Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E; crib; script; suite; UG; DevG; Qref; AdmG
	To be Assigned or Discussed							
4348	It was suggested that we allocate multiple processors to speed up overview plots. But this would only speed things up if we modified our overview processing scripts so that they're executed in parallel. My thinking is that it would be a much smaller modification to just adjust the multi-threading settings on IDL, rather than making the changes to run each overview probe in parallel.	8/24/2011	Pat	?	?	Run an Experiment after VM Migration is completed.		
4449	Overview plots - web behaviour	12/30/2011	Pat	0	Emmanuel?	Modify web server config to send cache control headers, so clients can detect stale files that need to be reloaded.		
4454	Plot templates (autoplot version, different from TDAS templates)	12/5/2011	John Bonnell	?	?			
4462	GUI and Illustrator	2/28/2012	Pat / Aaron	?	?	For discussion with Vassilis (Pat's email)		
4463	SST new Cal in GUI and make new SST Cal standard	3/22/2012	Vassilis	?	?	For discussion with Vassilis		
4465								
4466								
	v7.0 QA Tasks for Review with Vassilis							
4501	Documentation links from THEMIS web site should be http: instead of ftp: links.	2/2/2012	Jim L			Mac Safari users had trouble downloading users guide, etc. during a TDAS training session. FTP links not firewall-friendly.		
4502	FTP site access	2/2/2012	David		David, IT	Any way to make THEMIS FTP site more accessible to Mac/Safari users?		
4500	Velocity cotrans between non-inertial systems	2/2/2012	John Bonnell			John Bonnell had some questions about how TDAS transforms velocity between inertial and non-inertial systems as well as some ideas about how to make these features more useful to scientists.		
4495	Cotrans routines not checking st_type to warn about cotransing velocities	1/21/2012	Jim L					
4497	Need axis titles for the GUI. This is a pretty big limitation insofar as almost all plots end up combining component labels with axis titles. (Often labels on one side and axis titles on the other.)	1/27/2012	Pat			Post-TDAS 7.	1 week?	
4498	sst contamination removal: excessive console output if no bins selected	1/30/2012	Jim L			Noticed in CL contamination test. May be hard to move that warning out of the loop.. Post-TDAS 7, if at all.		
4499	Greenland GMAG stations -- move data to standard location thg/l2/mag ?	1/31/2012	Tami			Post TDAS 7.		
4503	thm_load_fgm does not throw error for invalid probe, only prints a message…should this be a more severe error?	2/3/2012	Ben			Probably the case for all themis load routines. Not covered in any CL test scripts as far as I can tell.		
	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	**new Arthemis offsets sent to Karl-Heinz on 11/21/11; reporcessing after AGU for the STATE**		

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4080	Attitude Determination next few months	6/21/2010	Hannes	1	Hannes			
4472	Inter-spacecraft FGM calibration for ARTEMIS	1/4/2012	Vassilis	1	Hannes			
2074c	quality flag for FGM data		Vassilis	2	Hannes	quality flags for FGM data: Hannes talked to Ferdinand and suggests some flags in the state CDF: times when eclipse spin model adjustments were performed; times when spin fit & FGL data used to refine the eclipse spin model; times when V03 attitude corrections are available; times when spin fit timing had problems. Some of these flags already present in state CDF spin model variables. JWL will document in L1 file definition document. Final item not so easy, since we have trouble even detecting the timing problem in spin fits. Keep task open, **Vassilis says we can come back to it when we have clarity on the spin fit timing.**		
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							
4421d	User's Guide			1	Aaron	add reference to thm_soc_135_time_conventions document (QA prep)		
4493	2D slices, 1.5D Pitch Angle Distributions	1/23/2012	Vassilis	1	Aaron	We need collapsed BV plots. I.e., we often do not care about gyrovelocity direction but only pitch angle direction. The electrons especially (but sometime ions too) are gyrotropic. Then we can increase the counting statistics if all the look directions with the same pitch angle (but different phases) are averaged into a single point. After QA.		
4494	2D slices, 2D Pitch Angle Distributions	1/23/2012	Vassilis	1	Aaron	We sometimes need cuts in a very special direction: B-M, 2D cut, where the P direction is normal to a specific, user-specified N direction. The N direction needs to be specified by the user as (1,0,0) or (0,0,1) etc. Then the cut would be made such that M isalong the NxB direction, such that M,N,B form an orthogonal system. After QA.		
4441	bugs in tplots handling of labels	11/23/2011	Aaron	1	Aaron			

