		Date			Assigned		Estimate
Task #	Task Description	Opened	Reported By	Pri	To	Notes	(hrs)
	To be Assigned or Discussed						
2297	To be Assigned of Disoussed						
2298							
2999 3000							
3001							
3002							
	General						
2186	I noticed that the Data->Collaboration Tools->(subcategories) fall	7/28/2009	Michael	2	Amanda		
	behind the ARTEMIS graphic.	44/5/0000		_			
2290	Revise ESA and MOM Data Historyweb pages To incorporate Vassilis's request regarding auroral zone stations, I will	11/5/2009	David Vassilis	2	Amanda Andreas	Jim M to make program mod	
	first need to identify THEMIS' auroral zone stations.	11/10/2000		•		om mane programmed	
	Revise the Data Products Web page and send to Amanda	40/05/0000	David		David		
	Incorporate electron calibration into data Enhanced SST and MOM Instrument Web Pages	10/25/2009	Vassilis David		Davin Davin		
2103	EAC offsets	8/1/2009	John Bonnell	2	John B	John has taken AC coupled data -> he will get	
						me the offsets and the switch-over times. Etc	
2246	Fig. the pign reversed of 224	0/40/0000	Mishaal	ام طه	John D	November Etc 10/23	
2216	Fix the sign reversal of e34. one outstanding issue with THM_LOAD/THM_CAL_EFI is that for	8/13/2009 9/8/2009	Michael Jim M	tbd	John B John B	Review Jim's fix, Eta 10/23	
	some reason when I ask for the calibrated data in SPG (which should						
	just be adjustment of gains and offsets, and conversion from ADC units to physical units, the code is trying to do some despin						
	operations. Since this has direct impact on my ability to evaluate the						
	EFI data quality,						
	Harald						
	ASI software - running fine as of November 12, 2:20pm				Harald		
	Thumbnail Data (updates will come around November 16):				Harald	Updates ready 7-10th of the next month	
	- cdf files done until September 30, 2009 - overview plots done until September 30, 2009						
	- movies done until July 31, 2009						
	Cull recolution rous date:				Horold	2 navy Calmany dialys containing full recolution	
	Full-resolution raw data:				Harald	2 new Calgary disks containing full resolution data until mid April 2009. Finished processing	
						everything until 2/28/2009. March in process.	
	1. (0007 10000						
	- complete for 2007 and 2008 - reasonably complete until mid April-2009						
	Todos naby complete and market 2000						
	Full resolution data:				Harald	need to finish processing of data that were on	
	- data cdf done for all 2007 and 2008 and until 03/31/09					transfer drives from Calgary	
	- keogram cdf done for 2007 and 2008 and until 02/28/09						
	Web site mosaics and movies: - Mosaics and movies reprocessed for 2007/2008 season						
	- Mosaics and movies reprocessed for 2008/2009 season					November 2008 mosaics to be reprocessed	
	Web site overview plots with full resolution data:					Need to update with data on transfer drives	
	- overview plots done for 2007 and 2008 and until 02/28/09					from Calgary	
	·					<u> </u>	
2069d	UCLA – mirror site set-up		Vassilis	1	Harald	UCB has sent 4 bricks to UCLA. After brick transfer UCLA will need to supply SSH key -	
						RSYNC Key.	
	Hannes						
	AE Index - quality control check plots for traces without gaps	8/3/2009	Vassilis	1	Hannes	on going	
2294	In addition to the AE index gmags could you also look, with the same tools the EPO gmags, just to make sure the data is coming through	11/17/2009	Vassilis	1	Hannes		
	OK and there are no glitches? Chris suggested this would be a good						
	(efficient) way of ensuring quality. You could report the EPOs back to						
	both the scisoft group and Kathryn Rowe to check on them. EPOs are						
	the low/subauroral gmags on THEMIS.						
