

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E; crib; script; suite; UG; DevG; Qref; AdmG
<b>Hannes</b>								
4153	maintenance of gmag stations "Exclude List"	10/11/2010	David	0	Hannes	Exclude List updated 7/11/11. <b>David 5/4/12: Has this been updated since?</b>		
4018a	New Calibration FGM parameters and spin axis offsets	5/10/2010	Hannes	1	Hannes	updated 4/3/12		
4080	Attitude Determination next few months	6/21/2010	Hannes	1	Hannes	<b>What is the status?</b>		
4472	Inter-spacecraft FGM calibration for ARTEMIS. <b>David 5/4/12: is this ready to be worked?</b>	1/4/2012	Vassilis	1	Hannes			
<b>Aaron</b>								
4468	Ongoing - Review all commits by Davin, Peter, etc for impact to TDAS.	3/27/2012	David	0	Aaron	Provide weekly report and spreadsheet		
4493	2D slices, 1.5D Pitch Angle Distributions - command line in progress; GUI?	1/23/2012	Vassilis	1	Aaron	<b>Andrei and Xuzhi to test further</b>		
4494	2D slices, 2D Pitch Angle Distributions - command line in progress; GUI?	1/23/2012	Vassilis	1	Aaron	<b>Andrei and Xuzhi to test further</b>		
4621	I was loading random things to test changes to file_http_copy and came across an error. I was trying to load state data in the GUI, datatype spin_tend (also happens with some of the other spin data types).	5/10/2012	Lydia	1	Aaron			
4530	When I despike thd_peim_flux on 2-10-12 I am left with data points that I expect should have been removed. All the spikes were surrounded by NaNs, but the those that consisted of more than one data point were removed while those that were only a single point were not. The values of the single-point spikes were comparable to those of the others. <b>Aaron 5/1/12:</b> I think the issue here is that the routines used to determine where spikes exist are not particularly good. It's hard to say how long it will take to gain a substantial improvement until I've looked into it a bit more.	3/1/2012	Aaron	1	Aaron	e.g. 3 and 4 were removed but 1 and 2 were not  1: 271376.90 NaN -2.4147143e+009 NaN NaN 2: NaN NaN 1.8829594e+009 NaN NaN 3: NaN NaN -2.5399129e+009 2.4763575e+009 NaN 4: NaN -2.5399129e+009 2.4763575e+009 NaN NaN	2-? Hrs	
4536	GUI Slices:Step 8 g) Annotation precision only changes z axis labels (not x, y) . Is that as intended?	3/1/2012	Lydia	1	Aaron	Formerly QA190 - may not be possible		
4521	GUI getspec: issues when setting phi limits and starting phi at same time	2/8/2012	Aaron	1	Aaron	I produced two phi plots with the phi limits set to 45 - 180; the second plot also had the start angle set to 90 degrees. That plot begins at 90 degrees and appears as it should until just past 160 degrees at which point the remainder appears to be 'smeared' and ends at a maximum of ~440. Because of this it is also hard to tell if it looped back to the data between 45-90 correctly.		
<b>Ben</b>								
4616	Chile having download issues	4/26/2012	Marina Stepanova	0	Ben	<b>working with Chile and UCLA mirror sites to identify reason for slow transfer rate reported by Chile. Will compare download speeds for "rsync" versus "scp" tools, and speeds reported by Chile vs UCLA, to confirm our suspicion that the problem is at Chile's end of the connection, rather than something to do with our server.</b>		
3093	Automate processing of eclipse sunpulse data from FGM team	2/22/2010	Jim L	1	Ben			

