Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate (hrs)
To be Assigned or Discussed							
2182							
2183							
2184							
2185							
General							
	Review EFI web pages on beta site		David		John B		
	Create web pages for FFT, FBK		David		Chris Cully		
	Format FFT and FBK info from C Cully into web pages		David		David		
	Work on acquiring FIT web info		David		David		
	Enhanced SST and MOM Instrument Web Pages		David		Davin		
	EFI Wiki Pages		David		John B		
	SST Wiki Pages		David		Davin		
	New Server Installation		Vassilis		Jon L	in progress	
	Greenland data total magnetic field is only about 250 nT even if no baseline subtracted (from Harald).		Vassilis		J Weygand	Waiting for student to have time.	
	Review corrections to the EFI Web pages from Amanda		David		John B		
	Move EFI Web Pages from beta to official web site		David		Amanda	After John has verified changes	
	Problem with the front page of the web site. When you hover the mouse over the "Data" link near the top of the page, then move down to the "Data processing" or "Collaboration tools" menu items, the next level of fly-out menus is unreadable -- they're blocked by one of the images next to the "Latest News & Events" section. I'm using Firefox 2.0.0.20 on Windows. When I look at the site in Internet Explorer instead of Firefox, the menus comes out on top of the image like they're supposed to.		David		Amanda	Amanda not yet notified	
2160	ESA Processing Web Page revision	7/1/2009	David		Amanda		
2161	Handle Tony's Pub	7/1/2009	Tony		Amanda		
	SST, ESA and EFI Wiki pages - initial entries		Vassilis		Vladimir		
	Calibration - send sample to Vassilis and David Sibeck		Vassilis		Vladimir		
	Link to Plots		Vassilis		Vladimir		
	Data contain engineering, deployment, maneuver, and science data are in the same stream. From the data description, only maneuver flag state_man is provided. Do you provide information about the time intervals when the data are on, say, engineering level? This data, though valuable in many respects, may be confusing if interpreted as science data. To provide such information, it is possible, for example, to add some bits to existing state_man flag. (from Vladimir) Quality flags (for each instrument to be added to L2 State cdf).		Vassilis		Vladimir		
	Clean-up the power ripples from the FGM data.		Krishan			awaiting programmer	
	Revise the Data Products Web page and send to Amanda		David		David		
2163	Send to Jim McFadden the format of the beginnings of the Operations Log for on board changes that will effect the instrument data	7/6/2009	Jim McFadden		Deron and John McDonald		
Harald							
	Keograms being updated.					Current status ASK through October 5 2008	
	The THEMIS movies are now up to date and finished through the end of April. There will be a ~4 days delay because we wait with the mosaic generation until that all the station data have been transmitted						
	Mosaic reprocessing post-February 2008 (Full Resolution).					Process full resolution for March 1-15 2008, Jan 15 2009 and onward. (Jim M)	
	Overview plots for web site done though 4/30/2009.						
	CDF file up to date through 4/30/2009. During the tail season I kept these up to date every 10 days. Now I planned to keep up with this task only once a month somewhere around the 10th of the following month.						
	Summary Plots through March 2008.						
	L2 ASI cdf's						
	When L2 ASI available Quality Flags and History Status?						
Tim							
2174	Reprocess VC files -> L0 packets, L0 packets -> L1 CDFs, and L1->L2 CDFs for all VC files from TH-D since the clock was reset. L1->L2 will probably take care of itself once the L1 files are made. VC->L0 and L0->L1 will need manual intervention.			1	Tim	Pending deployment of patch to processing software, Jim L. task 2173. Tim and Jim L. will work out the details and let the rest of the team know when the deed is done.	
