

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide
<b>To be Assigned or Discussed</b>													
4384	Horae possible VM Migration - Review after all other servers migrated	9/26/11	David	1	?								
	We should probably discuss whether the alternate versions of these routines should be built into our release versions of TDAS. While unlikely, these errors could also occur for non-VM users.					Discuss at S/W Meeting 10/24							
	THMSOC - anything left to discuss					Discuss at S/W Meeting 10/24							
	Data Reprocessing before AGU - cut off date					Discuss at S/W Meeting 10/24							
<b>Hannes</b>													
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. 8/29/11: Sent to Brandswaug							
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	2	Hannes	talk to Ferdinand							
<b>Aaron</b>													
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.	6/30/11	Pat	2	Aaron	Email list of order for global changes to team. When you come up with subgroups to do the global change email, come up with a list of QA scripts and/or suites that could be used to test the changes. I would suggest the first subgroup be a small one so we can check if there are any issues that pop up. Mid January 2012							
4393	Tplot cribs move to ssl_general	10/4/11	Pat	2	Aaron	In progress							
24	Misc changes												
24a	Page Options (for printing)	11/17/11	Team	2	Aaron								
24b	ungray widget to allow user to modify canvas settings	11/17/11	Team	2	Aaron								
24c	add window size to page settings template	11/17/11	Team	2	Aaron								
24d	need algorithm to print a large canvas	11/17/11	Team	2	Aaron								
<b>Ben</b>													
4403	clean up SST data from 4385 (Jim L)	10/17/11	Jim L	1	Ben								
4403a	implement a tool to clean up particle distribution CDFs as described	10/17/11	Jim L	1	Ben								
4403b	integration with process_lzp_dir (L0->L1) pipeline	10/17/11	Jim L	1	Ben								
4403c	reprocess entire mission to clean up L1 ESA and SST product	10/17/11	Jim L	1	Ben								
2149g	write a routine to check time tag monotonicity and repair tplot variable if necessary ("replace with NaN" and "delete") - Specifically checkout the esa pkt issue from Shanshan. Check other programs for similar code.		Jim L	2	Ben	Create a routine to clean up tplot variables. Use in the load routines were susceptible. Recommend that we just remove what is needed to make the time tags monotonic, and issue a warning indicating that the user should consult the THEMIS software team about that data. (repair monotonicity of time tags) has been discussed with Jim and the work will start asap, followed by the repair routine's integration with TDAS (Task 2149h).							
2149h	integrate time tag fixer-upper with TDAS load routines - thm_load_XXX and few others		Jim L	2	Ben	needs a prerequisite written - see 2149g							
<b>Jim L</b>													
4385	strange patterns in SST data	9/26/11	Xuzhi	0	Jim L	The updated script set was just uploaded to TH-C, TH-B to follow when the pass schedule permits. Monitoring to continue until both ARTEMIS probes are updated, and compression is once again being performed during fast survey. So maybe 2 more weeks at 1 hr/week.							
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. Looking like early next week to complete the leap second document. eta 10/30							
4310	state files: including P1, P2 SSE and SEL coordinates	8/8/11	Vassilis	0	Jim L								

