Task #	Task Description	Date Opened	Reported By	Pri	Assigned	Notes									
		-			То		Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide	Web
	To be Assigned or Discussed														
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4238									ļ						
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	General		i			;		ļ	ļ						ļ
	Davin's commits review							<u> </u>							<u> </u>
4229d	8630	5/2/2011	David	1	David	sent Davin email on 5/2/11									
4043	Paper on interdependentcies of FGM and STATE Reprocessing	4/19/2010	Pat	1	Jim L	David - Put Paper into themis doc format									
	Check with Jon Loran further about a THEMIS SVN read only SSL account for IUGONET and ERG	12/16/2010	David	QA	David	On Hold									
	Put links to the ERG and IUGONET web sites on the themis website	12/16/2010	David	QA	David	sent ERG and IUGONET folks email									
	Save THEMIS document: Attempting to save to a read only file in Windows outputs the correct error message, but IDL crashes immediately afterwards.	2/24/2011	Team	1	David	IDL Error report to ITT									
								<u> </u>							

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	Harald			:											
	L1's and mosaics are up-to-date and available through March 31, 2011				Harald										
	Thumbnail Data:				Harald	Updates ready 7-10th of the next month									
	- cdf files done until February 2011 - overview plots done until February 2011														
	- movies done until April 30, 2010														
	Full-resolution raw data: - complete for 2007, 2008, 2009				Harald										
	- Up to date and complete until April 2010														ļ
	Full resolution data: - data cdf done for all 2007 and 2008 and up todate and				Harald										
	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 2007-2009 and until April 2010														
2069d	UCLA – mirror site set-up		Vassilis	1	Harald	UCLA has 2-1TB and 2-2TB bricks.									
4450	Hannes	10/11/0010													
4153 4018a	maintenance of gmag stations "Exclude List" New Calibration FGM parameters and spin axis offsets	10/11/2010 5/10/2010	David Hannes	0		Exclude List updated 5/16/11 offsets sent to instr scientists									ļJ
10100		5,15,2515				; email from Braunschweig: Karl-Heinz will produce new Artemis calibration files in 2-3 weeks (first week in June).									
4080	Attitude Determination next few months	6/21/2010	Hannes	1		Attitude determinations to resume, results should be available ~2 weeks dependent on 4018a									
	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		Waiting for feedback from Ferdinand about state of inner probe eclipse models, long & short eclipse models									
	GSE-GSM	10/11/2010	Vassilis	1	Hannes										
	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 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.									

Task #	Task Description	Date Opened	Reported By	Pri	Assigned	Notes			QA Suite			Adm	Dev	
					То		Estimate	A&E	or Script	UG	Qref	Guide	Guide	Web
	Aaron	<u> </u>	I .					ļ						
4234	Determine cause of two type of gaps in esa slices, fix.	5/13/2011	Vassilis	1	Aaron	one gap completed and the second in progress								
4235	Determine why bulk velocity vector is off on SST plots.	5/13/2011	Vassilis	1	Aaron	if we want more accuracy we would need more development time - discuss with Vassilis at next meeting								
2013af	Mark one count level (dashed line)		Vassilis	2	Aaron	Have Andrea and Xuzhi check it out								
	The enhancement for QA 156 is to add a "lazy ytitles" option to the GUI. This means that a ytitle that has separators like spaces or underscores will have newlines inserted in their place so that long titles can fit in crowded layouts. This is a standard command line feature.	3/2/2011	Pat	2	Aaron		2 days							
	SST Test Suite: (Feature) Reports that default labels are cluttered. Specifically, sst_en_eflux y-label is long, & the content of the label is more appropriate for the z-axis. I agree, but making the defaults work better will take some effort.	2/3/2011	Pat (from Michael)	2	Aaron	see 4204								
	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	Aaron	Jim M: I have no trouble with EFF data either for linux or windows.	4-6 hrs							
	We don't have support for filled symbols. This means symbols are only outlines.	12/11/2009	Pat	2	Aaron									
	GUI Overview plots sometimes have diamond shaped artifacts in the sample rate bar. Should fix.	1/5/2010	Vassilis	2	Aaron	This is a side-effect of the a way that symbols are used as a hack to generate the sample rate bar. Fix after 3014 is fixed.	1/2 day							
QA038	Windows - Layout option	1/21/2011	Christine	2										
	6.a) I forgot to click Add to make new panels for each spacecraft's data and thus ended up with all data on one panel. The only way to fix this, that I saw, was to delete all the data and then start over, making sure to add a panel before selecting each dataset. As a user, I feel there should be an option to move data from one panel to another without having to remove it and select it again. For instance, we should be able to click and drag a piece of data from one panel to another panel.	1/21/2011	Christine	2	Aaron	checkbox - toggle	1-2 days							
	6.f) When the 5 panels have been made of the data, the type of data in each panel is labeled but the spacecraft is not included in the label. You only know which spacecraft is represented if you hover your mouse over the panel. I think the panel should have the sc label, especially for printing purposes.	1/21/2011	Christine	2	Aaron	come up with how to fix options with level of effort								
	REALLY don't like how when you select the dependent variable, the window slides over to center it. I want it to stay wehre it was unless I slide the window myself. Otherwise I'm constantly sliding it back to the left in order to see which variable I want to select.	1/21/2011	Christine	2	Aaron	fix only for windows								