2273	Attitude Determination changed based on spin tone removals?	10/19/2009	Hannes	1	Hannes	in progress; on hold until new calibration file comes in december	
2074c	quality flag for FGM data		Vassilis	2	Hannes	on hold	
	Spin modeling during shadows BugZid=43		Vassilis	2	Hannes	Jim L to write routine. Hannes send info.	
	Vladimir						
2033	Aaron VMO file generation		David	1	Aaron		
	One variable change to ASI files and possibly the whole repository		David	1	Aaron	changes sent to Jan	
	SCM and EFI L2 variables		David	1	Aaron	awaiting Jim M sign-off	
	V03 L2 STATE - revision needed?		David	1	Aaron	send Jan an email	

1

2020b	If requesting 1 hour of data using timespan, then load data using one of our load data routines.: EFI and SCM		Vassilis	1	Aaron	take a look at EFI with three hours one hour before and one after. After Calibration removed outer two hours.
2013	2-D, 3-D slices enhancements					Talk to Andrea, Christine, Shanshan
2013g	Integrate into gui - load slices in idl medical imagery software		Vassilis	1	Aaron	data analysis gui section
	Part I - 2D/3D option to Analysis pull down menu 2. Create new window allowing user to select options including widgets for a. data type b. type of slice 2D or 3D, c. calendar date, d. left/right arrow keys to allow user to scroll through data Part II 3. From the new window a. If 2D selected launch the 2D window b. If 3D selected launch both the 2D and 3D windows					in progress - Part I almost ready and then when will be reviewed with researchers
2040	c. TBD how the two windows will interact 4. Modifications will need to be made to Bryans code for this application 5. Will need to handle automatic loading of calibration and/or ancillary	44/40/0000				
	1. Clarify function of "Get Velocities From" field Change coordinates of B-field data. 2. Add option to omit B-field data w/ certain coordinates 3. Add subtract bulk velocity option 4. Add temporal scroll bar 5. Export generated slice to .png file Print velocities in km/s. 6. select B-field data from a loaded data variable specify energy range 7. add SST suffix support (prevent tplot overwrites in gui) 8. implement 'remove zeros' option	11/13/2009	Vassilis	1	Aaron	1-3 completed. 4-7 in progress
2013j	 Make plot_part_slice2d.pro more complete by adding in plotting keywords/options available in thm_esa_slice2d. Add plotting options, probably create new tab in interface (later) add contour scale 4. display min/max add control over main and axes titles control # of ticks improved annotations implement range keyword 		Vassilis	1	Aaron	on hold until Part II of 2013g
	Create our own version of slicer3.pro that can take user input to setup colors, orientation, etc. when it's called. Integrate our own slicer3.pro gui with regular 2-D slice plots.		Vassilis Vassilis	1	Aaron Aaron	will be completed when 2013g Part II completed will be completed when 2013g Part II
2253	Fix crib errors - Christine's list of 9/23/09	9/23/2009	Christine	2	Aaron	completed
	Fix chib eriors - Critistines list of 9/25/09 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)	9/23/2009	Vassilis	2	Aaron	not allow velocity to go bad
	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	3	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.			3	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	3	Aaron	
2029	From Hannes		Hannes	3	Aaron	
	Provided is the most common plot used by scientists that look at magnetic field data. Four panels Bx By Bz Bt and the position X Y Z as variables. Often the radial distance R is another variable. It would be great if someone enters e.g. tplot, 'tha_fgs_gsm' such a useful default plot would appear. I am currently not able to produce such a plot using tplot. Another useful plot would be instead of one trace per panel, 5 traces per panel. One for each spacecraft and 5 sets of positions as variables at the bottom. For example: tplot, 'th?_fgs_gsm' could produce such a plot. Also some standard plots that combine ground and spacecraft data could be useful. Notes from Vassilis: define keyword /positions default 'none', allow GSM X Y Z, R Lat Long,		Hannes	3	Aaron	
2029b	The level 2 CDF files at		Hannes	3	Aaron	
	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.					
