

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate (hrs)
To be Assigned or Discussed							
4193	EPO archive data missing after 10/11/10?	1/7/2011	Laura	0	Pat	looking at - may need to just restart cron job	
4194	Quick Reference guide link broken	1/7/2011	Pat	0	Jim M		
4195	MACCS data - retrieval issue	1/7/2011	Vassilis	0	Pat		
4196	Trouble loading SST data	1/7/2011	Miho Sato - Oak Ridge	0	Pat	send email requesting more info	
4197	Andrei asked me if we have any code to determine L-shells from positions. We don't have any in TDAS but I know that Cindy wrote some for her work with orbits. We might want to consider checking this code into TDAS so that it is available to everyone.	1/7/2011	Andrei	?	?		
4198	It looks like it is using the old set of IGRF coefficients, which are hardcoded into the cotrans code. Vassilis would probably be the person to ask. I don't think it will introduce a huge error, but the coefficients in was using before were already the extrapolated IGRF coefficients from 2005. The comments in the code say that it was based on Tsyganenko's GEOPACK, which means that we should probably get the new IGRF coefficients from the new version of GEOPACK.	1/7/2011	Jim M	0	Jim M, Pat		
4199	Investigate weird packet timestamps (dated before 2007) that were seen in TH-A telemetry from first week of November 2010. Is a VC->L0 processing patch or other corrective action required?	1/7/2011	Jim L	0	Jim L	Analysis - Priority 0; Fix priority to be determined	
4200							
General							
2186	I noticed that the Data->Collaboration Tools->(subcategories...) fall behind the ARTEMIS graphic.	7/28/2009	Michael	3	Amanda	Run Compatibility View in Internet Explorer	
4043	Paper on interdependencies of FGM and STATE Reprocessing	4/19/2010	Pat	1	Jim L	David - Put Paper into themis doc format	
4000	Document: Developers Guide	3/5/2010	David	3	Team		
4001	Document: Administrators Guide	3/5/2010	David	3	Team		
	Incorporate electron calibration into data	10/25/2009	Vassilis		Davin		
	Enhanced SST and MOM Instrument Web Pages		David		Davin		
Harald							
	L1's and mosaics are up-to-date and available through December 15 2010				Harald		
	Thumbnail Data:				Harald	Updates ready 7-10th of the next month	
	- cdf files done until November 2010						
	- overview plots done until November 2010						
	- movies done until April 30, 2010						
	Full-resolution raw data:				Harald		
	- complete for 2007, 2008, 2009						
	- Up to date and complete until April 2010						
	Full resolution data:				Harald		
	- data cdf done for all 2007 and 2008 and up to date and complete through April 2010						
	- keogram cdf done for 2007-2008, 2008-2009 and up to date and complete through April 2010						
	Web site mosaics and movies:						
	- Mosaics and movies reprocessed for 2007/2008 and 2008/2009 seasons						
	- Mosaics and movies up to date until April 30, 2010						
	Web site overview plots with full resolution data:						
	- overview plots done for 2007 and 2008 and until mid-November 2009						
2069d	UCLA - mirror site set-up		Vassilis	1	Harald	UCLA has 2-1TB and 2-2TB bricks.	
Hannes							
4153	maintenance of gmag stations "Exclude List"	10/11/2010	David	0	Hannes		
4018a	New Calibration FGM parameters and spin axis offsets	5/10/2010	Hannes	1	Hannes	offsets to be sent to instr scientists	
4080	Attitude Determination next few months	6/21/2010	Hannes	1	Hannes	awaiting new offsets	
4034b	Ferdinand sent was an attempt on his part to automate the shadow processing. He wanted feedback whether the products produced are adequate and if the code is amenable to automation. We can pick it up with him once you have gone through it.	4/14/2010	Vassilis	1	Hannes	Report sent out on 9/13/10. Jim L has reviewed. 11/22/10 - Jim L sent Hannes email on one unexplained major issue	
4154	GSE-GSM	10/11/2010	Vassilis	1	Hannes		
4058	This is getting a bit out of hand I think. How about a configuration file? The software just reads keywords from a configuration file. With such a configuration file it is possible to set keywords automatically (for the scientists) but additionally it would give us the possibility to keep track of what the software does automatically. When I do calibrations I can then save the configuration file together with the results and not worry about the things that the software might have done automatically.	5/10/2010	Hannes	3	Hannes	Hannes sent out new version for review.	
2074c	quality flag for FGM data		Vassilis	3	Hannes	on hold	
2082a	Spin modeling during shadows BugZid=43		Vassilis	3	Hannes	Jim L to write routine. Hannes send info.	
