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							
4847	Improve TDAS installation instructions for external libraries like IDL_GEOPACK	1/29/2013	John Bonnell			May require sysadmin assistance if user doesn't have permission to update IDL installation directories. We should also mention the option of installing to an alternate location and using the DLM_PATH environment variable, rather than updating the IDL directory.		
4852								
4853								
4854								
	v7.0 QA Tasks for Review with Vassilis							
	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			
4664	Laptop locks UCB and UCLA	6/6/2012	David	0	Team			
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 L	**Wait till after WIND reprocessing and see what happens to version numbers, if they're all consistent then 5 minute change to load routine. Will not do "load highest version" -- responsibility of WIND developers.**		
4464	All plug-ins for v7.10 - add a section to User's Guide for Plug-ins	3/22/2012	David	1	Jim L	Discuss at the appropriate time what the content would be. Also add a link for VM on the Software Web Page or Developers web page?		
	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**		
2074c	quality flag for FGM data. **Dependencies on Ben's tasks 3093 and JWL's tasks 4142 and 2266.**		Vassilis	2	Hannes	quality flags for FGM data: Hannes talked to Ferdinand and suggests some flags in the state CDF: times when eclipse spin model adjustments were performed; times when spin fit & FGL data used to refine the eclipse spin model; times when V03 attitude corrections are available; times when spin fit timing had problems. Some of these flags already present in state CDF spin model variables. JWL will document in L1 file definition document. Final item not so easy, since we have trouble even detecting the timing problem in spin fits. Keep task open, **Vassilis says we can come back to it when we have clarity on the spin fit timing.**		
	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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4848	thm_part_dist_array doesn't work with /sst_cal	1/30/2013	Pat	0	Aaron	The data for /sst_cal isn't stored in a common block any more, so we'll need a separate mechanism to handle the new /sst_cal data.		
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		
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)	
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				
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			
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.		
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).		
4685	Widget tree expansion, IDL 8.2	6/26/2012	Pat	2	Aaron	IDL fixed a bug which we had worked around, need a version check to enable/disable the workaround so it will work on all IDL versions.		

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4505	Add a TDAS routine to do 1-d cuts - **when ready to work send Aaron Bennenman an email for clarity of task and then review at the S/W meeting again with Vassilis.**	2/6/2012	Aaron Breneman	2	Aaron	You could obtain a 1D cut of a slice by aligning the custom orientation vector (slice_orient keyword) such that the desired cut is along the x or y axis. The data could then be pulled directly from the array returned by thm_part_slice2d via the 'part_slice' keyword. This returns an R x R array containing the interpolated slice data (R=resolution). The x & y axis values for the array are returned in the 'xgrid' and 'ygrid' keywords.	1 hr	
4314d	combination of ESA and SST data could only be done in the Geometric mode. Would be great if it could be done in other modes as well.	8/11/2011	Xuzhi	4	Aaron	**on hold**	1 hr	
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			
	Ping Sasha for status of back AE station data					Next March 2013		
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. 2/01/2013 All done except maps on web site. Need to spot check a few TDAS vs. Matlab plots to make sure our processing flow is correct and uses latest calibration files.		
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.		
4850	Cron job to check for GMAG cal file updates	2/1/2013			Cindy	Make sure we remain in sync with outside GMAG networks. Job should send an email if updates to remote cal files are detected, but not replace until we're sure there are no format changes or other incompatibilities that would break our processing.		
4851	Storage requirement for RMD files?	2/1/2013			Cindy	RMD files could be deleted after processing to ASCII or CDF, if necessary to conserve disk space? How much storage are we using, and how fast does it grow?		
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.		
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. 12/17/2012: Older data in different formats, Sasha is getting some other people involved and expects to deliver by Spring 2013.**		
4409	AE Stations: I am interested in including the "standard AE ground stations" i.e. the ones that go into the computation of the AE index - there are 12 - into the THEMIS pipeline. This is because we can then include them into the computation of our own pseudoAE. They include: FCC: Fort Churchill, LRV: Leirvorgur, a couple in Russia and one in Scandinavia etc. They should be available somehow. The ones in Russia have been made available through APL, and THEMIS has contributed to their refurbishment. I think we have established communication with APL's Kazue Takahashi and he said a couple of years ago that routine delivery of the Russian stations was impending. So by now they should be ready…I think he should be a good source of information about the other stations as well, if you cannot find them on the web by searching or at WDC Kyoto.	10/19/2011	Vassilis	2+	Cindy			
4409b	Dixon (DIK) (AARI, Russia)	10/19/2011	Vassilis	2+	Cindy	**Downloads in progress. Data from 2011 on has been made available; they have agreed to provide data back to 2007. No 1 sec data available (minimum 1 minute sample interval). Sasha pinged 8/20.**		
4409c	Cape Chelyuskin (CCS) (AARI, Russia)	10/19/2011	Vassilis	2+	Cindy	see 4409b		
4409d	Tixie Bay (TIK) (AARI, Russia)	10/19/2011	Vassilis	2+	Cindy	see 4409b		

