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	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.		
4458	Create a set of Benchmark Tests against IDL future versions (now for v8.2 beta). Run these tests and produce a report. In addition present this report to Exelis in a web conference with a demo of TDAS. Benchmark Tests should include tests for PC, Mac (leopard and lion) and Linux O/S.	3/21/2012	David	1	Pat	Write up findings and present to Exelis		
4651	Received the following error while loading a themis document that tested replay of data processing events: "Add called without tplot variable" It looks like the replay failed to perform a join operation on a variable I had split and re-joined.	6/4/2012	Aaron	1	Pat	in progress		