2177	Compose Announcement to users for switchover	7/20/2009	David	1	Tim	When we switchover to new server	
2069	Support Mirror Sites		Vassilis	1	Tim		
2069a	Japan (ISAS)		Vassilis	1	Tim		
2069b	Austria		Vassilis	1	Tim		
2069c	France		Vassilis	1	Tim	(Rumi - not always up to date for gmags)	

ID	Description	Date	Name	Pri	Owner	Notes	Hrs
2069d	UCLA – mirror site set-up		Vassilis	1	Tim	UCB sent 08T UCLA loaded 06T. Four bricks sent to UCLA - UCLA must reconfigure server first . UCLA will need to supply SSH key - RSYNC Key	
2070	Support gmag data remote sites		Vassilis	1	Tim		
2070a	Augsburg (MACC's)		Vassilis	1	Tim		
2070b	Alberta		Vassilis	1	Tim	gmag attributes - reprocess with fix - On Hold for IT	
2070c	Greenland		Vassilis	1	Tim		
2071	Processing full resolution ASI data disks (Apr-Nov 2008).		Vassilis	1	Tim	On Hold for IT to complete backup.	
2072	Reprocess of ESA L2 data from these dates and all days after until 5/31. This is needed to fill in a missing energy bin in 88x15 full electron mode.		Jim M	1	Tim	MOM reprocessing on hold, esa completed	
2063b	Make A-E Index an L1 cdf.		Pat	2	Tim	create cdf's	
2137	The CDF attributes for some of our GMAGs list the wrong location for the calibration files in the attribute: dl.cdf.gatt.logical_source_description It lists the cal files at: CAL files at http://www-ssc.igpp.ucla.edu/themis_data/calib_files/ But the calibration files for: ATHA, FSIM, FSMI, GILL, PINA, RANK, SNKQ will be found somewhere on this site: http://portal.cssdp.ca:8080/ssdp/jsp/logon.jsp		Pat	2	Tim	see 2070b	
	Hannes						
2073	New FGM offsets for tail season		Vassilis	1	Hannes	in progress	
2074	V03 STATE		Vassilis	1	Hannes		
2074a	Test FGM with new V03 STATE cdf		Vassilis	1	Hannes		
2074b	See email concerning parms ("thx_sci_mode", "thx_hsk_issr_mode") sci_mode - know fast survey, issr_mode - when IDPU thinks fast survey		Vassilis	2	Hannes		
2074c	quality flag for FGM data		Vassilis	2	Hannes	talk to Uli	
2075	Spin Axis offsets – Improve the new spin axis offsets calibration routine – In progress. A new technique has been developed for inside magnetosphere with high accuracy. Once complete a paper to be published. Sent data to Karl Heinz, included in the distribution		Vassilis	1	Hannes		
2082	Spin modeling during shadows BugZid=43		Vassilis	3	Hannes		
	Aaron						
2033	VMO file generation		David	1	Aaron		
2033a	One variable change to ASI files and possibly the whole repository		David	1	Aaron	changes sent to Jan	
2033b	SCM and EFI L2 variables		David	1	Aaron		
2033c	L2 STATE (?)		David	1	Aaron		
1311	Add capability to go into landscape mode (page pull down menu)	7/21/2009	Pat/Jim L	1	Aaron	Print Landscape mode as well - in progress	
2164	Just a quick summary of the task we were discussing to fix the issue Christine reported. If we decided to do the task, it would require modifying thm_gen_overplot.pro to use a fixed zrange for all spectral plots rather than autoscaling the plots. It should be trivial. We may also want to make the same changes to thm_ui_gen_overplot.pro, so we can be sure that the GUI overviews match the online overviews.	7/6/2009	Pat	2	Aaron		
2168	Add a task for the page options window to add font/color/size/alignment control for a panel title. Currently there is no way to control the way a panel title is displayed.	7/13/2009	Cindy	2	Aaron		
714	Add a set all button to the Z axis.	7/20/2009		2	Aaron		
944	Step 7. Load THEMIS data --Step 7. FGM data: I did not get fge data for THC. Maybe there is none for that day (2008-1-1), but the running history also did not issue a "some data not loaded" error, unless only that datatype is requested. Running histor		Michael	2	Aaron		
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	Aaron	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	4-8 hrs
2113	Many of the data processing routines that are tested here do not inherit the plotting options from the tplot variable that they take as input. For data processing routines that I've written Vassilis has had me modify them so that they inherit these options. It shouldn't be very hard to do this, but whether we do it or not depends on whether we think these data processing routines are useful only for the gui or for the command line user as well. (		Pat	1	Aaron	in progress	8 hrs

ID	Description	Date	Name	Pri	Assignee	Notes	Hrs
2114	Load routines to all support keywords suffix and relpathnames_all.			1	Aaron	in progress	8 hrs