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					То		Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide	Web
Č	10.c,d) If you change the panel row number, you have to also change the panel row number to which you are changing it to. Ex. 10.c) asks to select the 3rd panel and click the up arrow key twice, and click apply. You can't do this unless you ALSO select panel 1 and click the down arrow key twice. Same for 10.c and dYou can't apply panel 3 to row change to 5 unless you change 5 to some unused row number. Should this be automated? If not then at least the suite's directions should be altered.	1/21/2011	Christine	2	Aaron	alter test suite and resolve for simple case - talk to Christine									
	10.h) If you don't click cancel, but apply it and hit ok and go back to manually change it back to the original plot, the plot keeps the same width for each panel as when there were 3 columns, even now there is only 1, so each panel is very short instead of being its full, one-column size. This shouldn't be the case.	1/21/2011	Christine	2	Aaron	analysis - for discussion with level of efforts									
	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										
	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 relpathnames 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		Hannes	4	Aaron										
	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										
	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	<u> </u>									
	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										
2013w	Integrate our own slicer3.pro gui with regular 2-D slice plots.		Vassilis	4	Aaron	on hold	2 days	Υ	Y	Υ	Υ				
	Cindy					· 									

5/27/2011 3:39 PM

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Fatherst	4.0-	0-11	QA Suite		0	Adm	Dev	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
					10		Estimate	A&E	Crib	or Script	UG	Qref	Guide	Guide	Web
	New Programmer														
	Document: Administrators Guide	3/1/2011	David	1		50% time									
	THEMIS Pipeline proof of concept regression tests VC->L0	3/23/2011 3/23/2011	Jim L Jim L	1	tbd tbd	50% time						ļ			
	L0->L1	3/23/2011	Jim L	1	tbd										
4214d	empermeris->state v00	3/23/2011	Jim L	1	tbd										
	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	1		In progress. Several templates created, selecting the appropriate command line routines to test.									
	Yuri has generated a 3 parameters for the THEMIS spacecraft L,L*,Mlat. These parameters are very useful scientifically. The task would be to archive these parameters in CDF and add a load routine in TDAS to read them. Currently, the data will be made available to us by Yuri via tab separated ascii files.	1/19/2011	Yuri Shprits	2	tbd	part of the state cdf									
2175	L2 File Definitions Document	3/1/2011	David	2	tbd										
	THEMIS Pipeline proof of concept regression tests														
	L1>L2	3/23/2011	Jim L	2	tbd										
4214e	GMAG AE Index	3/23/2011	Jim L Jim L	2 2	tbd tbd			ļ				ļ			
	ASI	3/23/2011 3/23/2011	Jim L	2	tbd										
	mosaics	3/23/2011	Jim L	2	tbd							ļ			
•	summary plots	3/23/2011	Jim L	2	tbd										
	write a routine to check time tag monotonicity and repair tplot variable if necessary (with options for "replace with NaN" and "delete")		Jim L	2		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	2	tbd										
	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	3	tbd		2-4 hrs								
	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	3	tbd										