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4409e	Cape Wellen (CWE) - closed, replaced with Pebek (?) (AARI, Russia)	10/19/2011	Vassilis	2+	Cindy	see 4409b		
	Eric							
4764	Steps/Sawtooth pattern in FGS data near perigee	9/24/2012	Vassilis	1	Eric	Sudden changes at packet boundaries, probably a spin fit timing issue. On hold pending Jim L's analysis		
4764a	Script to identify time intervals with FGL/FGH/FGE coverage in high B field	9/24/2012	Vassilis	1	Eric			
4764b	Look at FGS dB/dt and FGS header times to identify when glitches are occurring	9/24/2012	Vassilis	1	Eric			
4764c	When glitches are present, compare FGS and waveform data looking for time offsets (off by 1 spin in FGS?)	9/24/2012	Vassilis	1	Eric	Seems to be happening intermittently, every other packet?		
1061	Add capability to control Legend text, font, format, size, color			1		Vassillis reviewed on 7/20/09	4 days	
1225	Spinner for zoom control redraws every key stroke		Jim L	1			1 hr	
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	2		Still happening?	3 days	
803	Would be nice to have a way to move different panels from one page to another	11/22/2011	Oldie	2	Pat	sort how level of effort to accomplish. On hold, after QA		
	Jim L							
4849	Change L0->L1 code to prevent out-of-order timestamps in iesa and isst configuration history.	1/29/2013	Nick		Jim L	Include configs from previous and next day, then clip to the desired day before writing into L1 CDFs.		
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.		
4802	GOES particle data	11/19/2012	Vassilis			Adam Kellerman has already brought in Goes particle data. Having a crib sheet, plus a gui tool to plot them would be great. We can then create GOES overview plots. The gui api can be helpful towards that end.		
4805	GOES magnetometer data from additional satellites - make available through TDAS somehow?	11/20/2012	Vassilis			So the NGDC GOES website is: http://www.ngdc.noaa.gov/stp/sa		
4806	CLUSTER load routine?	11/27/2012	Johnathan Eastwood			There may be a way of importing this data into tplot already, but maybe under a non-obvious name? Ask Jim McFadden, Tai Phan, French team?		
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.		
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)		

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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.		
4326c	L1->L2 reprocessing for eclipse spin model corrections	8/18/2011	Vassilis	1	Jim L	After 4034a2, when eclipse spin model corrections are trustworthy enough to enable by default for L1->L2.		
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			
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		
4476	Discuss thmsoc_dp_current deployment process, avoid unintended updates from trunk	1/5/2012	Jim L,David	1	Jim L	After QA, review CDF "software version" requirement with SPDF.		
4465	Diagnose, repair? Spikes in FGS data.	12/14/2011	Vassilis	1	Jim L	No code changes required. Document on web site (anomalies/watch out fors) as something to be aware of when		
2074c	quality flag for FGM data - Jim L perform analysis, define task - someone else to do development		Vassilis	1	Jim L	quality flags for FGM data: Hannes talked to Ferdinand and suggests some flags in the state CDF: times when eclipse spin		
4034a3	awaiting feedback and performing analysis	11/22/2010	Vassilis	1	Jim L	Tips of the Month at some point?		
4236	Ferdinand P. suggests that we make available a diagnostic quantity produced by the eclipse spin modeling procedure. Add "phase" diagnostic quantity (from eclipse spin modeling process) to L1 STATE CDF, to give end users a sense of the expected angular error in the eclipse spin model.	5/23/2011	Ferdinand	1	Jim L		1-3 days	
2047	Separate E and B timestamps for spin fits: a) make a revised V02	before the	Vassilis	1	Jim L	Hard for SPDF to deal with, with their plotting tools - review		
4030	cross-check SST psir6 and psif data types for excess counts in psir6	4/8/2010	Jim McFadden	1	Jim L	Jim L talked to Davin and sounds like we can shut the data off. Jim L will send email on the time saved by shutting this off.		
4030b	Correct Existing Data	5/17/2010	Jim McFadden	1	Jim L	4030a prerequsite		
4030c	If scripts change - make changes to processing scripts	5/17/2010	Jim Lewis	1	Jim L	4030a prerequsite	4-5 days	