2119	There's a possible bug thm_gen_overplot when an illegal device is set with the DEVICE keyword. The code doesn't check to make sure if the graphics device is valid. It passes the test script because thm_gen_overplot has its own catch error statement embedded in the code. The catch statement does report, "Graphics device not available: a", but only after data have been loaded and tplot vars have been created. If a long time range is requested this could be a significant waste of time to the user.			1	Aaron		2 hrs
2118	With a pre-mission and future dates, thm_gen_overplot does not exit gracefully. The user sees a lot of "Remote file not found messages", but is not offered any indication that the date requested is before the mission began. It would also be useful to have a check for when DATE plus DUR is greater than the current date, and then ignore the requested days beyond the current.			1	Aaron	same time as 2119	
2120	NO_DOWNLOAD keyword missing from thm_load_fbk.			1	Aaron		4 hrs
2136	When we implemented tplot_gui, we gave it support for the most important tplot options, but not many of the more obscure ones. It might be worthwhile to create a task for someone to go through exhaustively and implement as many tplot options as is feasible. That way people can more easily use the gui like an interactive 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.		Pat	2	Aaron	use tplot crib sheets to identify tplot options - get list together	
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	Aaron		
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	Aaron		4 hrs
Bryan							
2178	thm_load_goes_mag - put attributes where other TDAS software expects them	7/22/2009	Jonathan Rae, Jim L	1	Bryan	in progress (analysis to be reviewed at S/W meeting on 7/27)	
2122	THM_LOAD_MOM doesn't recognize the datatype keyword for L1 data. (It does for L2).			1	Bryan		
2013	Think about making 2D slices through distribution. See medical imaging code in IDL demo."		Vassilis	2	Bryan		
2013a	2D first migrate code into crib		Vassilis	2	Bryan		
2013b	2D with med imaging code		Vassilis	2	Bryan		
2013c	3D slices		Vassilis	2	Bryan		
2027	thm_load_state			2	Bryan		
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 and Ken)		Vassilis	2	Bryan	on hold until V03 State completed - not allow velocity to go bad	
2041	thm_load_state out_coord velocity calculations wrong		Vassilis	2	Bryan		
2126	State Vector -> remove coord keyword	7/20/2009	Pat/Jim L	2	Bryan	give them suffix's - review with Cindy	
1578	When calling: timespan,'2008-01-29/00:00:00',1,/day thm_load_state,probe='d',coord='dsl',/get_support_data It is printing the following error: % THM_COTRANS: input tplot variable is not a 3-vector. This may not be a big deal, or it may be indicative of the coord argument failing.		Pat	2	Bryan	on hold - may be solved by 2126	
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	3	Bryan		
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 relpathnames all keyword is broken.			3	Bryan		
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	Bryan	Discuss at Software Meeting - also related to 2141 and 2135	
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	Bryan		
2029	From Hannes		Hannes	3	Bryan		

2029a	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	Bryan		
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	3	Bryan		
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	3	Bryan		
2030	upgrade thm_load to work with probe assignments		Vassilis	3	Bryan		
2031	move functionality of thm_load_state2 into thm_load_state and delete thm_load_state2		Vassilis	3	Bryan		
2032	Multiple enhancements concerning keywords, valid_names and thm_load routines		Vassilis	3	Bryan		
	Cindy						
2179	Modify code for generating ephemeris	7/23/2009	Sabine		Cindy		
2179a	Minimize/avoid writing files whenever possible, pass data as arrays.	7/23/2009	Sabine		Cindy		
2179b	Remove ROI definitions from code and isolate in default init file	7/23/2009	Sabine		Cindy		
2179c	Handle situations when an ROI file is not found. This is not necessarily an error	7/23/2009	Sabine		Cindy		
2179d	Handover from step 1 (generation of maneuvers, MDT) to step 2 (create file for a time range, time resolution) needs optimization	7/23/2009	Sabine		Cindy		
2179e	Fix bug with maneuver numbering. It gets messed up when data is copied to state vector file.	7/23/2009	Sabine		Cindy		
2179f	Get rid of awkward filtering in code	7/23/2009	Sabine		Cindy		
	Hithesh						
2180	APID 458 compression - verify		Ops	1	Hithesh	descrepancy on Probe A	
2014	Peter wrote code to reset ETC Kicker (1/8 or 1/9) after hang-up.		Peter	1	Hithesh	Will run test on model sim until flatsat is available.	