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Task#	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide	Web
	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	3	tbd										
2078	bau_sunpulse_met assumes x86 endiannes (BugzID=13)		Vassilis	3	tbd										
4027b	Reprocessing GOES Data	4/5/2010	Tami - SPDF	1	tbd	Reprocessing on hold until Howard Singer delivers another batch of binary GOES data files.									

Task #	Task Description	Date Opened	Reported By	Pri	Assigned	Notes				0.4.6			٠ ۸	Derr	
	-	-	•		To		Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide	Web
	Jim L									•					
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 with him once you have gone through it.	4/14/2010	Vassilis	0	Jim L										
	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	0	Jim L	TDAS side - select on the fly to get the correction or not (keyword) - can build both standard and eclipse spin models from new state CDFs, keeping changes out of trunk until I get back from vacation	5 days	Y	Y						
	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	0	Jim L	must change everything that the calls the spin model - in progress; FGM, EFI, SCM (wavelets) and Spin Fits complete and Jim sent email to Vassilis, Hannes and Ferdinand to take for a tst drive (5/9-10); Others to do: particle distributions		Y	Y	***************************************				Y	
4034a2	At the moment, I have Ferdinand's eclipse spin models for THB and THC. There was some discussion about whether one of these models would also be appropriate to use for the THA, THD, and THE, but I don't remember what the recommendation was, or if that work is still in progress. The other thing I remember from our previous conversation is that they were thinking of distinguishing between "short" and "long" eclipses, and using different eclipse spin models for each situation. The models I'm currently using are "thb_modell_2.sav" (dated Jul 9 2010), and "thc_modell_2.sav" (dated Aug 20, 2010).	4/8/2011	Vassilis	1	Jim L	awaiting Ferdinand									
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										
4142	issue with FGS processing - timestamps	9/30/2010	Vassilis	1	Jim L	not trivial	3-5 days	Y							
2266	Timing of Spin Fit data	10/16/2009	Jim McFadden	1	Jim L	see 4142									
	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)	before the millenium started and when bugzilla's roam the free world	Vassilis	1	Jim L	Hard for SPDF to deal with, with their plotting tools - review priority with Vassilis; Check again with John Bonnel regarding timing differences between fgm and efi spin fits	4-5 days								
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Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide	Web
	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 prerequsite								
4030c	If scripts change - make changes to processing scripts	5/17/2010	Jim Lewis	1	Jim L	4030a prerequsite								
	"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.								
	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		Web Site - instruments will have a web page with "Sources of Data Anamolies". The first one being the ESA issue								
	Each of us should probably take a look at all the shell scriptswe're responsible for, scrub them for issues like this, and in the case of jobs running on gaia (and any other hosts that were recently upgraded), check the recent processing logs to make sure any failures are not signs of these or other incompatibilities.	3/11/2011	Jim L	1	Jim L									
	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							

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			,		То		Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide	Web
4022	Update L1 master cdfs to support SPDF hosting	3/25/2010	David	3+	Jim L	I think 4022 is a an end-of-mission task: basically clean up all the L1 CDFs, so they are fully ISTP compliant and as compatible as possible with SPDF's tools. But "ISTP compliant" is a moving target they keep adding new checks to the SKTEditor software so I think we made a task to do one final cleanup and reprocessing at the end of the mission, as opposed to reprocessing every time they introduce a new SKTEditor check that renders our L1 files non-ISTP-compliant. So 4022 = final end-of-mission adjustments to master CDFs, 4023=final reprocessing. Both should remain open, with no immediate action required as far as I know.									
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									
	either thm_load_fit or the GUI code that calls thm_load_fit should split the data into separate tplot variables for E and B, before importing them into the GUI data model. I think thm_load_fft 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.									
	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									
	L1 Data Processing History Info: SCM, EFI, STATE		Vassilis	3	Jim L										
	Refactor repeated CDF library code in CDF processing tools BugZid=50		Vassilis	3	Jim L										
2077	Non Monotonic timestamps. BugzID=72		Vassilis	3	Jim L										