Aaron							
2013	2-D Slices		Vassilis	1	Aaron		
2013x	User's Guide write-up and then review with Xuzhi		David	1	Aaron	changes in progress - also QA test Suite, eta 1/7	1 hr
2013am	Crib		David	1	Aaron		
4150	Allow slices based off coordinates other than DSL	10/8/2010	Vassilis	1	Aaron	in progress - eta 1/7	4-8 hrs
3015	The data processing panel doesn't allow split components. This is fine for some operations, even required, but for some operations this doesn't make sense. For example, clipping. There is a good chance that some people will want to clip each component at separate values.	12/11/2009	Pat	1	Aaron	analysis completed; Create joinvec routine and implement into GUI data processing window along with splitvec. - in progress	4-6 hrs
3079	110. GUI -- spinner widget, inconsistencies between actual and displayed value for very small numbers	2/12/2010	Pat	2	Aaron	Support exponential notation for very small values	
3079a	Spinner Part	2/12/2010	Pat	2	Aaron		

3079b	FormatAnnotation Part	2/12/2010	Pat	2	Aaron	The format routine is incorrectly deciding the # of significant digits in a number when using decimal format. I think this may have been done originally for simplicity but it should be fixed	4-5 hrs
3083	137. GUI spinner controls -- when inputting value >= 2^16/2 in grid thickness spinner, causes error message and value reset to -32768. Pat: Problem is not the spinner. Object definitions using short ints when long ints should have been used.	2/16/2010	Pat	2	Aaron	Probably short data type used where long required, affects many of the spinner controls	6-10 hrs
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)		Vassilis	2	Aaron	not allow velocity to go bad	1 hr
2013af	Mark one count level (dashed line)		Vassilis	2	Aaron	Vassilis wants to talk to Jim McFadden about this. Jim McFadden to review email.	
2013s	combine SST and ESA slices into a single plot?		Vassilis	2	Aaron		2 days
2013t	Allow for loading of user-specified distributions in gui. 8/23/10 Per Vassilis: For 2013t instead of allowing user specified distributions in the gui I will be adding an option to compare slices with specified functions		Vassilis	2	Aaron		4-6 hrs
2013w	Integrate our own slicer3.pro gui with regular 2-D slice plots.		Vassilis	2	Aaron		2 days
3014	We don't have support for filled symbols. This means symbols are only outlines.	12/11/2009	Pat	3	Aaron		
3016	There is no way to control the variable font size from the variable panel. There was a barrier to adding features to the variable panel when this came up before, in terms of a design that was too complex to modify reliably. When I fixed some previous bugs in this panel I simplified the code considerably. I now think that adding this feature is feasible.	12/11/2009	Pat	3	Aaron		1 day
3031	GUI Overview plots sometimes have diamond shaped artifacts in the sample rate bar. Should fix.	1/5/2010	Vassilis	3	Aaron	This is a side-effect of the way that symbols are used as a hack to generate the sample rate bar. Fix after 3014 is fixed.	1/2 day
1579	When importing a variable with a valid 'V' component in its data struct, but no spec flag set in its meta data, the loaded data object fails to load the y-axis. This should be fixed, as it ends up incorrectly loading certain spectral quantities.		Pat	4	Aaron		
2121	When thm_load_fit is called requesting a single data type it will also return some auxiliary data types. For example: thm_load_fit,probe='b',datatype='fgs' returns: 1 thb_fit_code 2 thb_fit_npts 3 thb_fgs. load bug or test script bug) b. The relpathname all keyword is broken.			4	Aaron		
2028	Variable units -- generic solution - thm_load_spin, _state, _hsk, _sst, _esa, _bau, _fgm, _fbk, _fft, _fit, _scm, _efi, _trg, _asi, _gmag, _ask, _mom, _esa_pkt		Vassilis	4	Aaron		
2029	From Hannes		Hannes	4	Aaron		
2029a	Provided is the most common plot used by scientists that look at magnetic		Hannes	4	Aaron		
2029b	The level 2 CDF files at http://themis.ssl.berkeley.edu/data_download.shtml should contain position in various coordinate systems as well. Preferably in the same resolution as the data. Otherwise Scientists need to get the position from another source. Notes from Vassilis: option to introduce the data in RE with keyword (one RE =6,478 kilometers ???). Like thm_load_fgm/pos_units= 'RE'. Also thm_load_state keyword out_coord 'GSM', 'GSE',...etc.		Hannes	4	Aaron		
