Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide
	To be Assigned or Discussed													
4361	is there a difference in the definitions of the two cotrans (fdcops and tdas) and if not, which one is right?	9/8/11	Cindy - Xiaojia		Jim M									
4362 4363	First Themis subscriber from CZ - Charles Univ Prague store_data overwrites the value of the 'verbose' keyword with the default from tplot. This probably doesn't account for much of the console "spam" we get, but it should still be fixed so that the keyword is functional. Also the 'verbose' keyword is not passed through to store_data in the cdf_info_to_tplot routine	9/8/11	Jaroslav Urbar Aaron	1	Aaron	just announce								
4366	Not a high priority issue but I noticed a problem trying to log in and use x-windows tunneling. I was trying to run the SSL version of idlde. First I log into apollo from my desktop at ucla: ssh -X apollo.ssl.berkeley.edu, then I log into astraea from apollo(because IDL is disabled on apollo, for some reason): ssh astraea -X. The error I get is: /usr/openwin/bin/xset: Command not found. And when I try to call idlde, it fails.I type: "which xset", to find the location of xset and it tells me that xset is not stored at the location that ssh is looking: /usr/X11R6/bin/xset	9/8/11	Pat		ΙΤ									
	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	After 4018a for Artemis is complete will work on spin phase and axis offsets								
4034b	Ferdinand sent was an attempt on his part to automate the shadow processing. He wanted feedback whether the products produced are adequate and if the code is amenable to automation. We can pick it up with him once you have gone through it.	4/14/10	Vassilis	1	Hannes	Waiting for feedback from Ferdinand about state of inner probe eclipse models, long & short eclipse models								
2082a	Spin modeling during shadows BugZid=43		Vassilis	2	Hannes	Jim L to write routine. Hannes send info.								
	Aaron			1 1			}							
4332	Slices Mods Keyword forces a load, SST warning to interpolate	8/22/11	Vassilis	1	Aaron									
4330	Andre stopped by again yesterday to mention that everything looked good. He did make a suggestion, which I agree with, to change the keyword that controls slice type ("TYPE") since the same keyword is already used in the load routine and it could get confusing.	8/19/11	Andrea	1	Aaron									
4335a	Perp_xz, perp_yz, xz,yz cannot be selected. I guess that changing the orientation vector below helps solving these problems? A friendly instruction might be helpful for new users like me.	8/22/11	Shanshan	1	Aaron	Discuss at next S/W Meeting								
4335b	I do not understand why there is a 'Generate' button and no 'Save' button. I can only check plots after I exported all of them, but I cannot press 'export all' directly because I have to generate the plots first and then export them. Every time I change some parameters and press 'export all' directly, I find those plots exported are the same with the old parameters. I find it a little inconvenient because I naturally would assume the new plots be according to new parameters.	8/22/11	Shanshan	1	Aaron	Discuss at next S/W Meeting								

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	}						, ,	_
							Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide
4335c	when I press the '?' button, the size of the popped-out window is too	8/22/11	Shanshan	1	Aaron									
	small to contain all the information it actually included.													