	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	3	Aaron	
2030	upgrade thm_load to work with probe assignments		Vassilis	3	Aaron	
						- L

2032 Multiple enhancements concerning keyworlds, valid_names and min_start ordines. 2032 Multiple enhancements concerning keyworlds, valid_names and min_start ordines. 2038 Load Penel Bug. Loading states concerning keyworlds, valid_names and min_start ordines. 2039 Load Penel Bug. Loading states can are proceed and requesting level 1 states spec." it is described and all the support specificipiness etc]. This start ordines was all the support specificipiness etc]. This start ordines was all the support specificipiness etc]. This start ordines is start—start, if give the following certificity is start—start, if give the following certificity. All start for the specific start ordiness. All starts start ordiness is given the specific start ordiness is start—start, if give the following certificity. All start for start give start—start give the following certificity. The start give start								
2239b. Load Partie Bug. Loading state data for any probe and requesting. This also decent your It shift-select all the quantities in the type list. 2239b. Load Partie Bug. Loading state data for any probe and requesting. This also decent your It shift-select all the quantities in the type list. 2239b. Load Partie Bug. When trying to load gard gold from the gar statistic-base, just the probe of the problems	2031	move functionality of thm_load_state2 into thm_load_state and delete thm_load_state2		Vassilis	3	Aaron		
2239 Load Plane Bug. Loading state data for any probe and requesting level 1 flat by they "It does not beed all the aupport operations of the state	2032			Vassilis	3	Aaron		
2239 Load Plane Bug. Loading state data for any probe and requesting level 1 flat by they "It does not beed all the aupport operations of the state								
vevel 1 class type** (*, it doesn't load all the support speakpointras of L.)								
station—kan. I got the following crash: "s. Alterny to subscript NEM_***TARK with NEW_**LARK_BID so und range.** Execution halled att. THM_ULKY_LOAD_DXTAQDS_1438 2284. Update GEM Software Presentation 11/2/2009. David 1 Cindy complete) 2294. Update GEM Software Presentation 11/2/2009. David 1 Cindy complete) 2394. Update GEM Software Presentation 11/2/2009. David 1 Cindy complete) 2394. Update GEM Software Presentation 11/2/2009. David 1 Cindy complete) 2499. In the control of the complete complete to the revised are received QA sorpt for FGM (path finder for other sorigis to be revised are received QA sorpt for FGM (path finder for other sorigis to be revised are received QA sorpt for FGM (path finder for other sorigis to be revised are received in the complete comp	2239b	level 1 data type '*', it doesn't load all the support types(spinras etc).		Cindy	1	Cindy	done - to be reviewed by Pat	
Complete	2239c	station=kian, I got the following crash: % Attempt to subscript NEW_TVARS with NEW_VARS_IND is out of range. % Execution	11/13/2009	Cindy	1	Cindy	done - to be reviewed by Pat	
Jim L 2034f revised QA script for FGM (psht finder for other scripts to be revised later) 2148g with a routine to check time tag monotonicity and repair (plot variable if in accessary (with options for "replace with NaN" and "Geleter") 2148g with a routine to check time tag monotonicity and repair (plot variable if in accessary (with options for "replace with NaN" and "Geleter") 2248		· ·				•		16
2334 revised CA script for FGM (path finder for other scripts to be revised later)	2284	Update GEM Software Presentation	11/2/2009	David	2	Cindy/Pat		
2334 revised CA script for FGM (path finder for other scripts to be revised later)		lim I						
Latery 2034g in progress 2034g in progre	2034f			Vassilis	1	Jim L	Jim will do for FGM and then Pat will do	
