

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
To be Assigned or Discussed														
2110	Tplot User's Guide (David and Vassilis to talk further)				tbd	any need?								
4029	One of Michael Hartinger (a grad student in atmos) is having trouble with thm_part_getspec when the SST is in fast survey mode. The routine can take a very long time to run because of the higher resolution. I think we should put a feature request on the list to automatically downsample the particle data in time. Normally, I would suggest that uses downsample using one of our interpolation routines, but because the particle data is stored in a special common block, there is no easy way for end users to perform this operation. *** Still Needed ??? ***	4/6/2010	Michael Hartinger / Pat		tbd	Michael supplied code for thm_part_moments	4-8 hrs							
4353	ARTEMIS Full Data: Looking at THB data for Aug 26 and 27, I'm not seeing any 32x88 PEEF data (apid 457). All I'm seeing is 15x88, for the following time intervals: Aug 26: 05:44:27 to 09:03:06 Aug 27: 11:54:13 to 15:13:08 It's not a processing issue; this is the only configuration I'm seeing in the apid 457 packets for these dates. If you were expecting something else, that would be an issue for the ops team.	8/29/2011	Vassilis	?	Jim L - > Ops Team	Vassilis to report to Ops Team								
4382	There is an inconsistency in how the 'stack labels' option is sensitized with respect to the 'lazy labels' option. It appears that the stack option is incorrectly sensitized on initialization.	9/23/2011	Aaron	?	Aaron		1 hr							
4383	The labels on the overview plot for probe A (default day) are not automatically stacked, causing them to be drawn on top of one another. It looks like this may be caused by a bug in how the code is handling stacking labels when lazy titles are being used.	9/23/2011	Aaron	?	Aaron		2 hrs							
Hannes														
4153	maintenance of gmag stations "Exclude List"	10/11/2010	David	0	Hannes	Exclude List updated 7/11/11								
4018a	New Calibration FGM parameters and spin axis offsets	5/10/2010	Hannes	1	Hannes	8/22/11 Hannes: start new Artemis offsets this week (currently covered through mid June). Themis covered through Mid August and will not be updated until the end of the year 2011. 8/29/1: Sent to Brandsvaug								
4080	Attitude Determination next few months	6/21/2010	Hannes	1	Hannes	After 4018a for Artemis is complete will work on spin phase and axis offsets								
2074c	quality flag for FGM data		Vassilis	3	Hannes	on hold								
4058	This is getting a bit out of hand I think. How about a configuration file? The software just reads keywords from a configuration file. With such a configuration file it is possible to set keywords automatically (for the scientists) but additionally it would give us the possibility to keep track of what the software does automatically. When I do calibrations I can then save the configuration file together with the results and not worry about the things that the software might have done automatically.	5/10/2010	Hannes	3	Hannes	Hannes sent out new version for review.								
Aaron														
4335a	Perp_xz, perp_yz, xz,yz cannot be selected. I guess that changing the orientation vector below helps solving these problems? A friendly instruction might be helpful for new users like me.	8/22/2011	Shanshan	1	Aaron	Discuss at next S/W Meeting								

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4335b	I do not understand why there is a 'Generate' button and no 'Save' button. I can only check plots after I exported all of them, but I cannot press 'export all' directly because I have to generate the plots first and then export them. Every time I change some parameters and press 'export all' directly, I find those plots exported are the same with the old parameters. I find it a little inconvenient because I naturally would assume the new plots be according to new parameters.	8/22/2011	Shanshan	1	Aaron	Discuss at next S/W Meeting								
4305	General Slices feedback from UCLA (Stefan, Andrei, Shanshan and Xuzhi) and UCB (Jim McFadden)	8/1/2011	Vassilis	1	Aaron	cribs, tips of the month, users guide as needed								
4340	Anything you can do to accelerate the geometric method?	8/22/2011	Vassilis	1	Aaron	discuss at S/W meeting								
4012	When Cindy & I tried to load tha_eff on 2007-03-23, it didn't load and said some calibration quantity couldn't be found. When I tried to load the same thing, I didn't have a problem. So the trick would be to find out what changed from my computer to Cindy's computer and to figure out how often our user's computers are going to have the same problem that Cindy's computer had.	3/22/2010	Pat	2	Aaron	Jim M: I have no trouble with EFF data either for linux or windows. discuss at S/W meeting								
3014	We don't have support for filled symbols. This means symbols are only outlines.	12/11/2009	Pat	2	Aaron	in progress - eta 9/23								
3031	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							
4275	There was a suggestion that we use dprint more consistently in our debugging output so that it is possible to disable all of the text that the GUI and other TDAS software prints to the command line.	6/30/2011	Pat	2	Aaron	to take a look at a possible standard and then review with all; User's Guide Update?								