2014c	First try to simulate in Modelsim. If unable to freeze ETC, then move to hardware simulation. If the problem is caused by Asynchronous signal (sun pulse), we won't be able to simulate the problem		Peter	1	Hithesh	Need to find some time on flatsat. Flatsat busy with Artemis.	
2015	Logic Analyzer setup		Vassilis	1	Hithesh		
2157	The ground-computed SC_POT to on-board computed SC_POT do not agree all the time. Jim McFadden thinks it is because of sampling jitter.		Jim McFadden	2	Hithesh	ETU not responding. Peter is looking into it.	
	Jim L						
2024	GUI Trainings at UCB		David	1	Jim L	S. Mende Completed, next training for Harald Frey and Niguel 7/27	
2173	Add patch to VC->L0 and L0->L1 processing to fix TH-D clock anomaly			1	Jim L		
2181	APID Compression on Probe A did not work - monitor telemetry	7/24/2009	Ops	1	Jim L		
2130	FGM offset study/debug for European Folks		Vassilis	1	Jim L	Offset Data - more analysis in progress	
2034	V03-L2 cdf STATE		Vassilis	1	Jim L		
2034c	writing some code to fill in the position and velocity variables for GSE and GSM coordinates.		Vassilis	1	Jim L	automation in progress - eta 7/24	
2034d	I need to add support to thm_load_state (and any load/cal routines that call thm_load_state, e.g. thm_cal_fgm) for specifying which version V00, V01, V02, V03 should be used for cotrans and calibration		Vassilis	1	Jim L	in progress enough data for Hannes to start testing. Thm_load_state done. Analysis to determine which other routines need fixing will be done	
2034e	I need to enhance the spinmodel routines to use Hannes' spin phase correction, if present With these code changes in place, we can hopefully make some kind of comparison between FGM data calibrated/cotrans-ed with V02 vs. V03 state to verify that the V03 attitude and spin phase corrections are working properly		Vassilis	1	Jim L	In progress then we'll do another round of tests when the spinmodel code is modified to use the V03 spin phase corrections. Question - do we apply spin phase corrections to other instruments? S/W meeting 7/27	

ID	Description		Assignee	Pri	Lead	Status	Hrs
2034f	revised QA script for STATE (path finder for other scripts to be revised later)		Vassilis	1	Jim L	Still in progress. V03 missing variables are fixed. QA scripts for thm_load_state in progress, but probably won't be ready for 5.1 release. Waiting for Hannes to complete his testing.	
2149	They were also asking when we'll be getting rid of the spikes in the L1 FGM data (Bugzilla #44 and #67). I told them that this is already in the queue, and I should be getting to it very soon. Maybe now is the time?		FGM Team	1	Jim L		
2149a	Packet lookahead in L0->L1 processing (Bugz #67)		FGM Team	1	Jim L		16
2149b	Apply despike algorithm to current packet if next packet has different range (Bugz #44)		FGM Team	1	Jim L		16
2149c	When a and b are coded and tested, build new tmtools release and start using it for automated processing.		FGM Team	1	Jim L		8
2149d	Reprocess all L1 FGM data (which should trigger L2 FGM reprocessing as well) will run for several days, should probably wait until "new justice" is operating reliably)		FGM Team	1	Jim L	Set-up only, then goes to Tim or Jim M	1
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).	
