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												
4425	Removing Duplicate procedures	11/3/11	Pat		Pat - Aaron	Reviewd Aaron's notes and list next S/W meeting 11/21							
4435	The wavelet options widget uses the time range set in tplot as the default. It should look at the active data or time range stored in the gui instead.	11/16/11	Aaron	?	?								
4436	The dproc method of the loaded data object has a line to copy the tplot variable being operated on before the wavelet is produced. However, the new variable name is always identical to the original name. If unintentional then it should be fixed, otherwise we can remove the line altogether.	11/16/11	Aaron	?	?								
	Oldies for Discussion - Du Jour												
760	It is somewhat confusing to the user about the zoom in and zoom out of the page. Another way to make this clearer, might be to draw a border around the draw area, so that the user is more aware of the difference between the two. We'll also have another wa						2 hrs						
764	Add widget to allow user to set space between labels in axis options label tab						1 day						
778	Need capability to read in ASCII, CDF?, SPLASH files. IDL has a built in widget to specify ASCII formats.					write 3-D distributions then extend to GUI	3 weeks						
799	Add '*' shortcut for navigating the tree widget						tbd						
802	Would be nice to have a THEMIS color palette quickly available, maybe a dropdown menu with the 5 themis colors, or a check box to say use 5 default colors?												
803	Would be nice to have a way to move different panels from one window to another												
805	Implement Undo/Redo												
	General												
	Harald reports that Calgary changed their data server in early September, and downloads started failing after that. Lydia made changes to the GMAG download scripts, which seem to be working. Changes in progress for ASI download scripts, should take about a week to finish downloading ASI files and check for anything missing.	10/31/11	Jim L		Harald								
	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								
4080	Attitude Determination next few months	6/21/10	Hannes	1	Hannes								
	Aaron												
4429	add support for new pos/vel and spin model variables to thm_load_state, both for command-line and GUI	11/8/11	Jim L	1	Aaron								
4429a	Check for the presence of slp data for coordinate transforms and warn or prompt the user if it is not present.	11/8/11	Jim L	1	Aaron		6 hrs						
4429b	Check the time range when verifying presence of support data and prompt the user if it is insufficient.	11/8/11	Jim L	1	Aaron		4 hrs						
4429c	Ensure that added features are replay correctly for Themis save files.	11/8/11	Jim L	1	Aaron		4 hrs						
692	"support additional time formats for Save Data As ASCII"?	11/7/11	Oldie	1	Aaron	**separate list of formats for save data instead of use axis annotation list**							

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2135	I didn't realize the cotrans messed up the velocities for earth centered coordinates. Maybe what we really need to do is modify cotrans so that it correctly transforms velocities. Users can incorrectly transform velocities just as easily using thm_cotrans on the command line, as they can using the coord keyword.		Pat/Jim L	3	Aaron	checking that the code to recognize velocity and acceleration components when performing non-inertial transformations works correctly for moon-based coordinates.							
2063	Problem with edit3dbins is being caused by IDL's mouse system variable not being updated correctly on Macs. The ctime procedure, used to interactively select a time from a tplot window, relies on this variable to determine when a selection has been made in the tplot window. If the variable is never updated then ctime gets caught in an infinite loop. It's unclear whether this is specific to a particular OS version, but the routine should probably be modified at some point to maximize compatibility with Macs. In the meantime the alternate method of calling gettime that I copied you on yesterday should provide a temporary way around this bug.		Aaron	3	Aaron	verify note in quick reference and users guide and then task will be closed							
Ben													
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 below	10/17/11	Jim L	1	Ben	in progress - tool back into development phase							
4403b	integration with process_lzp_dir (L0->L1) pipeline	10/17/11	Jim L	1	Ben	awaiting 4403a							
4403c	reprocess entire mission to clean up L1 ESA and SST product	10/17/11	Jim L	1	Ben	wait until after AGU (12/11)							
4437	Move Ephemeris Processing to TMTOOLS.	11/17/11	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 susecptible. 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 analysis routines		Jim L	2	Ben								
Jim L													
4385	strange patterns in SST data	9/26/11	Xuzhi	0	Jim L	**Now seeing similar issue in ESA data - just monitor.**							
4369	THEMIS Leap Second Discussion	9/15/11	Vassilis - Jim L	0	Jim L	draft document published. **Awaiting feedback from Harald and Bryce.**							
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 - verify tensor quantities are manipulated properly**							
4034a2	thm_parts_moments update (spin moments mods)	11/22/10	Vassilis	1	Jim L	initial simple way, final fix is to fix esa and sst 3D data structures							
Jim M													
4419	Reprocess overview plots with automated sun contamination removal?	10/26/11	Pat	0	Jim M	**Awaiting fix from Pat for TH-C before resumming the reprocessing.**							