Ben														
4214d	empermeris->state v00	3/23/2011	Jim L	1	Ben	exercised predictive to V0								
4001	Document: Administrators Guide	3/1/2011	David	1	Ben									
4001b	update admin guide for input and output locations L1->L2					send email to jim M								
4368	Master Probe Timing Diagram	9/15/2011	Jim L	1	Ben	in progress								
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		Jim L	1	Ben	In progress. TDAS v6 has been tested. Several templates created, selecting the appropriate command line routines to test.								
Jim L														
4369	THEMIS Leap Second Discussion	9/15/2011	Vassilis - Jim L	0	Jim L	discuss at S/W meeting								
4310	state files: including P1, P2 SSE and SEL coordinates	8/8/2011	Vassilis	0	Jim L									
4310g	take Jasper's code and incorporate into thm_cotrans	8/8/2011	Vassilis	0	Jim L									
4310b	Change the V00 and V02 ascii ephemeris to state CDF processing to include the new SSE and SEL ephemeris variables	8/8/2011	Vassilis	0	Jim L									
4310c	Change thm_load_state to allow loading the new variables	8/8/2011	Vassilis	0	Jim L									
4310d	Test that revised CDFs have correct data	8/8/2011	Vassilis	0	Jim L	See Sabine for verification of code - email sent to ARTEMIS team on 9/1/11; earliest 9/19-9/23								
4310e	Deploy code changes and new master CDFs for use in the automated processing	8/8/2011	Vassilis	0	Jim L	on hold until confirmation 4310d								
4310f	Reprocess state CDFs for entire mission	8/8/2011	Vassilis	0	Jim L									

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4326a	The ARTEMIS science team is keen to have a look at the most recent lunar data, with the eclipse spin model corrections turned on. That processing isn't fully automated yet, so it'll take me a couple of hours to set up and run Ferdinand's eclipse processing code. I told Vassilis I'd try to have at least the THB and THC products up to date by next Wednesday's telecon.	8/18/2011	Vassilis	0	Jim L	Processed latest set of eclipses and sent an email								
4326b	Then for Particles and Spin Fits	8/18/2011	Vassilis	0	Jim L	in progress								
4331	I noticed a couple of warnings overnight from the automated definitive ephemeris processing. It looks like a couple of files from 2008 got updated: THEMIS_B_EPHDEF60_08135_000100_08141_210000 THEMIS_B_EPHDEF60_08141_210100_08148_140000 THEMIS_B_EPHDEF60_11203_020100_11229_110000 was also picked up (as expected), and processed normally as far as I can tell. I haven't tracked down the exact problem with the 2008 files that were also processed last night. It's possible that my script just isn't working properly or the case when an ephemeris file is updated, but the preceding and following files are not. But it appears, from the processing logs, that the data in those two files may have differed from what was there previously. Otherwise, it should have detected that the updated products were identical to the published products, and skipped the update. Any idea why these files might have been updated, and what (if anything) was different about the updated version?	8/19/2011	Jim L	1	Jim L	Dan Cosgrove will update ascii files and then you will do a manuel reprocessing as needed								
Jim M														
4381	Also there's no FGM L2 data for those days, (otherwise the overplots shouldn't be trying to load L1 data).	9/23/2011	Jim M	0	Jim M									
4334c	Ambrosia Migration - testing and Migration	8/22/2011	David	0	Jim M									
4334d	Danaid Migration - testing and Migration	8/22/2011	David	0	Jim M									
4370	I can not load some of the 2011Sep data. (i.e. thm_load_mom failed for 2011.09.13). Also, thm_load_state refuses to do coordinate translation. Since it never happens before for all the other former data, I am wondering if the data are not processed yet. But on the other hand, the summary plots show just fine. How do I know if all the data are already successfully processed?	9/19/2011	Shanshan	?	Jim M	Priority ? Fix limitation. Document current limitation as appropriate.								