2076	SM coord transformation in thm_cotrans does not work: fixing that would be too drastic a change for a patch release, because it might break a lot of existing code. The issue is: if the in_coord parameter is not explicitly specified, and the dlimits structure also does not specify the coordinate system, do we want to try to figure it out from the "in_suffix" argument (current behavior, doesn't work for SM coords), or just fail with a message that a coordinate system must be specified with either the in_coord argument or dlimit structure (probably a better solution, but might break existing code).		Vassilis	2	Jim L	Issue Warning and not to let it fail. Clarification Needed	
1563	We were just griping about how long the Overview plots take to load, and I was thinking, what if the Overview Plot window, had a list of check boxes that would enable the user to turn off certain plots? That way if they don't care about the AE index plot, they could turn it off and speed up the load of the rest of overview plots. Here's some more food for thought: didn't we recently discuss the possibility of making an AE index CDF, and let the users download that instead of downloading all the data necessary to recalculate it client-side? Another candidate for that sort of treatment might be the time intervals for slow survey, fast survey, particle burst, and wave burst -- that's another calculation that requires a large volume of data to be downloaded to produce a tiny product, but only a trivial amount of extra work if it's done on the server side.		Bryan/JimL	2	Jim L	Separate L1	
2147	FGM spin harmonics correction (remove interference from solar array currents). David Fisher has produced several tables (each table valid for a few months; correction varies with sun angle) of FGM correction vs. spin phase		FGM Team	2	Jim L and/or Hannes		
2147a	Decide on how to represent tables for use in thm_cal_fgm (keep as ASCII? convert to CDF?), get full set of corrections, convert to the desired format, install somewhere under /disks/themisdata (probably alongside FGM cal files?)		FGM Team	2	Jim L and/or Hannes		16
2147b	Add a step to thm_cal_fgm to load the appropriate correction tables for the probe & time interval being processed, use spin phase at each sample and interpolate within table to find correction at that point, apply correction. There should be a way to disable this correction (e.g. /NO_HARMONIC_CORRECTION keyword or similar, since David F. will need to periodically create new tables from the uncorrected data as data continues to accumulate).		FGM Team	2	Jim L and/or Hannes		40
2147c	Reprocess L2 FGM products with enhanced code		FGM Team	2	Jim M or Tim	It might make sense to delay 2147c and 2148b L2 reprocessing until the 2149d L1 reprocessing is performed.	
2148	ADC non-linearity correction: This was proposed as a correction to (i.e. reprocessing) the L1 FGM CDFs, but I think it really belongs in thm_cal_fgm as the very first step. There are jumps in the X, Y, and Z components of the FGM data when the field increases or decreases past some thresholds. Dragos Constantinescu has sent some IDL code to implement the correction, but today I'm told that this code doesn't work that well, and Dragos will be rewriting it to reflect that the size of the jump depends strongly on the rate of change as well as the threshold value.		FGM Team	2	Jim L and/or Hannes		

2148a	3a) Incorporate Dragos' code in thm_cal_fgm (hold off on implementing until Dragos delivers improved algorithm; estimate 2 days from receipt of revised code?)		FGM Team	2	Jim L and/or Hannes		16
2148b	Reprocess L2 FGM products with enhanced code (Jim McT, combine with 2147c?)		FGM Team	2	Jim M or Tim	It might make sense to delay 2147c and 2148b L2 reprocessing until the 2149d L1 reprocessing is performed.	
2036	GOES 10-12 Test data: h. update labels (Howard's request - minor tweak)		Vassilis	2	Jim L		
2038	STATE Web Page (s)		Vassilis	2	Jim L	revew web pages	
2039	bad timing sun pulse times (early January 2009)		Vassilis	2	Jim L	Clarification needed	
2040	L1 Data Processing History Info: SCM, EFI, STATE		Vassilis	2	Jim L		
2042	FGM range changes in the mid packet. Post Proc maybe a solution to eliminate the spike. BugzID=44. Bfield mid-packet jumps.		Vassilis	2	Jim L		
2043	Refactor repeated CDF library code in CDF processing tools BugzId=50		Vassilis	2	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	2	Jim L		
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	2	Jim L		
2047a	FGS sample times and values, showing repeated timestamps. BugzID=113 (BugzID=67 must be done first)		Vassilis	2	Jim L		
2047b	Repeated timestamps and gaps in spin fit data BugzId=113 (#67 may fix this one as well).		Vassilis	2	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.		Vassilis	3	Jim L		
2081	Evaluate CDF compression algorithms BugzId=81		Vassilis	3	Jim L		
2083	Add "last processed" time to L1 (and L2?) CDFs BugzId=115		Vassilis	3	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 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		Christine	3	Jim L		
	Jim M						
2048	Process full resolution for March 1-15 2008, Jan 15 2009 and onward.		Vassilis	1	Jim M	on March 8, 2008. Stopped On hold for IT	
2049	MOM Quality Flags and MOM Processing History		Vassilis	1	Jim M	Ready to go. Waiting for ESA reprocessing to complete.	