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3093c	integrate into L1 pipeline	2/22/2010	Jim L	1	Ben	<b>In progress, tracking down a few minor problems but close to being finished.</b>		
3093d	Reprocessing	2/22/2010	Jim L	1	Ben	<b>Reprocess L1 State Data into QA</b>		
4458	Horae (rsync server for mirror sites) is dying and needs to be migrated to a VM Astrea.	12/8/2011	Jon L	1	Ben	<b>** In Progress **</b> Testing with UCLA; Once UCLA has completed the catch up rsync to test the UCLA data with the GUI doing loads, creating plots. Ben to ping Todd as to the status.		Y
<b>Jim L</b>								
4613	Prevent Email Storms when data servers go down	4/25/2012	Jim L	1				
4613a	Design database table to support logging and querying of error notifications	4/25/2012	Jim L	1	Jim L	<b>In progress</b>	1-2 hrs	
4034a2	thm_parts_moments update (spin moments mods)	11/22/2010	Vassilis	0	Jim L	initial simple way, final fix is to fix esa and sst 3D data structures. Probably a good idea to make a THEMIS-specific moment calculation routine, to avoid extensive changes to WIND code currently being used. Jim McFadden (as of 3/26/12) said he would review what Jim L sends him. <b>Waiting on Ben to finish 3093 so I can start testing.</b>		
4326b	Then for Particles and Spin Fits	8/18/2011	Vassilis	0	Jim L	in progress - dependent on 4034a2.		
4326c	reprocessing for the moments and spin fits	8/18/2011	Vassilis	0	Jim L	<b>on hold 3093 is done (task 3093 assigned to Ben)</b>	3-4 weeks depending on pri zero tasks	
4509	Some array accesses still use () instead of [].	2/6/2012	A. Breneman	1	Jim L	For example the ESA packet loading routines, thm_load_peif, thm_load_peek.		
4510	Remove incorrect FGM range correction code from thm_cal_fit	2/10/2012	Jim L	1	Jim L	FGM range correction is already applied in the L0->L1 processing. Code is disabled by hard-coding a variable value, but should be completely removed. Does this routine actually need the thx_fit_hed data it's trying to use?		
4451	operating the particle instruments in "accumulate" rather than "snapshot" mode. So we'd be getting into some unexplored territory. The time tagging code in the L0->L1 particle distribution processing would need some slight modifications to support "accumulate" mode. The ESA load routines use the L0 packets directly, and probably also assume "snapshot" mode, so that's another potential set of required modifications. I wouldn't be surprised if the ESA and SST calibration code also assumes snapshot mode. It would need to be tested with real data (since we have no way to generate a realistic particle data stream on FLATSAT).	12/1/2011	Vassilis	1	Jim L	<b>Vassilis - what to do????</b>		
4451a	accumulate mode	12/1/2011	Vassilis	0	Jim L	flatsat testing l0-l1 mods; <b>on hold</b>		
4451b	tdas mods - if accumulate mode approved discuss at S/W meeting	12/1/2011	Vassilis	?	?			
<b>Jim M</b>								

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4538	We should enable the sun decontamination for the multi-probe overviews of SST data. It would make the plots look much better.	3/7/2012	Pat	1	Jim M	reprocess old plots - eta 5/21		
4540	Linux: file_http_copy has long timeout if server is unreachable	3/13/2012	Lydia	1	Jim M	There is a !themis setting for this, but windows times out much faster than linux. - in progress		
4365	reverse-engineer the process of updating the onboard tables that define the ESA and SST angle/energy modes. <b>Jim M: he process of creating the RAW commands will result in an IDL routine which has the same functionality as the "lost" code that Davin wrote in 2008. This will make future changes easier.</b>	9/8/2011	Vassilis	0	Jim M			
4365g	<b>If all goes well:</b> Ops team: Run the EEPROM update script on one of the probes. Verify that the EEPROM update has effected the desired changes.	4/11/2012	Vassilis	0	Jim M, Jim L, Ops Team, Science Team	awaiting Ops Team upload to Probe A		
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	<b>Persons that can provide information are: Davin, Deron Pease/McDonald, Michael Luldam and Robert Abiad. See task 4365 (same process)</b>		
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			
<b>Lydia</b>								
4358	Every 6 months check that the UCLA Mag Cal have not changed.	9/6/2011	David	0	Lydia	Next October 2012		
4628	AEIndex CDFs. I noticed this on Tuesday and wanted to let it run once more to confirm it was a real problem and not just a temporary glitch - due to the power outage it hasn't run again since then. The script can't find IDL as of a week ago or so. The log file shows: /disks/apollo/export/idl_6.3/bin/idl: not found [No such file or directory] This path does seem to be valid so I'm not sure what the issue is. I'll have to ask the sysadmins whether any was changed.	5/18/2012	Lydia	0	Lydia	Wait until Monday and see if still a problem.		

