

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide
To be Assigned or Discussed													
4387	Radius values in TIPSOD vs TDAS	9/30/11	David			For discussion							
4393	Tplot cribs move to ssl_general	10/4/11	Pat	2	?	discuss at s/w meeting							
4394	We have a situation where, from time to time, code is getting pushed out to the automated processing directories prematurely. For example, the automated ephemeris to V00 state state CDF processing is not yet supposed to include the lunar SSE and SEL coordinates, but since I'm currently doing QA on them, the code is checked in to the repository trunk. Twice last month -- once in the beginning of September, and again about a week ago, the code directories used in the automated processing (/disks/socware/thmsoc_dp_current) were updated -- from the trunk -- and this caused the ephemeris processing to fail since the production state CDFs don't have the SSE and SEL variables yet. Suggestion: instead of periodically synchronizing /disks/socware/thmsoc_dp_current from the SVN trunk, we maintain a release branch for the automated processing code, just like we do for TDAS and tmtools. Code would only be promoted to the release branch after it's been thoroughly QA-ed, rather than just doing an SVN export from the trunk whenever something needs an update. This should reduce the risk of unapproved code coming along for the ride when an unrelated enhancement or bug fix gets pushed out to production.	10/4/11	Jim L	1		Do a & b need to be done at the same time?							
4394a	revert the undesired update to /disks/socware/thmsoc_dp_current and reprocess the affected state CDFs (everything after September 24). Probably priority 0, because pretty soon someone is going to notice that the GSE and GSM variables are empty after that date.	10/4/11	Jim L	1	Jim L								
4394b	Jim M. will probably be the one to make the necessary changes to the repository layout and deployment scripts, if my suggestion is approved.	10/4/11	Jim L	1	Jim M								
4399													
4400													
4401													
4402													
4403													
4404													
4405													
Oldies for Discussion - Du Jour													
24	<ul style="list-style-type: none"> • Page Options (for printing) <ul style="list-style-type: none"> o allow user to toggle landscape/horizontal o ungray widget to allow user to modify canvas settings o add window size to page settings template <p>need algorithm to print a large canvas</p>						3 days						
25	Add checkbox to append data array. This is to allow a variable to be												
50	Color Widget on various panels only seems to display 256 colors.												
63	Up/Down Arrows to scroll draw area						3 days						
312	Keep Probe selected highlighted in Themis Load Data when selecting						1/2 day						
Hannes													
4153	maintenance of gmag stations "Exclude List"	10/11/10	David	0	Hannes	Exclude List updated 7/11/11							
4018a	New Calibration FGM parameters and spin axis offsets	5/10/10	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 Brandswaug							

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide
4080	Attitude Determination next few months	6/21/10	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							
Aaron													
4386	It appears that some of the data in the GUI overview plot for probe D (on the default day) has been shifted up one panel. Each panel starting below the keogram appears to contain the data intended for the panel below it, judging by the labels and panel sizes.	9/29/11	Aaron	1	Aaron	in progress							
4392	Experiment with creating and deleting directories with SVN	10/4/11	Aaron	1	Aaron	see 4012 ??? Aaron: These are the two copies of the spin model code that were causing the EFI calibrations to crash: \themis\spacecraft\particles\spin\spin_model_get_ptr.pro \themis\spin\spinmodel_get_ptr.pro Jim L: I'm having trouble pinning down when the duplicate files were removed, or if they were ever in the repository under that location. Since it was under themis/particles, I'm assuming it had something to do with Jim McT's work to replace Jim McF's deprecated spinmodel routines.							
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.	3/22/10	Pat	2	Aaron								
3031	GUI Overview plots sometimes have diamond shaped artifacts in the sample rate bar. Should fix.	1/5/10	Vassilis	2	Aaron	able to reproduce							
Ben													
4001	Document: Administrators Guide	3/1/11	David	1	Ben	review doc from jim M in progress - final version of tool to be completed shortly; then analysis ; document a deliverable as well; automated script to run for a time and probe							
4001b	update admin guide for input and output locations L1->L2												
4368	Master Probe Timing Diagram	9/15/11	Jim L	1	Ben								
Jim L													
4385	strange patterns in SST data	9/26/11	Xuzhi	0	Jim L	Pat: You mentioned a modification to sanitize the data. Do we want to put it in? If yes, do we want it to be L0->L1 or L1->L2? Jim L: It's probably a bit easier to handle at the L0->L1 level, since I'm already tracking the ETC config changes. Monitor in the future							
4369	THEMIS Leap Second Discussion	9/15/11	Vassilis - Jim L	0	Jim L	Jim L to write up doc and get SL:P write-up from Pat. Issues Probe Files, Spin Model, ESA Pkt, SPDF, VMO							
4310	state files: including P1, P2 SSE and SEL coordinates	8/8/11	Vassilis	0	Jim L								
4310g	take Jasper's code and incorporate into thm_cotrans	8/8/11	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	8/8/11	Vassilis	0	Jim L								
4310c	Change thm_load_state to allow loading the new variables	8/8/11	Vassilis	0	Jim L								