4339	Its plot comes up and erases the tplot time series plots. Could you make sure it opens a separate window?	8/22/11	Vassilis	1	Aaron				+					
4341	It tried to avoid smoothing but it seems to have smoothed when it shouldn't.	8/22/11	Vassilis	1	Aaron				1					
4342	The autorange did not autorange when limited the energy in 2Dinterpol but worked for Geometric.	8/22/11	Vassilis	1	Aaron	in progress								
4305	General Slices feedback from UCLA (Stefan, Andrei, Shanshan and Xuzhi) and UCB (Jim McFadden)	8/1/11	Vassilis	1	Aaron	update the crib and users guide as needed								
4340	Anything you can do to accelerate the geometric method?	8/22/11	Vassilis	1	Aaron	discuss at S/W meeting								
	Ben													
4334 4214	Python Migration - testing and Migration THEMIS Pipeline proof of concept regression tests	8/22/11	David	0	Ben Ben	in progress								
	VC->L0	3/23/11	Jim L	1	Ben	in progress;				+			+}	
4214b	LO->L1	3/23/11	Jim L	1	Ben	in progress			1					[
4214d	empermeris->state v00	3/23/11	Jim L	1	Ben	exercised state v2; Jim L to take a hand in this								
4001	Document: Administrators Guide	3/1/11	David	1	Ben									
4001a	Review Tim Quinn's scripts and update admin guide for input and output locations. (VC->L0->L1)	8/26/11	Jim L	1	Ben	in progress								
4001b	update admin guide for input and output locations L1->L2					in progress								
	Jim L									ļ				{
4334a 4310	Python Migration - testing and Migration state files: including P1, P2 SSE and SEL coordinates	8/22/11 8/8/11	David Vassilis	0	Jim L Jim L	in progress							ļ!	<u>}</u>
	take Jasper's code and incorporate into thm cotrans	8/8/11	Vassilis	0	Jim L								<u> </u>	
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									
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 on 9/1/11; earliest 9/19-9/23								
	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								
	Reprocess state CDFs for entire mission The ARTEMIS science team is keen to have a look at the most	8/8/11 8/18/11	Vassilis Vassilis	0	Jim L Jim L	The second second second second second				ļ		ļ		
40200	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.	0/10/11	Vassiiis	U	JIII L	in progress - Ferdinands code not working on all eclipses; Spin model for Artemis probes expended fuel. Awaiting info from FGM Team								
4326b	Then for Particles	8/18/11	Vassilis	0	Jim L									
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 L									
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 L	On hold								

		Task Description	Date Opened	Reported By	Pri	Assigned To	Notes								_
4305       0.470 v vii fearured - sindbark dilly vee didung AT 00       0 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>Estimate</th> <th>A&amp;E</th> <th>Crib</th> <th>QA Suite or Script</th> <th>UG</th> <th>Qref</th> <th>Adm Guide</th> <th>Dev Guide</th>								Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide
box       cut to one up with a list of DPU commands, we may need and covert in attributed and the option information in the cut in and option information.       0711       Jin L       1       Ain L         4867       protects, find and covert information in the cut on the cut information.       0711       Jin L       1       Ain L       Information in the cut information.       Information information.       Information. <td>4365b</td> <td>not, JWL will resurrect a "cmd2raw" utility we used during I&amp;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</td> <td>9/8/11</td> <td>Vassilis</td> <td>0</td> <td>Jim L</td> <td>On hold</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	4365b	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	9/8/11	Vassilis	0	Jim L	On hold								
<ul> <li>4331 included accupted warnings overnight from the automated bit 1911 Jim L</li> <li>4 Jim L</li> &lt;</ul>	4365c	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	9/8/11	Vassilis	0		On hold								
edimitive explement processing. It LOSIS like a couple of files from 2000 of pt 1, 210000 of 11, 2000 of	4367	python2 kernel traps		Jim L	1	Jim L				[					
4334       Python Migration 1-12.2       8/2211       David       0       Jim M         2283b       There is another aspect to this problem. Dead-time corrections are asvere for ion ESA SW data and there are no dead-time corrections are for ion ESA SW data and there are no dead-time corrections are for ion ESA SW data and there are no dead-time corrections are for done Shas W data and there are no dead-time corrections for ground-processed moments. This involves calculating the dead-time correction after the fact. David developed an algorithm will have to be developed an algorithm may not work directly due to differences in energy grid, with 4 different points per output energy channel. In progress: Jim M 026/11: Thanks for looking at this. It also meeting this the SW may also need some correction for the fact worked out at the same time. "Send old code to Pat **       8/8/11       Vassilis       1       Jim M       discuss with Vassilis       2       Jim M         4312       Quality flags for efi are wrong including electric field offsets in computation. On hold until Michael Hartinger sorts out.       8/8/11       Vassilis       1       Jim M       discuss with Vassilis       2       Jim M         4302       "bad" themis thg I2 flies - mag flies       8/1/11       Tami       2       Jim M       multiple versions of idI_make_cdf       2       2       