2029c	If one loads fgm data from probe 'a' and let's say there are no data for the chosen interval. The variables tha_fgl and tha_fgl_gsm etc. should all be empty. It could be those variables still contain data from the previously loaded interval.		Hannes	4	Aaron		
2030	upgrade thm_load to work with probe assignments		Vassilis	4	Aaron		
2031	move functionality of thm_load_state2 into thm_load_state and delete thm_load_state2		Vassilis	4	Aaron		
2032	Multiple enhancements concerning keywords, valid_names and thm_load routines		Vassilis	4	Aaron		
Cindy							
Jim L							
4180	for the WB reconfiguration, what one should see is that the APID 0x44A (EFW) data should shift from 16384 samp/s to 8192 samp/s, and should stay with the AC-coupled signals, with the 0x449 and 0x44B remaining at 8192 samp/s. I'm actually not very familiar with what was supposed to happen in the "extended wave burst" commanding, and so someone else going to need to let Jim know what the nominal output should have been, mostly in terms of the contiguous length of WB collection acquired.	12/7/2010	John Bonnell - Deron	0	Jim L	in progress;	1-2 hrs
4034a	Ferdinand sent was an attempt on his part to automate the shadow processing. He wanted feedback whether the products produced are adequate and if the code is amenable to automation. We can pick it up wit him once you have gone through it.	4/14/2010	Vassilis	1	Jim L	12/16/10: Jim's response to Ferdinands latest email	
	Option1) Just to recap: it will be more difficult than I thought to support switching between the default spin model and the eclipse spin model from F. Plaschke et al. It can't be implemented as a simple correction to the default model -- I would have to introduce a whole new set of variables in the L1 STATE CDF, duplicating the existing set of spin model variables, to be able to switch between corrected and uncorrected models. And eventually, we'll probably end up using the corrected model exclusively, so we'd end up with a lot of unused variables cluttering up the state CDFs.	4/16/2010	Vassilis	1	Jim L		
4034a1	Code modifications: 1. Add keyword "use_eclipse_corrections" to spinmodel_interp_t (defaults to "don't use") 2. Add informational message to state whether corrections are in use or not 3. Add similar keyword & informational message to other routines as necessary (thm_cotrans, ssl2dsl, thm_cal_fgm, etc)	11/22/2010	Vassilis	1	Jim L	on hold	

4034a2	Fix spin model code to mask out everything but the eclipse flag in the BAU sun sensor status; identify times when other status bits were set, and reprocess V01, V02, V03 state with fixed code	11/22/2010	Vassilis	1	Jim L		
4164	THD time offset	11/15/2010	Vassilis	1	Jim L		
4142	issue with FGS processing - timestamps	9/30/2010	Vassilis	1	Jim L		
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.	
4030a	Review Onboard Scripts for possible error.	5/17/2010	Jim Lewis	1	Jim McFadden, Davin, Robert Abiad	can duplicate on flatsat. Jim Mcfadden and Davin to review Jim L's email.	
4030b	Correct Existing Data	5/17/2010	Jim McFadden	1	Jim L	4030a prerequisite	
4030c	If scripts change - make changes to processing scripts	5/17/2010	Jim Lewis	1	Jim L	4030a prerequisite	
4027b	Reprocessing GOES Data	4/5/2010	Tami - SPDF	1	Jim L	Reprocessing on hold until Howard Singer delivers another batch of binary GOES data files.	
4070	"Add support to thm_cotrans, ssl2gse, and ssl2dsl for /pseudo_dsl keyword. If keyword is present, look for and apply eclipse delta_phi corrections as appropriate."	6/1/2010	Jim L	1	Jim L	thm_load_fit and thm_load_mom, add keyword. In progress - Will review code Davin checked-in concerning tensor quantities in thm_load_mom.	
2266	Timing of Spin Fit data	10/16/2009	Jim McFadden	1	Jim L		
2149g	write a routine to check time tag monotonicity and repair tplot variable if necessary (with options for "replace with NaN" and "delete")		Jim L	1	Jim L	Create a routine to clean up tplot variables. Use in the load routines were susecptible. Recommend that we just remove what is needed to make the time tags monotonic, and issue a warning indicating that the user should consult the THEMIS software team about that data.	