write a routine to check time tag monotonicity and repair (bot variable if necessary (with options for 'replace with NaN' and 'delete') with a routine to check time tag monotonicity and repair (bot variable if necessary (with options for 'replace with NaN' and 'delete') which are the common time to the bad time tags (or even some of them—e.g., the farst-sal-ow case,) I 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 TEMIS software team about that data. 2266 Timing of Spin Fit data 2268 Timing of Spin Fit data 2268 In integrate time tag fiser-upper with TDAS load routines 2268 In septiment time tags fiser-upper with TDAS load routines 2268 Spin modeling during shadows BugZid-43 22682 Spin modeling during shadows BugZid-43 22682 Spin modeling during shadows BugZid-43 22683 Spin trodeling during shadows BugZid-43 22684 Spin modeling during shadows BugZid-43 22684 Spin modeling during shadows BugZid-43 22685 Spilit L1 ESA (using Thomas's routine) in master ESA data coff Vassilis 22 Jim L 22686 OCES 10-12 Test data: h. update labels (Howard's request - minor) weak) washilis 22 Jim L 22686 OCES 10-12 Test data: h. update labels (Howard's request - minor) weak) washilis 22 Jim L 22687 With Pags (b) Washilis 23 Jim L 3369 Lim L 3370 Mob Pags (b) Washilis 24 Jim L 3470 Lim L 3470 Web Pags (c) Washilis 25 Jim L 3470 Lim L 3470 Lim	200			r accine	'	V 2		
2149h Integrate time tag fixer-upper with TDAS load routines 224h 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 1 Jim L see 2149g and h mission), the FGM range doesn't change on all three axes at once: 9/10/2009 Jim L 1 Jim L see 2149g and h mission), the FGM range doesn't change on all three axes at once: 9/10/2009 Jim L 1 Jim L see 2149g and h mission), the FGM range doesn't change on all three axes at once: 9/10/2009 Jim L 1 Jim L see 2149g and h mission), the FGM range doesn't change on all three axes at once: 9/10/2009 Jim L 1 Jim L see 2149g and h mission), the FGM range doesn't change of the properties of the propert		write a routine to check time tag monotonicity and repair tplot variable if necessary (with options for "replace with NaN" and "delete")		Michael			assign when 2149e started. Michael: Since it is difficult or impossible (in post-processing) to identify all of the bad time tags (or even some of them e.g., the fast->slow case), I 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	
2248 moce 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 1 Jim L see 2148g and h mission), the FGM range doesn't change on all three axes at once: 9/10/2009 Jim L 1 Jim L see 2148g and h mission), the FGM range doesn't change on all three axes at once: 9/10/2009 Jim L 1 Jim L to write routine, Hannes send info. 2035 Split L1 ESA (using Thomas's routine) in master ESA data cdf Vassilis 2 Jim L Ch Hold - avaiting 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 SKTEdfior, which the Goddard team has agreed to fix) Waiting for feebback from Jim McFadden about how calibration data should be handled (TH-A ASCII calibration file (used for all probes) doesn't marks anything I removed from the data CDF).	2266	Timing of Spin Fit data	10/16/2009	Jim McFadden	1	Jim L		
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 probles) 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 2 Jim L determine if to be reassigned to the control of the data CDF.		once in a while (maybe 10-20 occurrences per probe during the entire	9/10/2009				see 2149g and h	
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 SCIC 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 weak) 2038 STATE Web Page (s) 2039 bad timing sun pulse times (early January 2009) 2040 L1 Data Processing History Info: SCM, EFI, STATE 2043 Refactor repeated CPI library code in CDF processing tools 2040 Refactor repeated CPI library code in CDF processing tools 2040 Create a more efficient & productive prototype QA Instrument Command Line Script - first template (s) functional blocks then 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 o) change the L0-sL1 processing oded of change the L1-sL2 processing code o) test the changes, then reprocess to create the V02 CDFs (keeping the V01 files around for a while to ease the transition) Bug2ID=45 2047a RGS Sample times and values, showing repeated timestamps. 2047b Rose and State Command Line Script - first template (s) functional blocks then 2047c Non Monotonic timestamps. Bug2ID=72 2048b L3 Jim L 2047a Non Monotonic timestamps. Bug2ID=72 2048b L3 Jim L 2049b Rose and L3 L3 L3 Jim L 2040b Rose and L3 L3 L3 Jim L 2040b Rose and L3 L3 L3 L3 Jim L 2040c Rose and L3 L3 L3 L3 Jim L 2040c Rose and L3 L3 L3 L3 Jim L 2041b Rose and R3 L3 L3 L3 Jim L 2042b Rose and R3 L3 L3 L3 Jim L 2043c R5 L3 L3 L3 Jim L 2044c R5 L3	2082a	Spin modeling during shadows BugZid=43		Vassilis	2	Hannes	Jim L to write routine. Hannes send info.	