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QA110	as you know we have a few folks here in our SPDF group who are using the THEMIS-B and C data for a lunar project. They have found and I've confirmed through CDAWeb, that the time stamps and associated data measurements for October, 9, 2010 THEMIS-B ESA, after time 15:58:40.695 are of a different resolution and the data values are either 0.0 or -NaN.	2/7/2011	Tami	1	Jim L	Web Site - instruments will have a web page with "Sources of Data Anamolies". The first one being the ESA issue		
4301	"bad" themis thg l2 files - instrument files; L0->L1 processing produces incomplete/empty CDFs	8/1/2011	Tami	2	Jim L	**one fixed - one priority 2 (data type VBx appeared once due to corrupted packet, produced empty CDF)**		
2248	once in a while (maybe 10-20 occurrences per probe during the entire mission), the FGM range doesn't change on all three axes at once:	9/10/2009	Jim L	2	Jim L			
	Jim M							
4784	Add RBSP orbit data to THEMIS plots	10/16/2012	Vassilis		Jim M	2/01/2013: Permission problem in JBT's code, putting SPICE kernel files in his home directory.		
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.		
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	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.		
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**		
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			
4694	Developers guide/admin guide update: troubleshooting SSH (SVN/rsync) access	7/6/2012	Jim L	1	Jim M	When setting up SVN access for a new user (or an old user using a new computer), or if a host key has changed, might need to do an interactive SSH login to answer the host key verification prompt before SVN or rsync will work. Dev guide due to SVN+SSH issue, Admin guide due to rsync over SSH issue. Additional note: people using putty/pageant on 64-bit machines should make sure they're using the latest version of putty, otherwise will have hard-to-diagnose access problems. 10/10/2012: Recent versions of MacOS ship with a different version of OpenSSH which causes problems for svn+ssh URLs. Resolution: edit .subversion/config [tunnels] section, add new 'tdas' protocol with "tdas = ssh -T -p 36867", then use "svn+tdas" instead of "svn+ssh" URLs.		
4003	Document: ESA File and Calibration Processing	3/5/2010	David	1	Jim M			
4312	Quality flags for efi are wrong including electric field offsets in computation. **On hold until Michael Hartinger sorts out.**	8/8/2011	Vassilis	1	Jim M	**discuss with Vassilis**		

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2035	Split L1 ESA (using Thomas's routine) in master ESA data cdf		Vassilis	2	Jim M	On Hold - awaiting Jim McFadden release: Then send David Sub Task List; Calibration variables removed from L1 data master CDF. (Side note: found and reported a bug in SKTEditor, which the Goddard team has agreed to fix...) Waiting for feedback from Jim McFadden about how calibration data should be handled (TH-A ASCII calibration file (used for all probes) doesn't match anything I removed from the data CDF).		
4208a	Enhanced MOM Instrument Web Pages	3/5/2010	David	2	Jim M	Talked to David first.		
	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	
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.		