2149h	integrate time tag fixer-upper with TDAS load routines		Jim L	1	Jim L		
4008a	He requested some extra datetime formats. A. Numerical month & time (ie 2007-03-23/00:00:00). this option isn't listed.	3/12/2010	Pat from a scientist (Martin Connors?)	1	Jim L		4 hrs
4008b	He said there is an ANSI standard to separate date & time using a capital T and requested the option to put datetimes in this format. (ie '2007-03-23T00:00:00')	3/12/2010	Pat from a scientist (Martin Connors?)	1	Jim L		
4016	Our "save data as" menu doesn't remember the previous directory > that the user saved to. It could and it should.	3/12/2010	Pat from a scientist (Martin Connors?)	1	Jim L		1 day
4178	themis-tmserver1 is having disk problems	12/2/2010	Jim L	2+	Jim L	themis-tmserver1 is having disk problems, and will be offline until I can replace the disk and restore from backups. So if you're doing any FLATSAT testing, the frame router won't be able to establish a connection to themis-tmserver1 -- just wanted to let you folks know, so you won't waste your time troubleshooting the issue. few cleanup tasks to be done	3-4 hrs
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		2 hrs
4135	Now that the L1 ESA/SST/MOM reprocessing is underway, these CDFs will soon contain the full ESA and SST configuration words, in addition to the solar wind flags, sweep modes, and so forth. With the full configuration data available, if someone wants to use a property of these instrument configurations that's not already present as a L1 variable, we don't need to reprocess L1 to add it -- we just write a little more code for TDAS, to extract the new attribute from the configuration data that's already present.	9/10/2010	Jim L	2	Jim L		2-4 hrs
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	2	Jim L		
4135b	In the load and/or calibration routines for ESA, SST, MOM: rather than using the ESA solar wind flags and sweep mode from the L1 CDFs, use the ESA full configuration instead (which is present in all three L1 types, for convenience), and use the routines from 4135a to extract the solar wind flags, sweep mode, and any other useful attributes. I think SST does not have any configuration flags similar to the ESA quantities (there's the attenuator status, but that's separate from the instrument configuration word), but it needs them in the future, they should be handled the same way as ESA (extract from SST configuration word instead of adding L1 variables). I can do this, but if the routines from part (a) are well-documented, any of us could probably do this part.	9/10/2010	Jim L	2	Jim L or tbd		

4022	Update L1 master cdfs to support SPDF hosting	3/25/2010	David	3+	Jim L		
3093	Automate processing of eclipse sunpulse data from FGM team	2/22/2010	Jim L	3+	Jim L		
4040	Spinfits - separate E&B timestamps?	4/15/2010	Jim L	3	Jim L	SPDF has issue creating plots on the L1 data with their software	
4046	either thm_load_fit or the GUI code that calls thm_load_fit should split the data into separate plot variables for E and B, before importing them into the GUI data model. I think thm_load_fit already does something like this. See task 4040	4/23/2010	Pat	3	Jim L	Jim M 4/23: thm_load_fit also splits into efit and bfit variables, so unless you need to look at raw bytes, the 'fit' datatype is not needed. Pat: Agreed. Short term, excluding the data type from the GUI seems like an easy solution.	
2082a	Spin modeling during shadows BugZid=43		Vassilis	3	Hannes	Jim L to write routine. Hannes send info.	
2035	Split L1 ESA (using Thomas's routine) in master ESA data cdf		Vassilis	3	Jim L	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).	
2036	GOES 10-12 Test data: h. update labels (Howard's request - minor tweak)		Vassilis	3	Jim L	determine if to be reassigned	3-4 days
2038	STATE Web Page (s)		Vassilis	3	Jim L	review web pages	
2039	bad timing sun pulse times (early January 2009)		Vassilis	3	Jim L	Clarification needed	
2040	L1 Data Processing History Info: SCM, EFI, STATE		Vassilis	3	Jim L		
2043	Refactor repeated CDF library code in CDF processing tools BugZid=50		Vassilis	3	Jim L		
2046	Create a more efficient & productive prototype QA Instrument Command Line Script - first template (s) functional blocks then scripts for FGM, ASK, SCM, FIT, MOM, ASI, EFI, FFT, FBK, Gmag, State, SST, ESA		Vassilis	3	Jim L	In progress. Several templates created, selecting the appropriate command line routines to test.	