tweak	2035	Split L1 ESA (using Thomas's routine) in master ESA data cdf		Vassilis	2	Jim L	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	
2039 bad timing sun pulse times (early January 2009) Vassilis 2 Jim L Clarification needed		tweak)		Vassilis	2	Jim L	determine if to be reassigned	
2040 L1 Data Processing History Info: SCM, EFI, STATE Vassilis 2 Jim L			<u> </u>				1 0	
Refactor repeated CDF library code in CDF processing tools BugZid=50 2046 Create a more efficient & productive prototype QA Instrument Command Line Script - first template (s) functional blocks then 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 2047a FGS sample times and values, showing repeated timestamps. BugzID=113 (BugzID=67 must be done first) 2047b Repeated timestamps and gaps in spin fit data BugZid=113 (#67 may fix this one as well). 2077 Non Monotonic timestamps. BugzID=72 Vassilis 2 Jim L 2078 bau_sunpulse_met assumes x86 endiannes (BugzID=13) Vassilis 2 Jim L 2080 Phantom packets" cause non-monotonic distribution times. BugzID=25, low priority.							Ciamication needed	
Command Line Script - first template (s) functional blocks then 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 2047a FGS sample times and values, showing repeated timestamps. BugzID=113 (BugzID=67 must be done first) 2047b Repeated timestamps and gaps in spin fit data BugZid=113 (#67 may fix this one as well). 2077 Non Monotonic timestamps. BugzID=72 Vassilis 2 Jim L 2078 bau_sunpulse_met assumes x86 endiannes (BugzID=13) Vassilis 2 Jim L Vassilis 2 Jim L Vassilis 3 Jim L Vassilis 3 Jim L		Refactor repeated CDF library code in CDF processing tools						
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 2047a FGS sample times and values, showing repeated timestamps. BugzID=113 (BugzID=67 must be done first) 2047b Repeated timestamps and gaps in spin fit data BugZid=113 (#67 may fix this one as well). 2077 Non Monotonic timestamps. BugzID=72 2078 bau_sunpulse_met assumes x86 endiannes (BugzID=13) 2080 Phantom packets" cause non-monotonic distribution times. BugzID=25, low priority.	2046			Vassilis	2	Jim L		
BugzID=113 (BugzID=67 must be done first) 2047b Repeated timestamps and gaps in spin fit data BugZid=113 (#67 may fix this one as well). 2077 Non Monotonic timestamps. BugzID=72 2078 bau_sunpulse_met assumes x86 endiannes (BugzID=13) 2080 Phantom packets" cause non-monotonic distribution times. BugzID=25, low priority. 2080 Phantom packets cause non-monotonic distribution times. BugzID=25, low priority.	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		Vassilis	2	Jim L		
fix this one as well). 2077 Non Monotonic timestamps. BugzID=72 Vassilis 2 Jim L 2078 bau_sunpulse_met assumes x86 endiannes (BugzID=13) Vassilis 2 Jim L 2080 Phantom packets" cause non-monotonic distribution times. BugzID=25, low priority.		BugzID=113 (BugzID=67 must be done first)		Vassilis		Jim L		
2077 Non Monotonic timestamps. BugzID=72 Vassilis 2 Jim L 2078 bau_sunpulse_met assumes x86 endiannes (BugzID=13) Vassilis 2 Jim L 2080 Phantom packets" cause non-monotonic distribution times. BugzID=25, low priority.	2047b			Vassilis	2	Jim L		
2080 Phantom packets" cause non-monotonic distribution times. BugzID=25, low priority. Vassilis Jim L	2077	,		Vassilis	2	Jim L		
BugzID=25, low priority.		_ , _ , , , , , , , , , , , , , , , , ,						
2081 Evaluate CDF compression algorithms BugZid=81 Vassilis 3 Jim L	2080			Vassilis	3	Jim L		
2083 Add "last processed" time to L1 (and L2?) CDFs BugZid=115 Vassilis 3 Jim L	2081	Evaluate CDF compression algorithms BugZid=81		Vassilis	3	Jim L		

2084	. transforming one data point from SM coordinates to GSM		Christine	3	Jim L		
2004	coordinates. ct=time double('2008-02-16/04:50:00')		Omistine		01111 L		