2017 Institution Substitution	Task #	Task Description	Date Opened	Reported By	Pri	Assigned	Notes				0.4.6			٠ ۵	Derr	
has, which is also a change to the L FIFT master CDF and hasociated TNAS crods. On units the supposed provision is a supposed provision in the supposed provision is a supposed provision in the L FIFT CDF vision number to VOZ and produce both VOT land VOZ for a while, so users of TDAS 52 and earlier will still per aller to both LFIFT data. So in most supposed to the company of the per and the supposed provision in the supposed prov		-	-	-		To		Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide	Web
his beginning of the time interval of the data that work into the FEK data, the middle, or the on, or is that unspecially and what is happening here is that the time lagging is being changed (in yard of other mass) in the LT file definition document, at what is happening here is that the time lagging convenions to this fewal was all the control of the mass of other mass in the LT file definition document, at what is happening here is that the time lagging convenions to this fewal was all the control of the mass of th		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 moreor-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	3/2/2010	Jim L	4+	Jim L										
SPDF SPDF SPDF SPDF SPDF SPDF SPDF SPDF		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	6/11/2010	John Bonnell	4	Jim L										
Bugs/LD-25, fow priority. 2081 Evaluate CDF compression algorithms BugZid=81 2083 Add "last processed" time to L1 (and L2?) CDFs BugZid=115 2084 I transforming one data point from SM coordinates to GSM coordinates. ct-time, double/2008-02-1604-5000? dipole-glig/[0][0][1]] vel1/2.3] store, data (ptole, sm. data) (spote, sm. dipole, gsw. d'SMACSM coordinate, d'inches, de la dipole, gsw. d'sMACSM coordinate, d'inches, d'inch	4023		3/25/2010	David	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, cretime_double(2008-02-16/04.50:00') dipole_[0], [0], [1] = v=[1,2.3] store_otata, dipole_gradinates and college (2008-02-16/04.50:00') dipole_gradinates (2008-02-16/04.50:00') store_otata, dipole_gradinates (2008-02-16/04.50:00') dipole_gradinates (2008-02-16/04.50:00') store_otata, dipole_gradinates (2008-02-16/04.50:00') dipol	2080			Vassilis	4	Jim L										
2084 transforming one data point from SM coordinates to GSM coordinates. ct-lime_double(2008-02-16/04-50:00) dipole=[[0],[0],[1],11] v=[1,23] store_data_(pipole_sm', dipole_sm', dipole_s	2081	Evaluate CDF compression algorithms BugZid=81		Vassilis	4	Jim L										
coordinates. ct-lime_double[2008-02-16(04-50.00) dipole=[[0][0][0][1] 12-23 store_data_dipole_sm'_data={kcrt.ydipole_ysm'_dSM2GSM} cotrans, dipole_gsm'_dploe_gsm'_SM2GSM cotrans, dipole_gsm'_dploe_gse_ySM2GSB= get_data_dipole_gse_data=dipole_gse_ySM2GSB= get_data_dipole_gse_data=dipole_gse_	2083	Add "last processed" time to L1 (and L2?) CDFs BugZid=115		Vassilis	4	Jim L										
Subtasks and estimates Subtasks and estima		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 xdipgse=dipole_gse.y[0] ydipgse=dipole_gse.y[1] zdipgse=dipole_gse.y[2] tilt=atan(xdipgse,zdipgse) 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.		Christine	4	Jim L										
Jim M 2283a Solar Wind moments corrected (Stephan Erickson) 5/27/11: 4/18/2011 Vassilis 1 Jim M email crib to Jim McFadden, then to Alaska Pl and James Weygand 4224 The solar wind flag variables in the files are in much better shape than before, but if you read more than one file in sequence you will come across a record here or there that is a duplicate. For your 1st date below. The record w/ time 01-01-2010 00:01:58.426 exists in both the 2009/12/31 and 2010/01/01 data files 4229 Davin's commits review	4097	cdf's with MD5 checksum	7/19/2010	Jim L	4	Jim L										
Solar Wind moments corrected (Stephan Erickson) 5/27/11: 4/18/2011 Vassilis 1 Jim M email crib to Jim McFadden, then to Alaska PI and James Weygand 4224 The solar wind flag variables in the files are in much better shape than before, but if you read more than one file in sequence you will come across a record here or there that is a duplicate. For your 1st date below. The record w/ time 01-01-2010 00:01:58.426 exists in both the 2009/12/31 and 2010/01/01 data files 4229 Davin's commits review	4201	Kyoto final data - may have different URL naming scheme	2/2/2011	Jim L	4	Jim L	they are only up to 2003 in final									
Solar Wind moments corrected (Stephan Erickson) 5/27/11: 4/18/2011 Vassilis 1 Jim M email crib to Jim McFadden, then to Alaska PI and James Weygand 4224 The solar wind flag variables in the files are in much better shape than before, but if you read more than one file in sequence you will come across a record here or there that is a duplicate. For your 1st date below. The record w/ time 01-01-2010 00:01:58.426 exists in both the 2009/12/31 and 2010/01/01 data files 4229 Davin's commits review		II 1														
shape than before, but if you read more than one file in Papitashvili sequence you will come across a record here or there that is a GSFC - duplicate. For your 1st date below. The record w/ time 01-01- 2010 00:01:58.426 exists in both the 2009/12/31 and 2010/01/01 data files 4229 Davin's commits review	2283a	Solar Wind moments corrected (Stephan Erickson) 5/27/11: found a bug in the handling of the suffix keywords. It'll take the	4/18/2011	Vassilis	1	Jim M	then to Alaska PI and James									
		shape than before, but if you read more than one file in sequence you will come across a record here or there that is a duplicate. For your 1st date below. The record w/ time 01-01-2010 00:01:58.426 exists in both the 2009/12/31 and 2010/01/01 data files	4/12/2011	Papitashvili GSFC -	1	Jim M										
			5/2/2011	David	1	Jim M	in progress									

