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							
4901	GOES overview plots				TBD	On hold until Eric's routine to load GOES data from NOAA is ready to use. Should include e-, i+, B field, s/c position, X rays, AE index, B wave survey (like FGM wave survey)		
4902	Load data via CDAWeb/web services, how to handle dependency on CDAWlib routines?		Nick			CDAWlib requires pre-compilation, also has very generic/conflicting routine names, making it hard to integrate with TDAS. Can the web services be used without having a dependency on CDAWlib code?		
4907	tplot namespaces		Pat			Add capability to create tplot variables in different namespaces (e.g. for creating tplot variables inside GUI without disturbing existing variables). Is it feasible to get this change implemented in time for the next SPEDAS release?		
4908	Prevent unnecessary reloads of particle data		Aaron			Keep track of last requested time interval in common blocks, so that gaps at beginning/end of day don't cause unnecessary reloads.		
4909	Compare magnetometer data between old & new GOES routines		Jim L		Eric	netcdf data from NOAA probably used different cotrans code, check for consistency with CDF data from Berkeley		
4910	Cron job for updating geomagnetic indices at UCLA		Eric		Eric			
4911	Load routine for GOES ephemeris data from SSCWeb				Eric			
4912	Spawn WWW data availability tool from THEMIS load panel				Eric	Add to WIND and other load panels when those data sets are added to the data availability database		
4913								
	Hannes							
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	**5-24-2013 Updated for 2012-12-01 – 2013-02-21, tha, thd, the**		
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							
4468	Ongoing - Review all commits by Davin, Peter, etc for impact to TDAS.	3/27/2012	David	0	Aaron	Provide weekly report and spreadsheet		
4711a	Getspec rewrite, sanitize ESA	05/23/13			Aaron	Convert to physical units, standard internal representation, strip extraneous fields to save memory		
4711c	Getspec rewrite, Apply theta,energy,phi limits	05/23/13			Aaron	disables bins based on user specified limits		
4711g	Getspec rewrite, Make PA/Theta spec	05/23/13			Aaron	Tracking down last few discrepancies (e.g. fringing)		
4711h	Getspec rewrite, Make Gyro/Phi spec	05/23/13			Aaron			
4711i	Getspec rewrite, Make En spec	05/23/13			Aaron			
4740	Getspec rewrite, bells, whistles, keywords etc.	07/08/13			Aaron	~1 week work remaining		
4741	Getspec rewrite, GUI modifications to support new code	07/08/13			Aaron	Wrapping up "replay THEMIS document" changes, should be the last item for this task.		
4757	Implement wrapper routine for new moment calculations		Aaron		Aaron	Similar to spectrogram wrapper		
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		1 hr	

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4689	need to keep clicking "yes to all" when replaying document that overwrites data. Also need to track deletions of data.	03/27/13	Pat	2	Aaron	Looking into this one, I found that quite a few operations don't have overwrite queries tracked: Interpolate pwrspc calc nudge getspec Some seem to default to overwriting, some default to repeated queries to user. Original report: 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).		
	Cindy							
4153	maintenance of gmag stations "Exclude List"	10/11/2010	David	0	Cindy	Weekly on Mondays		
4358	Every 6 months check that the UCLA Mag Cal have not changed.	9/6/2011	David	0	Cindy	Next September 2013		
4781	GMAG station status: troubleshoot stations with no data reported				Cindy			
	Ping Sasha for status of back AE station data					Pinged 7/2013, waiting for response		
4687	Check with Ian Schofield about status of Dr. Hayashi's 1-sec STEP data set.	41369	Cindy		Cindy	September 2013		
4903	Not receiving current data from Russian GMAG sites, seems like server has been moved or renamed?		Cindy			No responses from Oleg or Alexander, who is appropriate point of contact?		
4751	Locate Photoshop files and update plot keys for overview plots and GUI plots	08/05/13			Cindy	"Deep plasma sphere" bit repurposed to "Very low magnetic field (> 30 Re)" for ARTEMIS probes. Photoshop file now checked into repository. Still need to regenerate key.png and install to THEMIS and ARTEMIS production directories.		
4842	GUI API – Plugin access to GUI configuration settings dialog (remote, local data dirs, etc)	1/18/2013		1	Cindy	Convert to tabbed interface, like "load data" panel. Need to fix bug in handling hw vs. sw rendering setting (corrupts draw object)		
4743	Clean up GMAG processing scripts		Cindy	2	Cindy	many variations of wget wrappers, will be much cleaner when code is consolidated. Should also look into consolidating database schemas for the various scripts.		
	Eric							
4905	Acknowledgments for GOES data from NOAA?		Eric			Contact Howard Singer to find out who should approve acknowledgements		
4750	Add support for a standalone GSM->aGSM cotrans routine	08/02/13	Eric		Eric	Should accept either solar wind velocity data, or a user-provided rotation angle. Should live with other analytic transforms.		
4749	OMNI solar wind velocity missing coordinate system attribute	08/02/13	Eric		Eric			
4736	Add support for aGSM coordinates to neutral sheet model	06/27/13	Eric	2	Eric			
4724	Calendar widget should indicate valid date range	06/25/13	GEM-TDAS tutorial	2	Eric	Maybe a tooltip?		
4737	NaN vs "missing" in legend box	07/01/13	Pat	2	Eric	If cursor is outside the range of loaded data, should show "Missing" or "Out of range" instead of NaN in legend box.		
4714	Set up cron jobs for mirroring NOAA data at UCB and UCLA	05/24/13	Eric	2	Eric	May not be needed any more, can load directly from netCDF files		
	Jim L							
4748	Jumps in FGS and FGL around times of FGM range changes	07/29/13			Jim L	May be a dropped sample at the time of the range change? Problem goes away with the start of the next L0 packet.		
4142	issue with FGS processing - timestamps	9/30/2010	Vassilis	0	Jim L	May have fixed problem – if packet header time corresponds to spinphase between 0 and 143 degrees, timestamps need a -1 spin period correction (integration interval is V1 to V1, not MSSS to MSSS). Reprocessing L1 FIT to QA area to test.		
2266	Timing of Spin Fit data	10/16/2009	Jim McFadden	0	Jim L	See 4142 After 4764		
	Jim M							