	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. sqrt(x^2+y^2+z^2)=1						
	Jim M						
2270	gmag warnings - blank site names Process full resolution for March 1-15 2008, Jan 15 2009 and onward.	10/19/2009	David Vassilis	0	Jim M	if data is missing then we will investigate March 1-15, 2008 complete. at Feb 13,2009	
2048	Process full resolution for March 1-15 2006, Jan 15 2009 and onward.		Vassilis	1	Jim M	and processing. Second processor March	
						14,2009. Going to March 15, 2009	
2296	The labels for T_para, T_perp on the overview plots have been	11/19/2009	Andrei	1	Jim M	Mod complete and last 10 days reprocessed.	
2230	switched so that the correct color label refers to the correct value:	11/13/2003	Allarei	•	OIIII IVI	A full reprocessing is in the future.	
	green is Ti_para, blue is Ti_perp, black is Te_para and red is					3	
	Te_perp. This change will show up today, and will cover the last 10						
	days of plots.						
2282	Problems with onboard moments during solar wind are probably only	11/2/2009	Jim Mcfadden	1	Jim M	Davin is writing code - Vassilis will talk to him	
	a ground software issue. (There was some mis-communication						
	between Davin and I about changes that never took place which						
	caused some confusion.)						
	Ground software has never been modified to handle solar wind mode moments Davin is working on a modification that can at least allow						
	him to check that the data is ok. There could potentially be other						
	problems so we requested from Deron and John that they send us a						
	copy of the EPROM data in a format easy to read so we can check						
	that the onboard tables are what we think they are. For now we are						
	pretty sure they are correct and the data should be fine. I think Davin						
	will make a simple code change that will allow him to tell moments						
	code to assume SW mode when decommutating moment packets.						
	This should allow him to quickly test that the data is fine.						
2056	SCM L2 cdf		Vassilis	1	Jim M	in progress - see 2288	
2228	one outstanding issue with THM_LOAD/THM_CAL_EFI is that for	9/3/2009	John Bonnell	1	Jim M	fix awaiting JB review, eta 10/15	
2220	some reason when I ask for the calibrated data in SPG (which should	9/3/2009	John Bonnell	'	JIIII IVI	iix awaiting 3b review, eta 10/13	
	just be adjustment of gains and offsets, and conversion from ADC						
	units to physical units, the code is trying to do some despin						
	operations. Since this has direct impact on my ability to evaluate the						
0005	EFI data quality,	0/04/0004	\/!!!-	4	E NA	in an arrange all days arrange arrange for the second	
2225	L2 EFI cdf (quality flags)	8/31/2004	Vassilis	1	Jim M	in progress all done except quality flags. That to come 10/15. Then test files to be sent to	
						SPDF and Jon Bonnell	
2227	L2 SST cdf revisions	8/31/2004	Vassilis	2+	Jim M		
	FIT Q&A web page - needs info	11/7/2009	David	2+	Jim M	awaiting SST calibrations in progress - discuss at S/W meeting	
	Data Description Paragraphs - EFI, SCM, FFT, ASI and GMAG	11/9/2009	David	2+	Jim M	in progress allocates at 6,11 mesting	
	had expected that this cotrans would occur at the very end, after all	11/12/2009	Jim	2	Jim M	send Olivier email	
	the calibration code. But the calibration itself seems to be affected, as	\$					
	reflected in the following differences between the log messages						
2057	before/after rev 6929: SCM CAL File Processing Doc		Vassilis	2	Jim M	text completed. Put into std document format	
2037	SCIVICAL FILE PROCESSING DOC		v assilis		JIIII IVI	and send to Olivier for review	
2283	There is another aspect to this problem. Dead-time corrections are	11/2/2009	Jim Mcfadden	2	Jim M	2010 10 01101 101101	
	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.						