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Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide	Web
2283b	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	talked to Jim McFadden who will make dead time corrections in ground based to process onboard moments better - in progress				or script			Guide	Guide	
4233	Angular Correction for particle data - use Jim McFadden's code if available	1/9/2011	Vassilis	1	Jim M										
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	Jim M	not allow velocity to go bad									
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	2	Jim M										
2035	Split L1 ESA (using Thomas's routine) in master ESA data cdf		Vassilis	2	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).									
4208a	Enhanced MOM Instrument Web Pages	3/5/2010	David	2	Jim M	Talked to David first.									
4003	Document: ESA File and Calibation Processing	3/5/2010	David	3	Jim M										
2088	Themis Developers Guide Once Jim McFadden completes his mods for n_3d_new_3 reprocess L2 cdf's - entire mission		Vassilis Vassilis	3	Jim M 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									
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										
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								
4218	thm_part_moments angular restriction	4/4/2011	Vassilis	3	Jim M										
2093	AE Indexes Issue Jan 8-12, keyograms Jan 12-13, Stripes- Vassilis: minor nuisance		Vassilis	4	Jim M										
2094	Overview plot change: mode bar seems thick		Vassilis	4	Jim M	nothing we can do easily									

Task #	Task Description	Date Opened	Reported By	Pri		Notes			0.11	QA Suite			Adm	Dev	
					То		Estimate	A&E	Crib	or Script	UG	Qref	Guide	Guide	Web
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).									
	Try to track down frequency scaling problem in DPWRSPC (dlimit setting? Compare to old plots?).		John Bonnell	4	Jim M	On Hold - low priority									
	Modify THM_CAL_FIT to treat efs datatype - Install E12/E34 conditional based on th?_fit_code TPLOT variable. If E12 switched to E34 software needs to be revised to handle		John Bonnell	4	Jim M										