2050	Incorrect adjustment on S/C potential. Effects L2 cdfs. Fix in thm_cal_mom		Vassilis	1	Jim M	Mod completed awaiting to reprocess MOM L2 cdfs for specific dates for each probe.	
2951	New ESA Quality flag for Jim McFadden		Jim McFadden	1	Jim M	in progress, processing to wait until current reprocessing done	
2052	Add quality flag verbiage to ESA and MOM Data Description web page.		David	1	Jim M		
2053	Revise ESA Processing History Web Page		David	1	Jim M	Awaiting reprocessing completion	
2054	Issue with ESA data and Overview Plots. Pgm Change and reprocessing from Feb 2009-current ?			1	Jim M	Ready to go. Waiting for reprocessing to complete.	
			ETC-sst-esa table load	TH-A	2009-02-02 22:30:14.		
			ETC-sst-esa table load	TH-D	2009-02-13 20:36		
			ETC-sst-esa table load	TH-E	2009-02-13 22:27		
			ETC-sst-esa table load	TH-B	2009-02-17 23:50:38		
			ETC-sst-esa table load	TH-C	2009-02-18 00:52:20		
2145	Problem with ASI crib when using the command 'ctime,/cut' to generate the movies, it generates an error if you scroll out of bounds. The exact error message produced is: Error: -161 Attempt to subscript <PtrHeapVar289> with I is out of range. % Stop encountered: $MAIN$ 58 /home/pcruce/IDLWorkspace/themis/examples/thm_crib_asi.pro % Program caused arithmetic error: Floating illegal operand		Pat	2	Jim M	email from Harald - possibly by 7/27	

2125	I received an error in the smoothing function with the no_time_interp keyword set (through the gui). I was using mag data from drby on 2009-6-9 at 500 sec resolution. Traceback Report from THM_UI_LOADED_DATA::DPROC: $MAIN$ THM_UI_DPROC_PANEL_EVENT<C:\GUI\THEMIS_GUI\themis\thm_ui_new\panels\thm_ui_dproc_panel.pro(123)> THM_UI_NEW_DPROC<C:\GUI\THEMIS_GUI\themis\thm_ui_new\utilities\thm_ui_new_dproc.pro(179)> CALL_DPROC <C:\GUI\THEMIS_GUI\themis\thm_ui_new\utilities\thm_ui_new_dproc.pro(57)> THM_UI_LOADED_DATA::DPROC <C:\GUI\THEMIS_GUI\themis\thm_ui_new\objects\thm_ui_loaded_data__dproc.pro(104)> ERROR_MESSAGE <C:\GUI\THEMIS_GUI\themis\thm_ui_new\utilities\error_message.pro(256)> Last IDL Error: Unable to concatenate variables because the dimensions do not agree: ARRAY. % Execution halted at: SMOOTH_IN_TIME 153 C:\GUI\THEMIS_GUI\ssl_general\misc\smooth_in_time.pro		Aaron	2	Jim M		
2055	ESA L2 from L1 (not packets) - create L2 and test thoroughly, then reprocess ESA		Vassilis	2	Jim M	On Hold; awaiting Jim L to split L1 into master cdf	
2056	SCM L2 cdf		Vassilis	2	Jim M	in progress	
2057	SCM CAL File Processing Doc		Vassilis	2	Jim M	text completed. Put into std document format and send to Olivier for review	
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 CDAWeb) seem to have been resolved.		Vassilis	2	Jim M		
2059	L2 Data Processing History Info Completed: ESA, MOM Still to be Done: SST, FGM, FBK, FFT, FIT		Vassilis	2	Jim M		
2060	L2 cdf Quality Flags: for SST		Vassilis	2	Jim M		
2175	L2 File Definitions Document - awaiting L1 document to be completed to use as template.		David	2	Jim M		
2061	Data Description Paragraphs		David	2	Jim M		
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	2	Jim M		
2085	Summary Plot mods		Vassilis	2	Jim M		
2085a	Fix duplicate velocity units by removing 'km/s' from ytitle and maintaining 'km/s' in ysubtitle		Vassilis	2	Jim M		
2085b	Either make velocity labels into ('X','Y','Z') or make velocity labels into 'VX','VY','VZ'. So that the components are easier to distinguish.		Vassilis	2	Jim M		
2085c	Modify ytitles on esa eflux and sst eflux so that they do not collide. (Insert '!C's or change setting to make tplot do this automatically).		Vassilis	2	Jim M		
2085d	Set the scales on the zoomed out(24 hr) plots so that they are not autoscaled. Information on appropriate yranges should come from Vassilis.		Vassilis	2	Jim M		