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. **Send old code to Pat **	11/2/2009	Jim Mcfadden	1	Jim M	Jim McFadden showed me what he had in mind for improving the corrections for ground-processed moments. This involves calculating the dead-time correction based on a higher resolution energy grid, with 4 different points per output energy channel. In progress: Jim M 8/26/11: Thanks for looking at this. It also seems the the pressure tensor has some interesting spikes due to the dead-time correction, while the scalar quantities ssme to be more stable. 9/23/11 - will stop by and see Jim Mcfadden								

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4349	I was loading some FFT data in the GUI and just wanted to check that the behaviour was correct. If I attempt to load fff_32_adc it brings up a message: THM_UI_LOADED_DATA::ADDDATA--> Problem loading: tha_fff_32. GUI data model does not currently support data with dimensions greater than 2. (and also messages for tha_ffp_32 and tha_fw_32) But it does show fff/p/w_adc, src, hed as having loaded. I don't actually know what any of these quantities are so I'm not sure if this is what it should be doing. (This doesn't seem to happen in v.6)	8/26/2011	Lydia	0	Jim M									
4152	verify the location of the sun-contaminated bins for each spacecraft and any change in location over time(they should change very slowly if at all). They would then re-activate the sun contamination masking. It was previously disabled because the masking was originally in the from place. Davin said that he wants to create the new configuration files that would be uploaded to the spacecraft.	10/8/2010	Vassilis and Davin	0	Jim M	Persons that can provide information are: Davin, Deron Pease/McDonald, Michael Luldam and Robert Abiad.								
4152a	change the SST tables to mask view directions that are affected by the sun. We need to do this for the reduced distributions only. If it can be done for the moments too it would be great. WE need to find the masking tables that were input before in 2007 and rescinded sometime in 2008 - but the actual bins that require masking are different than before.	10/20/2011	Vassilis	0	Jim M									
4152b	change the ESA tables such that the minimum magnetospheric electron energy becomes lower (about 3eV, or lower). McFadden can specify the lower energy	10/20/2011	Vassilis	0	Jim M									
4152c	change the ESA tables such that electrons and ions can be changed separately into magnetospheric and solar wind modes.	10/20/2011	Vassilis	0	Jim M									
4365	reverse-engineer the process of updating the onboard tables that define the ESA and SST angle/energy modes.	9/8/2011	Vassilis	0	Jim M	see 4152								
4365a	Sanity check of current configuration: Jim and Davin will provide a range of ETC memory addresses to be validated. Ops team will request a memory dump of those locations, probably on one of the inner probes, via apid 407 memory dump packets. JWL (or maybe Ben S) will write a tool to stitch the memory dump packets back together into a memory image, which Jim and Davin can inspect to make sure we are working with the correct memory range. Hopefully this will be a targetted test -- a small range of addresses, rather than a complete memory dump (which would take extra care and error checking to interpret). If it's a small enough dump, we can possibly avoid having to write a tool and just look at the raw hex from a few 407 packets.	9/8/2011	Vassilis	0	Jim M	On hold								
4365b	ETC table upload utility: Davin may have something in his backups. If not, JWL will resurrect a "cmd2raw" utility we used during I&T to convert ASCII files of IDPU commands to a properly checksummed RAW command file, which the ops team can then upload to the probes. Jim McFadden and/or Davin will have to provide the list of IDPU commands.	9/8/2011	Vassilis	0	Jim M	On hold								

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4365c	(Maybe) ETC table image->IDPU command converter: If Jim McF or Davin can't come up with a list of IDPU commands, we may need an additional utility to take the desired ETC memory image, and convert that to a file of IDPU commands that will produce the desired memory image when executed on board.	9/8/2011	Vassilis	0	Jim M	On hold								
Lydia														
4375	Calgary GMAG Issue	9/20/2011	Lydia	1	Lydia - Harald	It sounds like Harald asked Calgary about the problem last week but hasn't heard back & will ask them again. The problem is likely at their end as there have been no changes at our end and when I attempt to connect to their server it times out.								