Task #	Task Description	Date Opened	Reported By	Pri	Assigned	Notes									
	·				To		Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide	Web
	Lydia														ļ
4210	Modeling SST fluxes	3/12/2011	Vassilis	1	Lydia	on hold		?	?						
	I encountered a very minor bug when using thm_load_esa. Calling thm_load_esa, probe='b' for 2009-08-26/00:10:10 for 1 day causes an error (command line only, not with GUI).	5/26/2011	Lydia	1	Lydia	It might be a good exercise to run the following as a way to familiarize yourself with the following: esa crib, esa command line (load) QA script and maybe some of the tests in the GUI QA ESA Full Test Suite									
4119a	Reorganize sun contamination keywords. (Add 'manual' option to method_sunpulse_clean)	8/26/2010	Vassilis	2	Lydia	Ask Drew to take a look									
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	Lydia	Ask Drew to take a look									
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	Lydia	Ask Drew to take a look									
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	Lydia	Load routine with Keyword									
4120	Add title support to plotxy	8/27/2010	Christine	3	Lydia										
4121	Add multi-row/column span to plotxy	8/27/2010	Christine	3	Lydia										
3053	102. Tplot_gui overwrite warning when importing data, even if variable gets renamed.	2/3/2010	Pat	3	Lydia	see 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	Lydia	see Pat									
4013	Plot Description Doc Button	3/22/2010	David	3	Lydia	see Pat									
2036	GOES 10-12 Test data: h. update labels (Howard's request - minor tweak)		Vassilis	3	Lydia	see Jim L									
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	Lydia	see Pat - on hold as MACCS data base in transition									
4005	The TDAS Software will be enhanced to incorporate data from the STEREO mission. (CL and GUI) ? For Vassilis	3/8/2010	David	4	Lydia	see Pat or Jim L									
4006	add the following ancillary ground-based observations: MAGDAS Network, Auroral Electrojets (AE) and Ground Radars (SuperDarn, AMISR and Sondrestorm)	3/8/2010	David	4	Lydia	see Pat									
3007	EPO-GMAG msgs: modify the script and only issue this message if > 2 days	12/8/2009	David	4	Lydia	see Pat									