2085e	Change labels on temperature lines so that they are done in different colors (and possibly different linestyles).		Vassilis	2	Jim M		
2085f	If necessary, Update the plot key so that it reflects any of the changes above. It'd probably be best to give this task to me, since I've done the past modifications of the plot key.		Vassilis	2	Jim M		
2086	Orbit Plot on Summary Plot web page - on the right side, 3 plots vertically, each overview plot there would be orbit panels (coordinate with Harald).		Vassilis	2	Jim M		
2087	Administrator's Guide		Vassilis	2	Jim M		
2088	Themis Developers Guide		Vassilis	2	Jim M		
	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		
2089	Thm_fgm_overviews currently loads the data out of the fit file. It should probably load the data out of the fgm file. Only needs to load from one data source. Jim M thinks the thm_load_fit can be deleted		Vassilis	2	Jim M		
2090	that streamlines the generation of gmag stackplots and a crib to show how to do this. (< than a day)		Vassilis	2	Jim M		
2091	Once Jim McFadden completes his mods for n_3d_new_3 reprocess L2 cdf's - entire mission		Vassilis	2	Jim M		
2092	thm_load_mom changes - reconcile mods with Davin at an appropriate time.		Vassilis	2	Jim M		
2093	AE Indexes Issue Jan 8-12, keyograms Jan 12-13, Stripes-Vassilis: minor nuisance		Vassilis	3	Jim M		
2094	Overview plot change: mode bar seems thick		Vassilis	3	Jim M	nothing we can do easily	
2095	Mosaic Processing - permanent script needed		Vassilis	3	Jim M		
	Michael						

ID	Description	Date	Assigned	Pri	Lead	Notes	
2169	LASP code appears to label SPG coords w/ DSL. Investigate and fix.	7/13/2009	John Bonnell	1	Michael	verify if fixed	
2170	Port LASP axial calibration to eff datatype -> can we?	7/13/2009	John Bonnell	1	Michael	in progress	
2171	Update THM_CRIB_EFI (adding _0 and _dot0 examples, if absent) giving examples for recent upgrades to THM_CAL_EFI.	7/13/2009	John Bonnell	1	Michael		
2172	Change THM_CRIB_EFI time interval to one of the Mozer intervals.	7/13/2009	John Bonnell	1	Michael		
2100	EFI calibration		John Bonnell	1	Michael	in progress	
2100d	DC offset between 4sdo and 2sdo in boom plane		John Bonnell	3	Michael	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	3	Michael	On Hold	
2100k	"Case-by-case" calibration parameters ("short-term" high accuracy corrections). LASP does this, but needs integration.		John Bonnell	2	Michael	On Hold	
2100n1	better define the behavior of THM_LOAD_EFI if multiple coord are specified.		John Bonnell	1	Michael		
2100n2	add an example to the EFI crib demonstrating the behavior.		John Bonnell	1	Michael		
2100p	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	3	Michael		
2100r	Add the DATATYPE kw to KYOTO_AE_LOAD , and load only AE data by default		John Bonnell	3	Michael	Check with Andrea if still needed	
2100s	Get the downloader (KYOTO_AE_DOWNLOAD based on the new version of FILE_HTTP_COPY) working		John Bonnell	3	Michael	Check with Andrea if still needed	
2101	THM_SPINFIT simulates the on-board spin fits		John Bonnell	2	Michael	in progress	
2101a	Check input coord and boom selection (offset is boom dependent) and reflect in TPLOT var name and metadata. Check offsets against C. Cully's example.	Revised 7/13/2009	John Bonnell	2	Michael		
2099	npot computation		Jim McFadden	1	Michael		
2099e	Integrating Npot code.	7/24/2009	Toshi	2	Michael		
2099f	Writing a crib to demonstrate how to use the code to remove penetrating electrons from ESA e- and ion data	7/24/2009	Toshi	2	Michael		
2099a	Formula		Jim McFadden	3	Michael	McFadden has found bugs in the pipeline. I am on hold until he works those out (he is working with Bonnell and Mozer).	