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4629	CARISMA gmag data We haven't received any data since May 9th. A few day delay is not unusual, but this does seem long. The download script is showing an rsync error 12. I've emailed the CARISMA team and they say the data is there and they know of no problems at their end (though they are looking into it for me).	5/18/2012	Lydia	0	Lydia	in progress - possible solution - awaiting IT support		
4630	EPO JPGS The EPO JPG processes produce warning messages every day so it is hard to identify when there are problems - it looks like the process to produce the jpgs stopped working in mid-April. The problem is a call to tplot in the IDL routine that uses keyword VERSION. It actually looks like that keyword was removed in February, but the problem didn't reveal itself till April. It seems that Davin made the change, so we may need to look at the make_epo_plots code and determine whether the VERSION keyword was doing something necessary there.	5/18/2012	Lydia	0	Lydia	awaiting database to commit to production		
4481	New data product, AE index from THEMIS+std sites	1/9/2012	Vassilis	1	Lydia	sorting out how to get data		
4620	file_http_copy issues	5/7/2012	Lydia	1	Lydia	as of 5/8 Davin to verify changes. 5/18/12 - ping Davin		
4624	The data we currently have is "Sensor XYZ", this is uncalibrated variation data relative to what seems to be an arbitrary baseline in some cases. For the most part the sensors are oriented with local magnetic north, east, vertical so the data matches the other GMAG data, however for some sites the sensors are oriented differently so the data we have is being mislabeled. If Vassilis approves we can move to downloading calibrated data in geographic XYZ coordinates. This data would then be rotated by the declination angle provided by TGO for each site, to get data in local magnetic coordinates. The declination angle will be stored in the CDF attributes. To do this I need to make minor changes to the download scripts, IDL processing routines, and update all the mastercds before redownloading and reprocessing the data.	5/10/2012	Lydia	1	Lydia	Code ready, started the download - awaiting for the databases to be up again.		

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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	<p><b>Carisma has changed the way their site works. They want us to start using a different URL to download data, but they have used an HTTP redirection method that is not supported by file_http_copy: 301 permanent redirects (not supported by TDAS yet) rather than 302 temp redirects (some support in TDAS).</b></p> <p><b>But requests for non-existent files get redirected to their main site, instead of giving a 404 "not found" status, and this makes it hard for TDAS to determine whether a file was successfully downloaded.</b></p> <p><b>Lydia will contact their admin and explain the difficulty, maybe they can make some minor changes to keep compatibility with TDAS. Otherwise we will need to modify file_http_copy to deal with 301 redirects, and possibly fix some bugs. Lydia to contact Davin to see if there's a reason he did it that particular way (e.g. to support some other mission), or if these are actual bugs that weren't caught in his testing.</b></p> <p><b>Another option is to use an IDL builtin capability to completely replace file_http_copy (it should correctly handle all aspects of the full HTTP protocol), but this IDL feature may not be compatible all the way back to IDL 6.3.</b></p>		
4409b	Dixon (DIK) (AARI, Russia)	10/19/2011	Vassilis	2+	Lydia	4/24/12: Vassilis received response and we are awaiting more detail		
4409c	Cape Chelyuskin (CCS) (AARI, Russia)	10/19/2011	Vassilis	2+	Lydia	see 4409b		
4409d	Tixie Bay (TIK) (AARI, Russia)	10/19/2011	Vassilis	2+	Lydia	see 4409b		
4409e	Cape Wellen (CWE) - closed, replaced with Pebek (?) (AARI, Russia)	10/19/2011	Vassilis	2+	Lydia	see 4409b		
4409l	Leirvorgur (LRV) (Iceland)	10/19/2011	Vassilis	2+	Lydia	code to download and process is done and Iceland can make the data available. Awaiting data.		
<b>Pat</b>								
	Overview plots - web behaviour - browser will keep a copy of the image will not always reloaded	12/30/2011	Pat	0	Pat	in progress		
4458	Create a set of Benchmark Tests against IDL future versions (now for v8.2 beta). Run these tests and produce a report. In addition present this report to Exelis in a web conference with a demo of TDAS. Benchmark Tests should include tests for PC, Mac (leopard and lion) and Linux O/S.	3/21/2012	David	1	Pat	Initial Test List complete and will be reviewed 5/14 (50% Time)		
4470	Pre-deployment summary plot QA script	1/4/2012	Jim L	1	Pat	Check that summary plots are produced, and that they're roughly correct, before pushing updates into production. In progress		

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4627a	SST: Need to do some pre-processing on GEANT4 output to make it easier for Drew to use files.	5/17/2012	Vassilis	1	Pat	program is running		
4508	GUI xy axis: improve aesthetic ticks	2/9/2012	Pat	1	Pat	Formerly QA112, QA276. I'm not really happy with the way that the aesthetic ticks option performs if you request more ticks than the number of orders of magnitude visible on a log axis. For example, on a plot of 1-1000, it will correctly select major ticks at 10 & 100, but you can't make it put more than 2 major ticks on the axis with that range. It seems like it would make sense for it to be able to put major ticks at $10^{1.5}$ and $10^{2.5}$ . Or if the ticks are not in scientific notation, maybe put the ticks at the nearest round number to $30(10^{1.47})$ and $300(10^{2.47})$ .	1-2 days	
4516	Can't save ISTP or WIND config params from GUI	2/14/2012	Ben	1	Pat	Changes persist in current session, need to write to config file & read same config file before loading ISTP or WIND data. Formerly QA130.	1/2 - 1 day	