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Pat 2069 Support Mirror Sites 2070 Support Mir		*					3				,					
2069a Japan (ISAS) Vassilis 0 Pat 2069b Austria Vassilis 0 Pat 2069c France Vassilis 0 Pat 2070c Augsburg (MACC's) 2070c Augsb	Task#	Task Description	Date Opened	Reported By	Pri		Notes	Estimate	A&E	Crib	3 3	UG	Qref		Dev Guide	Web
Support Mirror Sites Vassilis Vass		Pat														
2089b Austria 2089c France Vassilis 0 Pat Vassilis	2069			Vassilis	0	Pat										
2070 Support gmag data remote sites. 2070 Augushurg (MACC's) 2070b Alberta 2070b Alber	2069a	Japan (ISAS)		Vassilis	0	Pat										
2070 Support gmag data remote sites. 2070 Augsburg (NACC's) 2070a Augsburg (NACC's) 2070b Ablerta 20	2069b	Austria		Vassilis	0	Pat										
2070s Support gmag data remote sites. 2070s Aughberta 2070b Alberta 2070	2069c	France		Vassilis	0	Pat	• •									
2070b Alberta 20	2070	Support amag data remote sites		\/assilis	0	Pat	gmags)									
Additional Company Alberta Additional Company																
energy deposited as a function of path length and projected path 41381 Run simulation for range of initial positions around the full 9/17/2010 Davin 1 Pat in progress 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 flies that would be uploaded to the spacecraft. 3055 Install Calibration parameters from Davin (replace/amend current description) 3055a Verify/Install attenuation parameters for each attenuator. There should be 8x5 = 40 parameters 4072 Put eclipse spin model correction code in SST as already has been done for eas packet pgm 4088 Lynn Wilson possible enhancements 6/8/2010 Lynn Wilson 1 Pat Review Lynn's software and generate list of features 4086 Lynn Wilson possible enhancements 70/18/2010 Vassilis 1 Pat in progress 10/8/2010 Vassilis 1 Pat wait for SST calibrations 80/8/2010 Jim M 1 pat wait for SST calibrations 10/8/2010 Vassilis 1 Pat in progress 10/8/2010 Vassilis 1 Pat in progress 10/8/2010 Vassilis 1 Pat Valve Vassilis 1 Pat Valve Vassilis 1 Pat Valve Vassilis 1 Pat Valve Vassilis 2 Pat Valve Val	2070b	Alberta		Vassilis	0											
### Action Part Par		energy deposited as a function of path length and projected	12/14/2010	Davin	1	Pat										
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. 3055 Install Calibration parameters from Davin (replace/amend current description) 3055 Verify/Install attenuation parameters for each attenuator. There should be 8x5 = 40 parameters 3055a Verify/Install geometric factor corrections for each aperture. There should be 8x5 = 40 parameters. 4072 Put eclipse spin model correction code in SST as already has been done for esa packet pgm 4068 Lynn Wilson possible enhancements 6/1/2010 Lynn Wilson 1 Pat Review Lynn's software and generate tables to send to the S/C, Davin to ask Peter Harvey for more info. Vassillis to enall Davin. Since the surface of the surface or many form of the surface or many form of the surface or many for more info. Vassillis to enall Davin. 12/14/2010 Davin 1 Pat waiting values from Davin; for #a and #b - 4-6 hrs 12/14/2010 Davin 1 Pat wait for SST calibrations 4072 Put eclipse spin model correction code in SST as already has been done for esa packet pgm 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			9/17/2010	Davin	1	Pat	in progress									
current description) New parameters from Drew soon. Pat wait for SST calibrations New parameters from Drew soon. New parameters from Drew soon. Pat wait for SST calibrations New parameters from Drew soon. New parameters from Drew soon. Pat wait for SST calibrations New parameters from Drew soon. Pat wait for SST calibrations New parameters from Drew soon. Pat wait for SST calibrations New parameter	4152	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	10/8/2010		1	Pat	generate tables to send to the S/C, Davin to ask Peter Harvey for more info. Vassilis to email									
should be 8x5 = 40 parameters 3055b Verify/Install geometric factor corrections for each aperture. 12/14/2010 Davin 1 Pat			12/18/2009	Davin	1	Pat	New parameters from Drew	#b - 4-6								
There should be 8x5 = 40 parameters. 4072 Put eclipse spin model correction code in SST as already has been done for esa packet pgm 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 2060 L2 cdf Quality Flags: for SST Vassilis 2 Pat			12/14/2010	Davin	1	Pat										
been done for esa packet pgm 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 2060 L2 cdf Quality Flags: for SST Vassilis 2 Pat			12/14/2010	Davin	1	Pat										
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 2060 L2 cdf Quality Flags: for SST Vassilis 2 Pat	4072		6/8/2010	Jim M	1	pat	wait for SST calibrations									
2060 L2 cdf Quality Flags: for SST Vassilis 2 Pat	4068	Lynn Wilson possible enhancements	6/1/2010	Lynn Wilson	1	Pat										
		Calibration of different anodes - energy efficiency	10/18/2010				if Davin provides values for 3055									
4002 Document: SST File and Calibation Processing 3/5/2010 David 2 Pat	2060	L2 cdf Quality Flags: for SST		Vassilis	2	Pat								-		
	4002	Document: SST File and Calibation Processing	3/5/2010	David	2	Pat										
4208b Enhanced SST Instrument Web Pages 3/5/2010 David 2 Pat Talked to David first.	4208b	Enhanced SST Instrument Web Pages	3/5/2010	David	2	Pat	Talked to David first.									

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E	(:rih	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide	Web
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 reloaded 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 if they do not choose the correct option - in progress									
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	in progress	40								
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									
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 problems - 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										

		:	:			3								
Task#	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide	Web
	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								
	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								
	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								
	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							