4371	Athabasca (AUTUMN) (Sites are LARG, LETH, ROTH, REDR) Database: No database exists for these sites yet. Processing scripts currently attempt to write to non-existent tables. Tables need to be created. Website: No status table exists. A new status table needs to be created (this can probably copy most of the code from one of the existing php scripts) and a link added to the status webpage.	9/20/2011	Lydia	1	Lydia	in progress								
4372	GMAG ASCII status: http://themis.ssl.berkeley.edu/data_processing_check/ground_data_processing/gmag_ascii_table.php (I'm not sure if this has a link from the main webpage) Database: a. Add Athabasca sites to the database gmag_ascii_files. b. Add a table epo_PGEO_asciifiles to gmag_ascii_files database. Website: a. Add Athabasca sites (LARG, LETH, ROTH, REDR) b. This may be more tricky, depending on what exactly the script to generate the table says. PGEO is already on the list, but needs to change from looking at the table gbo_PGEO_asciifiles to looking at the table epo_PGEO_asciifiles. c. Add GBO sites SNAP and KUJ d. Add MACCS sites CDRT, CRVR, GJOA, IGLO, PANG, RBAY e. Add Alberta sites SNKQ, ATHA f. Add Alaska sites ARCT, BETT, CIGO, EAGL, HLMS, HOMR, KAKO, POKR, TRAP	9/20/2011	Lydia	1	Lydia	Lydia completed her part not with Emmanuel								
4373	GMAG CDF status: http://themis.ssl.berkeley.edu/data_processing_check/ground_data_processing/gmag_cdf_table.php Repeat 4372a - f.	9/20/2011	Lydia	1	Lydia	Lydia completed her part not with Emmanuel								

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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. Augsburg investigating - ping on 9/23	2/19/2010	James Weygand	2	Lydia	Email requesting other 2007 sites to be put on ftp site. From Erik at Augsburg: We are indeed moving information from an older computer to a newer one, with both currently in service and with the general designator space.augsburg.edu now pointing at the newer computer leaving the old 'space' computer as yspace, as you noticed. We are indeed moving information from an older computer to a newer one, with both currently in service and with the general designator space.augsburg.edu now pointing at the newer computer leaving the old 'space' computer as yspace, as you noticed.								
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	Lydia	awaiting reply to sent email								
4006	add the following ancillary ground-based observations: MAGDAS Network, Auroral Electrojets (AE) and Ground Radars (SuperDarn, AMISR and Sondrestorm)	3/8/2010	David	2	Lydia	discuss at software meeting of 9/27								
Pat														
4377	I just noticed that the ground track overview plots stopped being generated on august 26th.	9/22/2011	Pat	0	Pat	reprocessing								
4380	Status Mode Bar does not appear on plots certain days	9/23/2011	Vassilis	0	Pat									
4334d	gaia Migration - testing and Migration	8/22/2011	David	0	Pat	in progress								
4138f	Run simulation for range of initial positions around the full sphere.	9/17/2010	Davin	1	Pat	Rob Lewis sanitizing files.								
4267c	Write code to remove proton and electron contamination from the electron and proton distributions using data and efficiencies from the F & O channels.	6/27/2011	Pat	1	Pat	in progress - testing with real data								
4355	IDL-VM checkout	8/30/2011	Yoshimasa - lugonet	1	Pat	lugonet - may need to mod gui history window for more detail info.								
4306	Overview web page navigation	8/1/2011	Vassilis	1	Pat									