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4412	Out of memory problem loading HSK data for long timespan	10/28/01	John Bonnell	0	Jim M	**sent John diagnostic code to run; from Jim to John 11-2-11: So far, The program never seems to use more than 400Mbytes of memory, at least as far as I can tell? Can you run the attached version and send the IDL output to me, in a journal file? It just has a couple of statements included, help, /memory, which checks how much memory is being used, and has been used, and get_max_memblock2, which is a program that we wrote to check to see how big an array you can create.**							
4334d	Danaid Migration - testing and Migration	8/22/11	David	0	Jim M	**in progress**							
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 **Have code for reading maps into memory, working on outputting IDPU commands.**							
	Lydia												
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.							
4409a	Abisko (ABK) (Sweden)	10/19/11	Vassilis	2+	Lydia	**Permission granted to access data through INTERMAGNET. Awaiting a response from Gerhard Schwarz as to the PI, Affiliation, Acknowledgement, Rules of Use information to include in CDF and on data policy website. (Email sent 14th Nov) In process of writing script to download data. In process of writing script to process data to CDF.**							
4409h	Yellowknife (YKC) (CANMOS/Geological Survey of Canada)	10/19/11	Vassilis	2+	Lydia	**Permission granted to access data through INTERMAGNET. Awaiting a response regarding PI, Affiliation, Acknowledgement etc. Email sent 16th Nov. FCC, YKC can be downloaded and processed with the same scripts as ABK. These scripts are in progress.**							
4409i	Fort Churchill (FCC) (CANMOS/Geological Survey of Canada)	10/19/11	Vassilis	2+	Lydia	ss 4409h							
4409k	Narsarsuaq (NAQ) (DTU, Denmark)	10/19/11	Vassilis	2+	Lydia	**Want to change cdf_save_vars to correctly write epoch attributes as CDF_EPOCH before starting the process to produce Greenland CDFs.**							
4409n	Greenland Scripts	10/19/11	Vassilis	2+	Lydia	**see 4409k**							
	Pat												
4420	reprocessed slp data in a different way	11/1/11	Sabine	0	Pat								
4138f	Run simulation for range of initial positions around the full sphere.	9/17/10	Davin	1	Pat	**Reeceived Data from Rob Lillis - check the mods to see if they work and if so start simulations**							
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 - working well and will show Vassilis next week**							
4355	IDL-VM checkout	8/30/11	Yoshimasa - lugonet	1	Pat	**another error - bug analysis; review list of duplicate name modules at next S/W meeting**							

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4433	Is there was a way to specify tick marks on the z axis in tplot and whether the ticks themselves could be drawn. It looks like the procedure responsible for drawing the z axis does not include these options, although they are basic IDL plotting options. We would simply need to add the respective keywords to the procedure's call and they could be passed through to the plotting routine with the usual options.	11/14/11	Drew - UCLA	2	Pat	**Vassilis** was under the impression that they are automatically accepted like all standard keywords. Is that true from your experience? **Jim M**: I don't think that you can pass standard keywords through tplot to the plot routine; instead you use the options routine to set up the options for a given tplot variable, and then tplot should pick that up. something like options, 'thb_xxx_xxx', 'zticklen', 5. **Aaron**: Currently tplot only picks up the 'zticks' option, which controls how many ticks are automatically used by IDL. Users can add other plotting options such as zticklen but there's no code to pull them from the options structure so they end up boing ignored. **Pat:** draw_color_scale.pro is the routine that draws the z-axis for a tplot spectrogram, but it doesn't look like draw_color_scale supports the normal set of options. The settings it does support are: zrange zlog ztitle zticks zposition zoffset no_color_scale. All of these would need to be set using the options keyword. I imagine that zticks, zposition, & zoffset could be used to configure z tick settings. Another possibility would be to use no_color_scale to turn off the z-axis then you could draw it yourself by calling draw_color_scale manually.							