2047	Separate E and B timestamps for spin fits: a) make a revised V02 master CDF with E and B separated b) change thm_load_fit to support V01 and V02 of the L1 CDFs c) change the L0->L1 processing code d) change the L1->L2 processing code e) test the changes, then reprocess to create the V02 CDFs (keeping the V01 files around for a while to ease the transition) BugZid=45		Vassilis	3	Jim L	Discuss with SPDF whether having one variable with multiple data sources is difficult for them	
2047a	FGS sample times and values, showing repeated timestamps. BugZid=111 (BugZid=67 must be done first)		Vassilis	3	Jim L		
2047b	Repeated timestamps and gaps in spin fit data BugZid=113 (#67 may fix this one as well).		Vassilis	3	Jim L		
2077	Non Monotonic timestamps. BugZid=72		Vassilis	3	Jim L		
2078	bau_sunpulse_met assumes x86 endiannes (BugZid=13)		Vassilis	3	Jim L		
2047	task 2047 in my name: "Seperate E and B timestamps for spin fits", which is also a change to the L1 FIT master CDF and associated TDAS code. But unlike the spacecraft potential enhancement (which only adds new CDF variables, and is more-or-less backward compatible), 2047 would require us to bump the L1 FIT CDF version number to V02, and produce both V01 and V02 for a while, so users of TDAS 5.20 and earlier will still be able to load L1 FIT data. So I'm not sure whether the spacecraft potential task should include 2047, or not.	3/2/2010	Jim L	4+	Jim L		
4075	describe the FBK data type, time tag specified to correspond to the beginning of the time interval of the data that went into the FBK data, the middle, or the end, or is that unspecified, and what's happening here is that the time tagging is being changed in year 3+ of the mission - in the L1 file definition document, at least, does not define the time-tagging conventions to this level of detail.	6/11/2010	John Bonnell	4	Jim L		
4023	Before EOM reprocess L1 cdf's due to master cdf changes for SPDF	3/25/2010	David	4	Jim L		
2080	Phantom packets" cause non-monotonic distribution times. BugZid=25, low priority.		Vassilis	4	Jim L		
2081	Evaluate CDF compression algorithms BugZid=81		Vassilis	4	Jim L		
2083	Add "last processed" time to L1 (and L2?) CDFs BugZid=115		Vassilis	4	Jim L		
2084	. transforming one data point from SM coordinates to GSM coordinates. ct=time_double('2008-02-16/04:50:00') dipole=[[0],[0],[1]] v=[1,2,3] store_data,'dipole_sm',data=(x:ct,y:dipole,v:v) cotrans,'dipole_sm','dipole_gsm',SM2GSM cotrans,'dipole_gsm','dipole_gse',GSM2GSE get_data,'dipole_gse',data=dipole_gse xdigpse=dipole_gse.y[0] ydigpse=dipole_gse.y[1] zdigpse=dipole_gse.y[2] tilt=atan(xdigpse,zdigpse) When I check the data for 'dipole_gsm', the values are 0,0,0. I'm not sure what they SHOULD be, but I know that their magnitude should equal 1. sqrt(x^2+y^2+z^2)=1		Christine	4	Jim L		
4097	cdf's with MD5 checksum	7/19/2010	Jim L	4	Jim L	Jim L to send email with subtasks and estimates	
Jim M							
4176	fgs data missing - before reprocessing wait until STATE v1 reprocessed for entire mission	12/2/2010	Toshi Nishimura - UCLA	0	Jim M	Reprocess L2 files as was originally done, so that a given L2 file for a given day has the same time range as the corresponding L1 file. This means that the file would typically start a few minutes into the day, and end a few minutes into the next day. This would be easier for L1 to L2 comparisons, and also comparisons of L2 data to L1 header information which is not included in the L2 files. This would be more difficult for end users who want to see the first few minutes of the day as Toshi wanted. They would have to make sure that they load the previous day's file to get the first few minutes of a given day, as is true for loading L1 data.	

4191	Create EFI quality flags for EFI field data based on comparison of E12, E34 ground spinfit data with each other	12/20/2010	John Bonnell	1	Jim M		1 day
4192	Create L2 EFI files, including quality flags	12/20/2010	John Bonnell	1	Jim M		1 day
2057	SCM CAL File Processing Doc		Vassilis	1	Jim M	5/21/10 Olivier will review - pinged Olivier again on 7/30/10. Ping again - we will include with Version 6 in Spring 2011	
4004	Sort out if TDAS software can run off SPDF cdf's	3/5/2010	David	1	Jim M	QA Test Script	
2103	EAC offsets	8/1/2009	John Bonnell	1	Jim M	John sent Jim M code from Chris Cully showing how the offset should be calculated (8/12) 8-20-10 Jim M send John B for review a database of offsets. 9-2-10: John B to have feedback by 9-11.	
4056	EFI Calibration Document	4/30/2010	David	2	Jim M	Awaiting John Bonnell review eta 12/14	
2283	There is another aspect to this problem. Dead-time corrections are severe for ion ESA SW data and there are no dead-time corrections for onboard moments. Some algorithm will have to be developed that does this correction after the fact. Davin developed an algorithm like this for Wind 3DP. That algorithm may not work directly due to differences in energy sweeps, but something like it could be developed for THEMIS. Davin and I can provide some advice and direction. Similarly electron onboard moments in the SW may also need some corrections -- this should also be worked out at the same time.	11/2/2009	Jim McFadden	2	Jim M		
2175	L2 File Definitions Document		David	3	Jim M		
2087	Administrator's Guide		Vassilis	3	Jim M		
2088	Themis Developers Guide		Vassilis	3	Jim M		
2224	thm_load_mom: for quantities like velocity, the coordinate system isn't stored in the meta data, and none of the units are stored in the place we normally try to store them (from Pat - Vassilis concurs) Will take a look.		Vassilis	3	Jim M		
2091	Once Jim McFadden completes his mods for n_3d_new_3 reprocess L2 cdf's - entire mission		Vassilis	3	Jim M		
2092	thm_load_mom changes - reconcile mods with Davin at an appropriate time.		Vassilis	3	Jim M		
2055	ESA L2 from L1 (not packets) - create L2 and test thoroughly, then reprocess ESA		Vassilis	3	Jim M	On Hold; awaiting Jim L to split L1 into master cdf	
4003	Document: ESA File and Calibration Processing	3/5/2010	David	3	Jim M		
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	Jim M		
2093	AE Indexes Issue Jan 8-12, keyograms Jan 12-13, Stripes- Vassilis: minor		Vassilis	4	Jim M		
2094	Overview plot change: mode bar seems thick		Vassilis	4	Jim M	nothing we can do easily	
2095	Mosaic Processing - permanent script needed		Vassilis	4	Jim M		
2100	EFI calibration		John Bonnell	4	Jim M		
2100d	DC offset between 4sdo and 2sdo in boom plane		John Bonnell	4	Jim M	Which is better? Assigned to J. B. (low priority).	