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4441a	It looks like the LABFLAG option, which controls where y-azis labels are placed in tplot, is not applied correctly for compound variables. Specifically, the option to draw evenly spaced labels doesn't account for the labels from all the component tplot variables and end up drawing them on top of each other.	11/23/2011	Aaron	1	Aaron			
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.		
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 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.	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		
4544	If I have a list of panels, with the page locked to the top panel. If I remove the top panel it will lock to the panel at the bottom of the list instead of the next panel in the list. It makes more sense that it goes through the list in order when trying to lock, rather than jumping around.	3/14/2012	Pat	1	Aaron			
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		
4543	Axis options: With "bound autoscaling" or "floating center w/ span", allow units other than seconds for a time axis.	3/14/2012	Pat	2	Aaron	Floating center/span not very useful; probably exists only because SPLASH had it. Perhaps it could be removed?		
4529	Remove items from GUI menus -- desensitized, cannot or probably will not implement these features.			2	Aaron	print preview, print multiple files, undo/redo,track additional variables		
	Ben							
3093	Automate processing of eclipse sunpulse data from FGM team	2/22/2010	Jim L	1	Ben	**then reprocess. In progress**		
4466	Documentation for mirror site admins	12/14/2011	David	2	Ben	Sample scripts, suggested config for ssh, rsync,firewalls. Add to THEMIS-ARTEMIS admin guide? Japan and France contacted, awaiting reply.		
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	2	Ben	**Save v7.0 templates and saved files.**		
4455	Developer's Guide - Plug in Section - How to do, QA, Suites, Scripts, watch out fors (like erg)	3/21/2012	Jim L	2	Ben	in progress		
4532	Developer's guide update re: "touched" properties, standard way of tracking which settings were changed at user's request.	2/27/2012	Pat	2	Ben	with 4455		

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4200	Yuri has generated a 3 parameters for the THEMIS spacecraft L,L*,Mlat. These parameters are very useful scientifically. The task would be to archive these parameters in CDF and add a load routine in TDAS to read them. Currently, the data will be made available to us by Yuri via tab separated ascii files.	1/19/2011	Yuri Shprits	2	Ben	part of the state cdf On hold, after QA.		
	Cindy							
4489	TDAS cotrans to magnetic coordinates?	1/12/2012	Cindy	2	Cindy	After TDAS 7.0		
	Jim L							
4458	Horae (rsync server for mirror sites) is dying and needs to be migrated to a VM ASAP.	12/8/2011	Jon L	0	Jim L	Use new UCLA mirror site as test case for new server, or maybe Chile since UCLA will take a while to set up.		
4421b	L1 File Definitions			1	Jim L	add reference to thm_soc_135_time_conventions document (QA prep)		
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. On hold, after QA	3-4 weeks depending on pri zero tasks	
4326b	Then for Particles and Spin Fits	8/18/2011	Vassilis	0	Jim L	in progress - dependent on 4034a2. On hold, after QA.		
4326c	reprocessed	8/18/2011	Vassilis	0	Jim L	**on hold 3093 is done (task 3093 assigned to Ben)**		
4142	issue with FGS processing - timestamps	9/30/2010	Vassilis	0	Jim L	not trivial	3-5 days	Y
2266	Timing of Spin Fit data	10/16/2009	Jim McFadden	0	Jim L	see 4142		
	Jim M							
4456	GET_MOMENT3D is bombing when it calls STORE_DATA.	3/7/2012	Peter	0	Jim M	Jim L: I tried to reproduce the error, but load_3dp_data does not exist in TDAS. Maybe you're familiar enough with some of the other missions under ssl_general to troubleshoot this...if not, maybe you can tell us at least who's responsible for that code, so we can let them handle it.		
4457	I am not able to load Wind PM files. The code is so convoluted, I can't figure out where things are going awry, but the path it ultimately tries is invalid.	3/7/2012	Peter	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	steps: Create the Table Image, Create the CDI Commands, Create the IDPU Commands, Create the raw packets that go to the MOC for uplink **Have code for reading maps into memory, working on outputting IDPU commands sst angular maps and esa energy maps part done week of 3/26-3/30. Then flatsat testing.**		
	Lydia							
4358	Every 6 months check that the UCLA Mag Cal have not changed.	9/6/2011	David	0	Lydia	Next October 2012		