0050				_	p		
2058	found 3 errors in the new th*_l2_esa masters - the good news is, with them fixed in our masters, all plotting issues w/ the ESA files (in		Vassilis	2	Jim M		
2060	L2 cdf Quality Flags: for SST		Vassilis	2	Jim M		
	L2 File Definitions Document		David	2	Jim M		
2062	Alberta - At the moment the data files are from Dawson (daws),		Vassilis	2	Jim M		
	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						

2007	Administrator's Cuido		Vassilia	2	lim M		
2087	Administrator's Guide Themis Developers Guide		Vassilis Vassilis	2	Jim M Jim M		
2224	thm_load_mom: for quantities like velocity, the coordinate system isn't		Vassilis	2	Jim M		
	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.						
2090	that streamlines the generation of gmag stackplots and a crib to show		Vassilis	2	Jim M		
	how to do this. (< than a day)			_	•		
2091	Once Jim McFadden completes his mods for n_3d_new_3 reprocess		Vassilis	2	Jim M		
	L2 cdf's - entire mission						
2092	thm_load_mom changes - reconcile mods with Davin at an		Vassilis	2	Jim M		
	appropriate time.						
2055	ESA L2 from L1 (not packets) - create L2 and test thoroughly, then		Vassilis	2+	Jim M	On Hold; awaiting Jim L to split L1 into master	
2093	reprocess ESA AE Indexes Issue Jan 8-12, keyograms Jan 12-13, Stripes- Vassilis:		Vassilis	3	Jim M	cdf	
2000	minor nuisance		Vassilis		OIIII W		
2094	Overview plot change: mode bar seems thick		Vassilis	3	Jim M	nothing we can do easily	
	Mosaic Processing - permanent script needed		Vassilis	3	Jim M		
2100 2100d	EFI calibration DC offset between 4sdo and 2sdo in boom plane		John Bonnell John Bonnell	3	Jim M Jim M	Which is better? Assigned to J. B. (low	
21000	DC offset between 4500 and 2500 in boom plane		John Bornell	3	JIIII IVI	priority).	
2100h	Try to track down frequency scaling problem in DPWRSPC (dlimit		John Bonnell	3	Jim M	On Hold - low priority	
	setting? Compare to old plots?).						