Jim M         4302       "bad" themis thg I2 flies - mag flies       8/1/11       Tami       2       Jim M       multiple versions of idI_make_cdf       2       2       Jim M </td <td>4331</td> <td>definitive ephemeris processing. It looks like a couple of files from 2008 got updated: THEMIS_B_EPHDEF60_08135_000100_08141_210000 THEMIS_B_EPHDEF60_08141_210100_08148_140000 THEMIS_B_EPHDEF60_11203_020100_11229_110000 was also picked up (as expected), and processed normally as far as I can tell. I haven't tracked down the exact problem with the 2008 files that were also processed last night. It's possible that my script just isn't working properly or the case when an ephemeris file is updated, but the preceding and following files are not. But it appears, from the processing logs, that the data in those two files may have differed from what was there previously. Otherwise, it should have detected that the updated products were identical to the published products, and skipped the update. Any idea why these files might have been updated, and what (if anything) was different about the updated version?</td> <td>8/19/11</td> <td>Jim L</td> <td>1</td> <td>Jim L</td> <td>and then you will do a manuel</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	4331	definitive ephemeris processing. It looks like a couple of files from 2008 got updated: THEMIS_B_EPHDEF60_08135_000100_08141_210000 THEMIS_B_EPHDEF60_08141_210100_08148_140000 THEMIS_B_EPHDEF60_11203_020100_11229_110000 was also picked up (as expected), and processed normally as far as I can tell. I haven't tracked down the exact problem with the 2008 files that were also processed last night. It's possible that my script just isn't working properly or the case when an ephemeris file is updated, but the preceding and following files are not. But it appears, from the processing logs, that the data in those two files may have differed from what was there previously. Otherwise, it should have detected that the updated products were identical to the published products, and skipped the update. Any idea why these files might have been updated, and what (if anything) was different about the updated version?	8/19/11	Jim L	1	Jim L	and then you will do a manuel								
2283 b       There is another aspect to this problem. Dead-time corrections are for on DSA W data and there are no dead-time corrections are for on DSA W data and there are no dead-time corrections are for on DSA P. That algorithm will have to be developed that does this correction after the fact. Davin developed an algorithm will have to be developed an algorithm and the direct on Smillary delection onboard moments in the SW may also need some activities and its correction showed more what he had in mind for increding at this. It also needs one corrections – this showed and also be worked out at the same time. "Send old code to Pat **       Jim M       Jim M       Jim MeEadden showed me what he had in mind for improving the dead-time correction have and the period to the dead-time correction. This involves calculating this the scalar quantities same to be nore stable. If the scalar quantities same to be more stable. If the dead-time correction, while the scalar quantities same to be more stable. If the dead-time correction, while the scalar quantities same to be more stable. If the dead-time correction, while the scalar quantities same to be more stable. If the dead-time correction, while the scalar quantities same to be more stable. If the dead-time correction, while the scalar quantities same to be more stable. If the dead-time correction, while the scalar quantities same to be more stable. If the dead-time correction, while the scalar quantities same to be more stable. If the dead-time correction, while the scalar quantities same to be more stable. If the dead-time correction, while the scalar quantities same to be more stable. If the dead-time correction for particle data	4334h		8/22/11	David	0	.lim M									
computation. On hold until Michael Hartinger sorts out.         4233       Angular Correction for particle data - use Jim McFadden's code if       1/9/11       Vassilis       2       Jim M         4302       "bad" themis thg I2 files - mag files       8/1/11       Tami       2       Jim M       multiple versions of idl_make_cdf         Jim M to look at       Lydia       Lydia       Lydia       Lydia       Lydia		There is another aspect to this problem. Dead-time corrections are			1										
4233       Angular Correction for particle data - use Jim McFadden's code if       1/9/11       Vassilis       2       Jim M         4302       "bad" themis thg I2 files - mag files       8/1/11       Tami       2       Jim M       multiple versions of idl_make_cdf         Jim M       to look at       Jim M to look at       Jim M to look at       Jim M to look at		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					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. I'll check this out. eta 9/6 then Jim Mc								
Jim M to look at	4312	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. <b>**Send old code to Pat **</b>	8/8/11	Vassilis	1	Jim M	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. I'll check this out. eta 9/6 then Jim Mc Fadden approval								