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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.		
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, ISTP).	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.		
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).		
4519	getspec (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.		
4519a	Aaron has identified some "cut points" for sections that can be pulled out as separate procedures.				Pat	Extract procedures, figure out which variables are used/required in each section.		
4506	GUI Getspec: Some regrid values yield all while plots (noticed in GUI getspec test suite for TDAS 7). **If a re-write of thm_part_getspec this would be done as part of it.**	2/8/2012	Aaron			64x20 yield plots but 50x20 and 49x20 do not. All energy fluxes appear normal. This is certainly something strange happening in thm_part_moments2, so we probably want to wait until after QA to fix it. After 4519		
4521	GUI getspec: issues when setting phi limits and starting phi at same time -	2/8/2012	Aaron			I produced two phi plots with the phi limits set to 45 - 180; the second plot also had the start angle set to 90 degrees. That plot begins at 90 degrees and appears as it should until just past 160 degrees at which point the remainder appears to be 'smeared' and ends at a maximum of ~440. Because of this it is also hard to tell if it looped back to the data between 45-90 correctly. After 4519		
4507	GUI getspec: no way to return just an energy spectrogram	2/8/2012	Aaron			Formerly QA099 After 4519		
4825	Implement error estimates (/get_error) for angular spectrograms	12/10/2012	Vassilis			After 4519		
4460	Add New Routines from Lynn Wilson	3/22/2012	Vassilis	1	Pat			
4460-1	Include: safe, minimal effort, obvious benefit. (21)		Vassilis	1	Pat		3-4 days	

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E; crib; script; suite; UG; DevG; Qref; AdmG
4460-2	Documentation only: LW3 has documented a routine that didn't have documentation previously, but incorporating routine body is not worthwhile.(possible bugs or too much effort) (12)		Vassilis	1	Pat		1 day	
4460-4	Not sure: Need a scientist's opinion on the benefits of the routine. (26)		Vassilis	?	Pat	**Vassilis will talk to Lynn Wilson and ask the benefits of these routines**		
4460-5	Not sure: Need more programmer time to make confident recommendation. (14)		Vassilis	?	Pat	**Vassilis will talk to Lynn Wilson and ask the benefits of these routines**		
4460-6	Helper, only include if required by an included routine. (9)		Vassilis	1	Pat			
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			
4267d	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.		
4627e	SST: After #a-d 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 **		
4717	A limitation for tplot came up for the EMIC plots. If you want to use the var_label feature(for example, to plot spacecraft position below spacecraft data) you can only put the var labels at the very bottom of the plot. In the case of EMIC, what we actually want to do is a layout that looks like this (from top to bottom) Plot1PrbA Plot2PrbA VarLabelPrbA Plot1PrbB Plot2PrbB VarLabelPrbB Plot1PrbC Plot2PrbC VarLabelPrbC ....etc...	8/2/2012	Pat	2	Pat	You can't actually do this in tplot right now. To work around this limitation for the EMIC plots, I'm going to do some tricks making separate plots in the z-buffer and concatenating them then reposting them to the z-buffer. This will work for the overviews, but it is an ugly kluge. We should consider a task that adds this feature to tplot.(The task would be to add the feature to tplot and to add examples to the tplot cribs showing how to use the features) 8/6/2012: Workaround exists for EMIC plots, assess level of effort for more general solution. Will need Davin's approval if changes are nontrivial. Probably 2-4 days effort.		
4686	There were several reports that the dproc window was too small in IDL 8+. It looks like this is a side effect of the font change.	6/27/2012	Pat	2	Pat	For whatever reason, many widget sizes are specified in characters, instead of more standard units. This means that if the base font size of a character changes, so does the size of a viewable area. Just an FYI, I'm going to be rolling this one into the font size one. I'll list it as a reason why the font size change is such a pain in the rear.		
4520	The bug that Drew had reported yesterday turned out to be not a bug, but because the bins that the sun decontamination code selected differed depending on the date selected and this wasn't clearly reported to the end-user. I put an informational message in to clarify what is happening, but after talking with Drew there are two other solutions that don't fit within the scope of QA, but would be good to consider later. There features are: #1 Add a keyword that returns the the bins that were flagged by automatic sunlight decontamination to the end user. #2 Provide an option to window the automatic sunlight decontamination code so that one test is not applied to the entire time period.	2/22/2012	Pat	2	Pat			
2060	L2 cdf Quality Flags: for SST		Vassilis	2	Pat			

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4208b	Enhanced SST Instrument Web Pages	3/5/2010	David	2	Pat	See current ESA Instrument Web Pages - Make recommendations to Vassilis to improve.		