2099c	McFadden requires more information on the bias changes from John as of 6/5		Jim McFadden	3	Michael	J.B. to send Jim McFadden info	
2099d	Integrate Nishamura's Npot routine as an option into THM_SCPOT2DENS		Vassilis	3	Michael	On Hold	
2102	FBK frequencies		John Bonnell	2	Michael		
2102c	Make sure that bin center assignment from L2 works with any changes that Jim M. makes		John Bonnell	2	Michael	Talk to Jim M on 7/13	
2102d	John wants to calibrate by signal source – thm_cal_fbk		John Bonnell	2	Michael		
2103	EAC offsets		John Bonnell	2	Michael	John has taken AC coupled data -> he will get me the offsets and the switch-over times.	
2104	L2 CDF		John Bonnell	2	Michael	J. B. to talk to Vassilis about expectations for users. Michael to find out what the programming task is.	
2105	EFI Calibration Document		David	2	Michael		
Pat							
2006	boundary normal coordinates. BugzID=59.		Pat	1	Pat		
2162	talking with Mcfadden this week, as well as doing some of my own work, it seems that it would be very useful to have THM_LOAD_HSK be able to produce TPLOT variables with housekeeping data in physical (calibrated) units; ie. IEFI_IBIAS in nA instead of RAW TM units. The conversions are straightforward and well-documented, although we should check with the MOC folks to get the latest versions of the calibration parameters.	7/2/2009	John B	1	Pat	Waiting for John B to verify units on tplot output.	
2037	J. Kissinger's cotrans routine (from GSE to SSE coordinates)		Vassilis	2	Pat	SPICE/ICY lib installed. integration of this data into a separate L2 cdf. - in progress	
2009	Be able to plot ASI & GMAG observatory positions and GOES data on the same plots that are generated by THEMIS Station keyword executing thm_crib_trace.pro		Pat	2	Pat		
1565	I noticed while trying to export an EPS of some FGH that the fan compression algorithm can be very slow. A little while back, I thought of a way to make the algorithm much faster at the expensive of slightly worse compression ratios. I think this could be well worth implementing after this release and I don't think it would take too long.		Pat	2	Pat	in progress	
2063a	Make A-E Index an L1 cdf.		Pat	2	Pat		

2139	I noticed that when calc performs an operation that reduces the number of dimensions on a tplot variable, it doesn't reduce the number of labels and/or colors, which can cause tplot to issue a warning when a result is plotted.		Pat	2	Pat		
1121	Overview plots - need to figure out how to handle memory issues with tplot variables.		Bryan	2	Pat		
964	I noticed a bug with the x-grid thickness. For some reason if I use a style like dotted and increase the thickness, the thickness doesn't appear to increase properly for the portion of the grid near the axis itself. This is a pretty minor aesthetic thing, so I don't think it will be a big deal if we put it in the next phase.		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		
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	
1555	A conversation here brought up what should probably be considered a feature. If only minor grids are on, gaps appear in the grid lines, because the grids are not drawn on major ticks. After talking about it, we were thinking a better rule would be to only maintain those gaps if major grids are turned on.		Pat	3	Pat		
		Misc					
447	Save THEMIS document: Attempting to save to a read only file in Windows outputs the correct error message, but IDL crashes immediately afterwards.			1		IDL Error report to ITT	