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4732	Rename TDAS to SPEDAS for next release	06/25/13	GEM-SPEDAS		Jim M	Have scripts to rename files & function/procedure calls and definitions, testing snapshot scripts, will destroy branch and recreate from trunk when things seem to be working smoothly.		
4756	Apply spacecraft potential to energy spectrograms		Aaron		Jim M?	Do not apply. Rather, show S/C potential as black line in ESA e-summary plots (within TDAS and also on web). Enable with new keyword to thm_part_getspec? Do we need another label on spectrogram plots? A plot key entry?		
4906	Add 2-hour orbit plots for THEMIS A,D,E (without RBSP)							
4758	Clean up s/c potential (onboard and ground), FBK and EFS data for time intervals when SDTs are running				Jim M?	Cleanup to be done in L1->L2 processing, using time intervals when SDTs were being run. Eliminate this contaminated data from summary plots and L2 data files. Time intervals to be provided by MOC and/or John Bonnell.		
4739	Investigate SVN-level access controls (e.g. keep SPEDAS developers out of ssl_general?)	07/01/13	Jim L		Jim M			
4690	thm_mom_cotrans_cltestsuite is obsolete, either needs a complete rewrite to conform to current thm_load_mom usage, or merge any non-redundant tests into existing test scripts.	03/04/13	Jim M		Jim M	This test script can be dropped. In fact, most of the "cotrans" CL test scripts should be folded into the instrument "load" CL tests, with the exception of tests like cotrans_all_combos.		
4820	Need IDL-only FITS reader code suitable for inclusion in SPEDAS	12/11/2012	Mini-GEM		Jim M	Checked into SVN, needs to be documented in developers guide.		
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	Scripts appear to be running but we're still seeing the old configs. Need to work with John McD, seems like a flatsat setup issue.		
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		
4208a	Enhanced MOM Instrument Web Pages	3/5/2010	David	2	Jim M	Talked to David first.		

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	Nick							
4728	Use SPDF web services to write a generic SPEDAS plugin to import arbitrary data sets	06/25/13	GEM-SPEDAS		Nick	Try using this method to access RBSP data		
4745	tplot_ascii formatting bug	07/25/13	Andre Runov		Nick	He was trying to print spectral tplot variables with values a few values that are very small negative numbers. (e.g. -1.23456789e-14, caused by round-off error in operations that would ideally be producing a result that is zero.) What he found is that the spaces between the columns can disappear which breaks parsing when he tries to read the values back in. #1 This should be fixed. It should detect if it needs additional space to write a number and use wider columns. #2 There is no keyword in tplot_ascii to manually control formats. There should be.(The workaround I gave him was to edit tplot_ascii.pro, obviously no ideal)		
4752	Add GUI configuration option to specify command to use to spawn a web browser				Nick	No standard environment variable on Linux/Mac to reliably get user's preferred browser. (Hold until work on new configuration panel is completed?)		
4729	Investigate bug tracking/wiki support for SPEDAS developers	06/25/13	GEM-SPEDAS		Nick?	Work with Clarina to do test install of issue tracking, wiki, blog tools		
4738	User-friendly indication of availability of various THEMIS products over time (e.g. no L2 MOM until boom deployment)	06/25/13	GEM-TDAS tutorial		Nick?	THEMIS, GOES done, WIND, RBSP in progress		
	Pat							
	Updated FGM calibrations for solar array currents vs. spin phase?	5/30/2012	Vassilis	0	Pat	Last Recieved – Jan 2013. May need to remind FGM team if we go a long time without updates. Check again in mid-August 2013		
4771	Writeup for new SST calibration	9/28/2012		1	Pat/Drew	For senior review. After 4844. Working on a bug report from Drew		
4711b	Getspec rewrite, sanitize SST	05/23/13			Pat	Convert to physical units, standard internal representation, strip extraneous fields to save memory		
4711d	Getspec rewrite, FAC transform	05/23/13			Pat	In progress. Needed to test some of Aaron's code updates.		
4711e	Getspec rewrite, Regrid	05/23/13			Pat			
4711f	Getspec rewrite, Apply PA and gyro limits	05/23/13			Pat			
4740	Getspec rewrite, bells, whistles, keywords etc.	07/08/13			Pat	Should be ready to "flip the switch" and start using new code on Monday.		
4744	Add combined ESA/SST moments capability to new particle routine	07/24/13	Pat		Pat	I was talking to Drew about particle stuff yesterday and we got to talking about how our goal for THEMIS particles should be combined ESA/SST particle products. (Spectra and moments) Doing this for spectra should be pretty easy with the new routine. (Just pass in a concatenated structure and it should work.) Doing this for moments would be pretty tricky in the current configuration because it makes a lot of assumptions about the particular instrument that it is working with. But Aaron and I were thinking that we could probably add moments capability to the the new particle routine pretty easily and this could be done in a way that was sufficiently generic that it would not choke on a combined particle distribution struct. I don't think it would be more than a week for one of us to do this.		
4718	Add new variables to SST L2 master CDF	06/06/13	SPDF		Pat	New SST calibrations working well enough to start making new L2 CDFs.		