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4310d	Test that revised CDFs have correct data	8/8/11	Vassilis	0	Jim L	Jim will ping Sabine Frey							
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								
4326b	Then for Particles and Spin Fits	8/18/11	Vassilis	0	Jim L	Vassilis is okay awaiting Sabine's okay							
4326c	add new variables to STATW cdf and reprocessed					on hold 4326b is done							
Jim M													
4401	hsk and config file - permanet change	10/17/11	Team	0	Jim M								
4411	I've been using the tplot variable 'th*_hsk_issr_mode_raw' to automatically identify fast survey intervals. It's been working well for most intervals in 2008 and 2009, but recently I've been looking at intervals in 2010 and later and have been having problems. In particular, there are some fast survey intervals that are identified as slow survey using this variable. For example, if you run the code below, you'll see that during an interval on 01-Nov-2010 around 1100, slow survey data is indicated along with wave burst data every 5 data points, yet the summary plot shows that it should all be fast survey (attached) -- it also doesn't look like any wave burst intervals are occurring.	10/21/11	Michael Hartinger UCLA	0	Jim M	What's happening is that the degap program has gotten a small value of dt equal to 12 seconds, and many of the data points are spaced a minute apart. Many of the data points are also 2 and 4 seconds apart. There are also a bunch of intervals spaced 12, 16, 24, and 48 seconds apart. By default the value for dt used in tdegap is the median value of the set of time intervals. It's not designed to deal with multiple time resolutions; how it it supposed to decide what the data should look like? You could use the min value of the time resolution, but then you end up degapping when you shouldn't, for the points with long time resolution. You can use the max value of time resolution, but you would never degap anywhere then. The median usually works, because you usually don't get THEMIS data with that many different time resolutions in the same dataset. The user needs to use the dt keyword in tdegap, and input something slightly larger than what he expects the maximum time resolution to be. In the overview plots we use dt = 600.0 in the degap calls, I'd suggest that Michael use two minutes here. <b>Awaiting confirmation from Michael that this fixes his issue.</b>							
4334c	Ambrosia Migration - testing and Migration	8/22/11	David	0	Jim M	ve migrated and checked out the repository, I'll be testing commits andupdates today. Next week I'll fill the socware directories and check the release and bleeding edge scripts, we should be good to go a week from Monday.							
4334d	Danaid Migration - testing and Migration	8/22/11	David	0	Jim M	will send email to IT to get it ready							
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 <b>** In progress ** Still writing code that reads the angle/energy maps into memory.</b>							
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. JWLL (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, JWLL 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							
Lydia													
4375	Calgary GMAG Issue	9/20/11	Lydia	1	Lydia - Harald	new script needed. gmags up and running. ASI will be up and running by Monday. Will check next week to see if any data products are missing.							
4405	tidy up the cribs that load ACE data so that they use dates where the data is available	10/18/11	Lydia	1	Lydia	in progress - one more crib to do.							

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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	<b>Scripts to fill in missing information in database and also to reprocess missing files are currently running.</b> Will be another week before that is finished. Still waiting to hear back regarding the spectral jpg files.							
2175	L2 File Definitions Document	3/1/11	David	2	Lydia	<b>next week commit changes</b>							
4409	AE Stations: I am interested in including the "standard AE ground stations" i.e. the ones that go into the computation of the AE index - there are 12 - into the THEMIS pipeline. This is because we can then include them into the computation of our own pseudoAE. They include: FCC: Fort Churchill, LRV: Leirvorgur, a couple in Russia and one in Scandinavia etc. They should be available somehow. The ones in Russia have been made available through APL, and THEMIS has contributed to their refurbishment. I think we have established communication with APL's Kazue Takahashi and he said a couple of years ago that routine delivery of the Russian stations was impending. So by now they should be ready...I think he should be a good source of information about the other stations as well, if you cannot find them on the web by searching or at WDC Kyoto.	10/19/11	Vassilis	2+	Lydia	Lydia: Do we want to be mirroring the data for the sites and generating CDFs as we do for the other external magnetometer sites? If so, we would need to determine where the data could be retrieved from, obtain permission to mirror it, and write download and conversion to CDF scripts. This would be a separate task for each of the data suppliers (unless there is some existing site that has the data from multiple sources). The 12 stations that are used for the calculation of the AE indices seem to be (according to Kyoto WDC): listed in tasks 4409a-4409m.							
2088	Themis Developers Guidelines		David	3	Lydia	<b>Lydia completed Draft - out for review: Jim M, Jim L, Aaron</b>							
<b>Pat</b>													
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	<b>Installed geometric factors from true. Decontamination with new GFs improved data some, but there are still problems. Drew is checking for a possible error in his GF calculation, code. I'm writing code to include background noise removal as a function of the activity on the FTO channel and double checking the for sources of error in the decontamination matrix. Progress continues,</b>							
4355	IDL-VM checkout	8/30/11	Yoshimasa - lugonet	1	Pat	<b>GUI modifications to be made so that we can track down the errors. I'm aiming to have the mods completed sometime next week.</b>							
4399	modifying the overview plot script to include the automatic sun contamination removal for SST. I've been hearing from people that its been working better now that Lydia has tuned the thresholds for contamination removal. A lot of the time, the SST spectrograms are extremely contaminated in the overview plots.	10/13/11	Pat	1	Pat	<b>mod made; overview updated over the weekend for the next couple of days; If Vassilis says okay then reprocess</b>							
63	Up/Down Arrows to scroll draw area		David	2	Pat								