2100h	Try to track down frequency scaling problem in DPWRSPC (dlimit setting? Compare to old plots?).		John Bonnell	4	Jim M	On Hold - low priority	
2100p	Modify THM_CAL_FIT to treat efs datatype - Install E12/E34 conditional based on th?_fit_code TPLLOT variable. If E12 switched to E34 software needs to be revised to handle		John Bonnell	4	Jim M		
Pat							
2069	Support Mirror Sites		Vassilis	0	Pat		
2069a	Japan (ISAS)		Vassilis	0	Pat		
2069b	Austria		Vassilis	0	Pat		
2069c	France		Vassilis	0	Pat	(Rumi - not always up to date for gmaps)	
2070	Support gmag data remote sites.		Vassilis	0	Pat		
2070a	Augsburg (MACC's)		Vassilis	0	Pat		
2070b	Alberta		Vassilis	0	Pat		
2070c	Greenland		Vassilis		Pat		
2070c2	DMI data (currently available Greenland data) was never calibrated and proper calibrations are not available. Need to properly label data and make sure users don't use data improperly.	11/23/2010	Vassilis	3	Pat		
2070c3	Data from new provider is archived in CDF but TDAS modifications to make it accessible to users have not been made.	11/23/2010	Vassilis	3	Pat		
2070c5	New keywords, pgm doc change, QA Test Script	11/23/2010	Vassilis	1	Pat		
3034	U Alaska all working	12/7/2009	Jim M	0	Pat		
4138	Install the new GEANT model when released. 4.9.4 is currently in beta.	9/14/2010	Davin	1	Pat	needs to be installed	
4138a	Verify the time to run electrons & protons through complex SST model.	9/17/2010	Davin	1	Pat		eta 1/12
4138b	Label active area for each detector. Update code to track statistics. (hit(e-)/fired(e-), edep/hit(e-)) Update code to aggregate statistics using the same method as SST FPGA.(bins= F,T,O,FT,TO,FTO)	9/14/2010	Davin	1	Pat	in progress	3-5 days
4138c	Fire electrons through aperture perpendicular to detector surface. Determine fraction attenuated.	9/14/2010	Davin	1	Pat		
4138d	Run simulation for fixed energy aimed at first detector(e- and p+), record energy deposited as a function of path length and projected path	12/14/2010	Davin	1	Pat		
4138e	Run simulation for variety of energies for all detectors, record energy deposited as a function of path length and projected path	12/14/2010	Davin	1	Pat		
4138f	Run simulation for range of initial positions around the full sphere.	9/17/2010	Davin	1	Pat		

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	1	Pat	Davin to handle S/C change. Pat is done.	