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4460	modify scripts using rsync to call /usr/bin/rsync rather than /usr/local/bin/rsync Clarina says she has restored /usr/local/bin/rsync so the scripts should run correctly at the moment, but making the modification will mean there are less likely to be problems in the future. The modification will be very quick - probably only 15 minutes to update the scripts and then a few minutes over the next days to ensure they are running correctly. I can make the changes as soon as we are back to allowing SVN commits.	3/21/2012	Lydia	0	Lydia			
4421a	Developers Guide			1	Lydia	add reference to thm_soc_135_time_conventions document (QA prep)		
4421c	L2 File Definitions			1	Lydia	add reference to thm_soc_135_time_conventions document (QA prep)		
4481	New data product, AE index from THEMIS+std sites	1/9/2012	Vassilis	1	Lydia	talk to Vassilis		
4274	Bob Clauer mentioned that he was interested in importing his Antarctic gmags into TDAS.	6/30/2011	Bob Clauer	2	Lydia	From Bob 11-7-11; Both stations that were being tested at South Pole are still operating properly. We will be departing immediately after AGU for our Antarctic field season and plan to redeploy those two stations onto the East Antarctic plateau along the 40 degree magnetic meridian chain (conjugate to the west coast of Greenland). When the stations are deployed and we have exact locations, I will let you know and we can begin the process of including the data into the THEMIS data base. Data from some Antarctic sites has been made available to us in CDF form. Download script written and awaiting SVN open and then add sites to valid sites in TDAS.		
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	**Heard back from David Milling, who gave us a sample URL we can use to download CDFs with wget. Location will probably change when new server is ready.**		
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.	10/19/2011	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.		

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4409b	Dixon (DIK) (AARI, Russia)	10/19/2011	Vassilis	2+	Lydia	**Masahito Nose replied that we should contact AARI directly. Contacted Oleg Troshichev at AARI on Jan 20th. Have not heard anything back from Oleg Troshichev.**		
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		
4409h and i						**Yellowknife and Fort Churchill Initially data before 2011 was not made available for these sites. I requested access to earlier data as FCC was the site Vassilis particularly wanted for the new AE indices. The back data was made available temporarily. This data has now been downloaded and processed, so we have YKC data back to 2008-10-24 and FCC data back to 2009-10-18**		
4409l	Leirvorgur (LRV) (Iceland)	10/19/2011	Vassilis	2+	Lydia	**They have replied that we can make the data available, but should contact Masahito Nose at Kyoto WDC for access to data. Vassilis would prefer definitive data if delay is not too long. I have emailed Leirvogur asking about data delay (20th Jan). Waiting to hear back before asking Masahito Nose about data access. 3/23/12 fromLydia: Need to check with Vassilis whether he wants definitive or preliminary data. One minute resolution definitive data is updated at the beginning of each month, one second preliminary data is updated hourly. After decision on definitive/preliminary next step is to contact Masahito Nose to request access to the data.**		
4409m	SNKQ	10/19/2011	Vassilis	2+	Lydia	SNKQ is confirmed to be the same site as SNK. We already get this data. **There seems to be an issue with data availability at the moment, but this is a problem at their end.** Nothing needs to be done. We gat data from Alberta.		
	Pat							
4471	Support TT2000 CDF time format in cdf2tplot	1/4/2012	RBSP	1	Pat	should complete by May 2012		
4477	Reprocess SLP data for 2012 leap second	1/9/2012	Jim L	1	Pat	Pre-2012 files also need reprocessing for update to ICY/SPICE kernel. After QA, due end of June 2012	1-2 hrs	
4460	Add New Routines from Lynn Wilson	3/22/2012	Vassilis	1	Pat	also lasp code?		
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			