2100p	Modify THM_CAL_FIT to treat efs datatype - Install E12/E34		John Bonnell	3	Jim M		
2100p	conditional based on th?_fit_code TPLOT variable. If E12 switched to		John Donnell		Citit IVI		
	E34 software needs to be revised to handle						
	Pat		<u> </u>	1			
2069	Support Mirror Sites		Vassilis	0	Pat		
2069a	Japan (ISAS)		Vassilis	0	Pat		
2069b 2069c	Austria France		Vassilis Vassilis	0	Pat Pat	(Rumi not always up to data for amage)	
20090	Support gmag data remote sites		Vassilis	0	Pat	(Rumi - not always up to date for gmags) The -12 days ones are ones that Kathryn	
2070	Support grindg data romoto onco		Vaddillo		1 41	indicated are on the fritz:	
						BMLS,UKIA,HOTS,PINE	
2070a	Augsburg (MACC's)		Vassilis	0	Pat		
2070b	Alberta		Vassilis	0	Pat		
2070c	Greenland	10/10/0000	Vassilis	0	Pat		
2265	When new FGM Cal files come from David Fisher reprocess last 6 months.	10/16/2009	Pat	0	Pat	ongoing	
2291	Train backup (Aaron) for daily gmag monitoring	11/12/2009	David	1	Pat		
2280	Retrieval of ASCII Data - Including 2009.	10/29/2009	Laura	1	Pat	in progress	
	Ţ		\/!!:-	4	D-4	an hald well and December	
2286	Update Summary Plot script to get latest STATE for reprocessing. And reprocess in early December 2009 after FGM is reprocessed.	11/9/2009	Vassilis	1	Pat	on hold until early December	
2024~			Vassilia	4	Dot	On hold until Jim L finishes 2034f	
2034g	revised QA script for STATE (path finder for other scripts to be revised later)		Vassilis	1	Pat	On noid until Jim L finishes 2034f	
2284	Update GEM Software Presentation	11/2/2009	David	1	Cindy/Pat		
2295	I am less familiar with the details of the new profile feature. Would you		Cindy	2+	Pat		
	put together a rough draft test suite for me? I can fill in the details if						
24.47-	you would just provide a list of the things to test for.		FGM Team	2	Pat	should hear from ECM review team by 40/00	
1	Reprocess L2 FGM products with enhanced code Few tweaks to the FGM: 1. As Ferdinand updates his code, he's been	10/10/2002	FGM Team	2		should hear from FGM review team by 10/30	
214/d	making small changes and sending me new versions. 2. Edita would	10/19/2009	rGivi Team		Pat	completed - awaiting feedback until beginning of December	
	like me to add keywords so that the FGM Team can get copies of the					. 2 300111501	
	data after each stage in the calibration process so that they can						
	validate the calibrations						
2147f	Send out notification to users a month before fgm reprocessing. Using			2			
2292	bleeding edge that can generate the new data. Use latest available STATE files when reprocessing overview plots	11/7/2009	Vassilis	2	Pat		
2632	plots	11/1/2003	v assilis	_	ıal		
2269	Notify Jim M to make FGM keywords standard for L2 Processing.	10/19/2009	FGM Team	2	Pat	on hold until before fgm reprocessing	
2136	When we implemented tplot_qui, we gave it support for the most		Pat	2	Pat	in progress	16
	important tplot options, but not many of the more obscure ones. It					1 3.555	
	might be worthwhile to create a task for someone to go through						
	exhaustively and implement as many tplot options as is feasible.						
1	That way people can more easily use the gui like an interactive						
	vorsion of tolot. Pight now I feel like the mare chasses entions and						
	version of tplot. Right now I feel like the more obscure options end up leading to gui plots that still look reasonably different from tplot plots.						
	version of tplot. Right now I feel like the more obscure options end up leading to gui plots that still look reasonably different from tplot plots.						
2289	leading to gui plots that still look reasonably different from tplot plots.		Vassilis	2	Pat		
2289		11/12/2009	Vassilis	2	Pat		
2289	leading to gui plots that still look reasonably different from tplot plots. modify the summary plot web page according to the request by		Vassilis	2	Pat		

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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]			2	Pat		40
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	2	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	2	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 if they do not choose the correct option	
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	2	Pat		
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	
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		
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	3	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	3	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	3	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	3	Pat	verify note in quick reference guide and then task will be closed	4-8 hrs
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	3	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	4 hrs
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	3	Pat		
	Misc						16-24 hour
447	Save THEMIS document: Attempting to save to a read only file in			1		IDL Error report to ITT	4 hrs
	Windows outputs the correct error message, but IDL crashes immediately afterwards.						

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