3055	Install Calibration parameters from Davin(replace/amend current description)	12/18/2009	Davin	1	Pat	awaiting values from Davin	for #a and #b - 4-6 hrs
3055a	Verify/Install attenuation parameters for each attenuator. There should be 8x5 = 40 parameters	12/14/2010	Davin	1	Pat		
3055b	Verify/Install geometric factor corrections for each aperture. There should be 8x5 = 40 parameters.	12/14/2010	Davin	1	Pat		
4072	Put eclipse spin model correction code in SST as already has been done for esa packet pgm	6/8/2010	Jim M	1	Jim M	wait for SST calibrations	
4068	Lynn Wilson possible enhancements	6/1/2010	Lynn Wilson	1	Pat	Review Lynn's software and generate list of features	
4156	Calibration of different anodes - energy efficiency	10/18/2010	Vassilis	1	Pat	if Davin provides values for 3055 this task can be closed	
4129	We would like to incorporate the Hermanus gmag data into the THEMIS database in some form of external ground station, like the Greenland chain. Can you implement this with the help of Jiang? I think Jiang will be writing code to read and validate the reading process anyway, for his own work, soon.	9/8/2010	Vassilis	2	Pat	in progress - on hold	
2060	L2 cdf Quality Flags: for SST		Vassilis	2	Pat		
4002	Document: SST File and Calibration Processing	3/5/2010	David	2	Pat		
4119a	Reorganize sun contamination keywords. (Add 'manual' option to method_sunpulse_clean)	8/26/2010	Vassilis	2	Pat		
4119b	Add 'automatic' option to method_sunpulse_clean which will sum across time range provided by user in new keyword.	8/26/2010	Vassilis	2	Pat	in progress - on hold	
4119c	Create a new crib that shows only a few simplified options to the users. (all_angle_median, scale_sphere, manual bin selection(for fill), automatic bin selection)	8/26/2010	Vassilis	2	Pat	4119a and b prereq's	1-2 hrs
4012	When Cindy & I tried to load tha_eff on 2007-03-23, it didn't load and said some calibration quantity couldn't be found. When I tried to load the same thing, I didn't have a problem. So the trick would be to find out what changed from my computer to Cindy's computer and to figure out how often our user's computers are going to have the same problem that Cindy's computer had.	3/22/2010	Pat	2	Pat	Jim M: I have no trouble with EFF data either for linux or windows.	4-6 hrs
2187	I noticed a bug in the x-axis options panel. It probably also applies to the y-axis options. If the set-all button is selected on the grid tab, then changing panels doesn't update the settings on the grid tab to the settings currently displayed for that panel.	7/29/2009	Pat	2	Pat	set to most recent user action for all routines	2-4 hrs
2041	thm_load_state out_coord velocity calculations wrong		Vassilis	2	Pat		
2285	Christine brought to my attention a bug that occurs if you use the TDAS tsyganenko routines in a way that is not really something that I expected, but seems to be a legitimate use of the routines. If passing in a set of input parameters that are stored in tplot variables but are not in time-series, the routine produces incorrect results.	11/4/2009	Christine	2	Pat		
4045	For the beta and official sites we want to add a button at the bottom to the right of the existing two buttons. Official site web page url: http://themis.ssl.berkeley.edu/summary.shtml?autoload=1 Please center the 3 buttons. The new button will have the words "Plot Descriptions" and if clicked will link to the following: ftp://apollo.ssl.berkeley.edu/pub/THEMIS/3 Ground Systems/3.2 Science Operations/Science Operations Documents/THEMIS Summary Plot Description Tables	4/19/2010	Pat	2	Pat		
2062	Alberta - At the moment the data files are from Dawson (daws), Churchill (fchu), Island Lake (isll) and Fort McMurray (mcmu). I will add Rabbit Lake and Taloyoak at some time but we have some issues with mag pointing at those 2 sites. If you recall, the agreement between Ian and Vassilis was that this data wouldn't be copied to become part of a mirrored archive like the existing data we provide. Instead, each file would be obtained from this site each time it is requested (using curl or some such). This means we can use our own logs to monitor data usage. Themis Software to be able to retrieve from Alberta		Vassilis	3	Pat		
4120	Add title support to plotxy	8/27/2010	Christine	3	Pat		
4121	Add multi-row/column span to plotxy	8/27/2010	Christine	3	Pat		
2090	that streamlines the generation of gmag stackplots and a crib to show how to do this. (< than a day)		Vassilis	3	Jim M		2 hrs
3053	102. Tplot_gui -- overwrite warning when importing data, even if variable gets renamed.	2/3/2010	Pat	3	Pat		6 hrs
2115	tplot does not fail gracefully after illegal margin set. In this case: tplot_options,'xmargin',[100,100], tplot does not fail gracefully after illegal margin set. In this case: tplot_options,'xmargin',[-1,-1] -tplot does not fail gracefully after illegal margin set. In this case: tplot_options,'ymargin',[100,100]			3	Pat		
2267	if you want to load a template, you need to pass the template path in via a keyword, or select an option to open it from the THEMIS->File Menu. I think we should consider adding the template path to the configuration file that we save, so that it can be loaded automatically.	10/19/2009	Pat	3	Pat		
4013	Plot Description Doc Button	3/22/2010	David	3	Pat		