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide
4310d	Test that revised CDFs have correct data	8/8/11	Vassilis	0	Jim L	See Sabine for verification of code - email sent to ARTEMIS team ; Sabine will take a look; Jasper gave his okay							
4310e	Deploy code changes and new master CDFs for use in the automated processing	8/8/11	Vassilis	0	Jim L	on hold until confirmation 4310d							
4310f	Reprocess state CDFs for entire mission	8/8/11	Vassilis	0	Jim L								
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.	8/18/11	Vassilis	0	Jim L								
4326b	Then for Particles and Spin Fits	8/18/11	Vassilis	0	Jim L	in progress							
3093	Automate processing of eclipse sunpulse data from FGM team	2/22/10	Jim L	1	Jim L	brought up from 3+ priority							
Jim M													
4381	Also there's no FGM L2 data for those days, (otherwise the overplots shouldn't be trying to load L1 data).	9/23/11	Jim M	0	Jim M	missing FGH data - September 2011; notify Tami; FGH reprocessing complete - overview plots to be reprocessed							
4334c	Ambrosia Migration - testing and Migration	8/22/11	David	0	Jim M								
4334d	Danaid Migration - testing and Migration	8/22/11	David	0	Jim M								
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 **	11/2/09	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 ping Jim Mcfadden							
4365	reverse-engineer the process of updating the onboard tables that define the ESA and SST angle/energy modes.	9/8/11	Vassilis	0	Jim M	steps: Create the Table Image, Create the CDI Commands, Create the IDPU Commands, Create the raw packets that go to the MOC for uplink ** in progress **							
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.	9/8/11	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.	9/8/11	Vassilis	0	Jim M	On hold							

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide
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.	9/8/11	Vassilis	0	Jim M	On hold							
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.	10/8/10	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.	10/20/11	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	10/20/11	Vassilis	0	Jim M								
4152c	change the ESA tables such that electrons and ions can be changed separately into magnetospheric and solar wind modes.	10/20/11	Vassilis	0	Jim M								
Lydia													
4334d	gaia Migration - testing and Migration	8/22/11	David	0	Pat - Lydia	watch for a few more days							
4398	I have identified the problem with the Alaska processing. Some of the netCDFs that we have received from Alaska contain non-monotonic timestamps. Our code handles cases where adjacent timestamps are the same, but not cases where there are strange jumps in the timestamp. Do you have a contact for Alaska? It would be good to know if this is a temporary problem. At the moment I will attempt to make the error reporting from the script more useful so that we know when this problem occurs.	10/5/11	Lydia	1	Lydia	contact name found - awaiting feedback from UA							
4357	Laura is looking into the processing of EPO Spectra jpgs. As this has been a problem for more than a year it is probably not a high priority.	9/1/10	Laura Petacolas	n/a	Lydia - maybe	script ti fill-in data is running; where spectra plots are coming from are in analysis.							
2175	L2 File Definitions Document	3/1/11	David	2	Lydia	Lydia completed Draft - out for review: Jim M, Jim L, Pat, Ben, Aaron							
4006b	SuperDarn - when available make sure it works with TDAS	3/8/10	David	2	Lydia	sent analysis to ERG folks - v6.1?							
2088	Themis Developers Guidelines		David	3	Lydia	in progress							
Pat													
4334d	gaia Migration - testing and Migration	8/22/11	David	0	Pat - Lydia	in progress - crons to run over weekend; review some new found scripts							
4138f	Run simulation for range of initial positions around the full sphere.	9/17/10	Davin	1	Pat	Rob Lillis sanitizing files.; eta couple of weeks from Rob							
4267c	Write code to remove proton and electron contamination from the electron and proton distributions using data and efficiencies from the F & O channels.	6/27/11	Pat	1	Pat	in progress - iterative testing with real data in progress							
4355	IDL-VM checkout	8/30/11	Yoshimasa - lugonet	1	Pat	in progress with IUGONET							
4068	Lynn Wilson possible enhancements	6/1/10	Lynn Wilson	1	Pat	Review Lynn's software and generate list of features							