		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. <b>**Send old code to Pat **</b> Quality flags for efi are wrong including electric field offsets in computation. On hold until Michael Hartinger sorts out. Angular Correction for particle data - use Jim McFadden's code if			1		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. I'll check this out. eta 9/6 then Jim Mc Fadden approval								
	4233	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. <b>**Send old code to Pat **</b> Quality flags for efi are wrong including electric field offsets in computation. On hold until Michael Hartinger sorts out. Angular Correction for particle data - use Jim McFadden's code if available	1/9/11	Vassilis		Jim M	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. I'll check this out, eta 9/6 then Jim Mc Fadden approval discuss with Vassilis								
	4233	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. <b>**Send old code to Pat **</b> Quality flags for efi are wrong including electric field offsets in computation. On hold until Michael Hartinger sorts out. Angular Correction for particle data - use Jim McFadden's code if available "bad" themis thg I2 files - mag files	1/9/11	Vassilis		Jim M	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. I'll check this out, eta 9/6 then Jim Mc Fadden approval discuss with Vassilis								

					-	Notes	E-dimente		0.11	QA Suite		0	Adm	Dev
							Estimate	A&E	Crib	or Script	UG	Qref	Guide	Guide
כ יו וו כ ע ע ע ע	got a question from a grad student(Shan shan) that made me think of a missing feature. The routine tinterpol_mxn should have a repeat/nearest neighbor' option when interpolating. That is, instead of picking a value between the two adjacent points when nterpolating, it should repeat the value of the nearest point. This came up when Shan Shan was trying to interpolate a bit-packed variable(the ROI data), if you use normal interpolation on this type of variable, the result will be garbage. It looks like this routine gets a lot of usage so I think it would be a fairly visible improvement.	8/23/11	Pat	1	Lydia	in progress								
t F s tt F s	was loading some FFT data in the GUI and just wanted to check that the behaviour was correct. If I attempt to load fff_32_adc it prings up a message: THM_UI_LOADED_DATA::ADDDATA> Problem loading: tha_fff_32. GUI data model does not currently support data with dimensions greater than 2. (and also messages for ha_ffp_32 and tha_ffw_32) But it does show fff/p/w_adc, src, hed as having loaded. I don't actually know what any of these quantities are so I'm not sure if this is what it should be doing. (This doesn't seem to happen in v.6)	8/26/11	Lydia	1	Lydia	tplot and gui								
s s t f	Astraea GMAG script migration plan I noticed that some of the scripts that are running are not on the SVN. I'd like to move the scripts over to SVN and make sure everything is running correctly pefore the migration. Existing problems, such as with the EPO processing warnings, will just make the migration more difficult to est.	8/30/11	Lydia	1	Lydia	in progress								
4343 E s	Bay Mills was installed backwards, where sensor north is facing south. Apart from sending someone to rotate the sensor 180 degrees, there is nothing that we can fix. What we can do is add a matrix transformation and reprocess the data.	8/22/11	Shanshan	1	Lydia	in progress - Shanshan to verify for Bay mills; PINE and HOTS analysis ongoing								
r F F	add MACCS gmag data from 2007 to our data archive. We already have MACCS data for some years and a process that automatically downloads it/converts to CDF. So the task would involve finding missing files from 2007 and feeding them into our pre-existing processing framework. It should be pretty straightforward, but probably non-trivial because of learning curve/unexpected details. Augsburg investigating	2/19/10	James Weygand	2	Lydia	Email requesting other 2007 sites to be put on ftp site. From Erik at Augsburg: We are indeed moving information from an older computer to a newer one, with both currently in service and with the general designator space.augsburg.edu now pointing at the newer computer leaving the old 'space' computer as yspace, as you noticed. We are indeed moving information from an older computer to a newer one, with both currently in service and with the general designator space.augsburg.edu now pointing at the newer computer leaving the old 'space' computer as yspace, as you noticed.								
2175 L	2 File Definitions Document	3/1/11	David	2	Lydia	25% time - in progress	[							

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes								
					J J J		Estimate	A&E	Crib	QA Suite or Script	UG	Qref	Adm Guide	Dev Guide
	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									
4360	GMAG updates to Administrators Guide	9/6/11	David	2	Lydia									
	Pat													
4138f	Run simulation for range of initial positions around the full sphere.	9/17/10	Davin	1	Pat	Software to be purchased and build the geometry by hand. (working with Rob Lewis) in progress; anothet two weeks before testing								
	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	1	Pat	Pat has enough info to generate tables to send to the S/C, Davin to ask Peter Harvey for more info. Davin will talk to Peter next week. 7/26/11 David reminded Davin;8/22/11 Vassilis says another week								
	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 - updating code to new method								
4355	IDL-VM checkout	8/30/11	Yoshimasa -	1	Pat									
4306	Overview web page navigation	8/1/11	lugonet Vassilis	1	Pat	Emmanuel not able to do								