2176	I ran into a small annoyance today when loading a themis document. I had originally loaded ESA and SST data for one time period, then overwrote that data by loading the same quantities but for a different time period. I did this several times and then saved the document for later. When re-opening the document I got a series of prompts asking whether I would like to re-write each quantity. It would speed up and streamline the process in this case if data that was later overwritten is not loaded when you open the document.	7/20/2009	Aaron	3	Pat	I spoke to Pat about this yesterday and we both agreed that while we cannot be sure which quantities should be re-loaded and which shouldn't (some may have been used temporarily for calculations). However, we can store the users's original choice to overwrite the data or not. So while we may not be able to save on loading time we can still keep the user from having to click multiple messages and from having to remember what they chose originally. The latter is particularly important since they may receive errors or get corrupted data	16
2201	One feature that was never implemented for the mini-language is globbing.(The ability to use "*" and "?" to reference multiple tplot variables at once.) This is a feature that is standard with many of our other tplot data processing routines. I think it would be very useful to include in the mini-language.	8/5/2009	Pat	3	Pat		40

3086	add MACCS gmag data from 2007 to our data archive. We already have MACCS data for some years and a process that automatically downloads it/converts to CDF. So the task would involve finding missing files from 2007 and feeding them into our pre-existing processing framework. It should be pretty straightforward, but probably non-trivial because of learning curve/unexpected details.	2/19/2010	James Weygand	3	Pat		
3091	Add a configuration setting "force_download", which if enabled, will download data even if the remote file is older than the local file. This comes up if you're switching back and forth between using QA data and production data; once you've downloaded QA data, it's hard to download (usually older) production data without manually removing any QA files. This should apply to all data sources -- THEMIS, GOES, WIND, etc.	2/22/2010	Vassilis	3	Pat		
3065	68. GUI z-axis options -- when Fixed Min/Max selected, value in spinners does not reflect current range as it does for X and Y axes. Displayed range when spinners desensitized is inaccurate.	2/10/2010	Aaron	4	Pat	check draw object	
4005	The TDAS Software will be enhanced to incorporate data from the STEREO mission.	3/8/2010	David	4	Pat		8 hrs
4006	add the following ancillary ground-based observations: MAGDAS Network, Auroral Electrojets (AE) and Ground Radars (SuperDarn, AMISR and Sondrestrom)	3/8/2010	David	4	Pat		4 hrs
3007	EPO-GMAG msgs: modify the script and only issue this message if > 2 days	12/8/2009	David	4	Pat		
2279	How's it going with the stats? I noticed the query takes some time because it's looking at the whole table. It could be refined for specific time periods. The delay in return could be what's causing Dave to have access problem - or the SSL firewall?	10/23/2009	Tim	4	Pat	see 2277	
2135	I didn't realize the cotrans messed up the velocities for earth centered coordinates. Maybe what we really need to do is modify cotrans so that it correctly transforms velocities. Users can incorrectly transform velocities just as easily using thm_cotrans on the command line, as they can using the coord keyword.		Pat/Jim L	4	Pat		
2124	I loaded a plot which had the line color as white. Because the legend plots in the same color as the line, the legend text did not show up. We should probably just put in a check for this case. If the line is white and the background is white then draw the text in black		Pat	4	Pat		
2063	Problem with edit3dbins is being caused by IDL's mouse system variable not being updated correctly on Macs. The ctime procedure, used to interactively select a time from a tplot window, relies on this variable to determine when a selection has been made in the tplot window. If the variable is never updated then ctime gets caught in an infinite loop. It's unclear whether this is specific to a particular OS version, but the routine should probably be modified at some point to maximize compatibility with Macs. In the meantime the alternate method of calling gettime that I copied you on yesterday should provide a temporary way around this bug.		Aaron	4	Pat	verify note in quick reference guide and then task will be closed	
2106	Add the ability to right-click on a variable in the widget-tree and display a popup with basic information about the quantity such as dimensions, range or other meta data as well as the ability to rename variable		Pat	4	Pat	originally part of task 64, however, after further evaluation, it was determined this best belonged with the widget tree rather than the analysis window	
2220	I found a small bug in the z-axis panel in the gui. If I change the z-axis annotation size of a layout with 2-panels each with one spectrogram, when I apply this change, it gets applied to both panels, even if set-all is off.	8/27/2009	Pat	4	Pat		
3063	40. CL tplot options -- setposition test plots all look the same	1/15/2010	Pat	4	Pat	Long-standing tplot bug, may not ever be fixed	
4029	One of Michael Hartinger (a grad student in atmos) is having trouble with thm_part_getspec when the SST is in fast survey mode. The routine can take a very long time to run because of the higher resolution. I think we should put a feature request on the list to automatically downsample the particle data in time. Normally, I would suggest that uses downsample using one of our interpolation routines, but because the particle data is stored in a special common block, there is no easy way for end users to perform this operation.	4/6/2010	Michael Hartinger / Pat	4	Pat	Michael supplied code for thm_part_moments	4-8 hrs
	Misc						
447	Save THEMIS document: Attempting to save to a read only file in			1		IDL Error report to ITT	