

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								
4929	Improve "basic" cribs		Pat		TBD	The tplot cribs under ssl_general/examples are good examples to follow for style. Cribs should be directly executable (not wrapped in a function call), with explanatory banners and comments. They should demonstrate loading raw L1 data, calibrated L1 dat		
4929	Improve "basic" cribs		Pat		TBD	Missing a basic "esa" crib		
4929	Improve "basic" cribs		Pat		Volunteers?	Still to do: asi cotrans dproc efi export fbk fft fgm fit spinfit gmag overplot scm		
4951	Inconsistent directory listing format from justice FTP server		Tami		Sysadmins?	Sometimes they get HTML formatted listing, sometimes plain ls output. Affects SPDF data product ingest process.		
4972	Unnecessary downloads when loading IUGONET data		Mini-GEM		TBD	File downloaded even when it's freshly created on local filesystem. May be related to server reporting timestamps in UTC vs. local time? IUGONET team to provide test case		
4986								
4987								
4988								
General								
	Tips of the Month		David		Jim L	Next Candidates: Lynn Wilson Routines; Eclipse auto processing; FGM Reprocessing, CDF library 3.4.1 released (fixes memory issue for Linux users), Simplified eclipse spin model corrections, new SST calibrations, specplot datagap		
4664	Laptop locks UCB and UCLA	6/6/2012	David	0	Team			
4661	I tried to load 3dp datatype pm for 2012 - the testscript says to check availability at http://sprg.ssl.berkeley.edu/data/wind/3dp/ and test different combinations. There are cdfs for 3dp pm for 2012 on that site, but the have are _v05 and don't load. Sho	6/6/2012	Lydia	1	Jim L	Wait till after WIND reprocessing and see what happens to version numbers, if they're all consistent then 5 minute change to load routine. Will not do "load highest version" -- responsibility of WIND developers.		
4464	All plug-ins for v7.10 - add a section to User's Guide for Plug-ins	3/22/2012	David	1	Jim L	Discuss at the appropriate time what the content would be. Also add a link for VM on the Software Web Page or Developers web page?		
Hannes								
4018a	New Calibration FGM parameters and spin axis offsets	5/10/2010	Hannes	1	Hannes	12/06/2012: Cal files updates, all probes from mid-August 2012 on.		
4080	Attitude Determination next few months	6/21/2010	Hannes	1	Hannes	5-24-2013 Updated for 2012-12-01 – 2013-02-21, tha, thd, the		
4472	Inter-spacecraft FGM calibration for ARTEMIS.	1/4/2012	Vassilis	1	Hannes	6/4/12 from Hannes: Artemis inter spacecraft differences show good results with current calibration		
2074c	quality flag for FGM data. Dependencies on Ben's tasks 3093 and JWL's tasks 4142 and 2266.		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 corre		
Aaron								

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4468	Ongoing - Review all commits by Davin, Peter, etc for impact to TDAS.	3/27/2012	David	0	Aaron	Provide weekly report and spreadsheet		
4970	Add Plugins menu to main menu bar, develop API routines so plugins can add their own menu items		Mini-GEM	0	Aaron			
4985	Bug fixes (handling of SST reduced data with new calibrations, sanitization routines)							
4908	Prevent unnecessary reloads of particle data		Aaron	1	Aaron	Keep track of last requested time interval in common blocks, so that gaps at beginning/end of day don't cause unnecessary reloads.		
4730	Integrate idlneturl into file_http_copy?	06/25/13	GEM-SPEDAS		Aaron	Would have to sacrifice IDL 6.3 compatibility, but most users should have upgraded by now. OK to proceed.		
4952	Obtain beta for upcoming IDL 8.3 release & evaluate for SPEDAS compatibility issues		Tami		Aaron			
4979	Integrate SST contamination removal options with particle slices code		Aaron		Aaron	Initially I thought this would be as simple as changing a couple keywords when loading the data, but it's now being performed post-load. The new code is in the SST sanitization routine for thm_part_products so it should be simple to drop a call to that i		
4968	SPEDAS wiki			1	Aaron	Slices documentation, background info & documentation for general particle processing		
4725	Generate combined ESA/SST moments in GUI	06/25/13	GEM-TDAS tutorial	2		Very preliminary at the moment, add to GUI in 6-12 months (so probably sometime in 2014)		
4929	Improve "basic" cribs		Pat	2	Aaron	sst mom part_products		
Cindy								
4153	maintenance of gmag stations "Exclude List"	10/11/2010	David	0	Cindy	Weekly on Mondays		
4358	Every 6 months check that the UCLA Mag Cal have not changed.	9/6/2011	David	0	Cindy	Check again in March 2014		
4781	GMAG station status: troubleshoot stations with no data reported				Cindy			
	Ping Sasha for status of back AE station data					Pinged 7/2013, waiting for response		
4687	Check with Ian Schofield about status of Dr. Hayashi's 1-sec STEP data set.	41369	Cindy		Cindy	2013/10/17: Data being converted now, should be available in a couple of weeks		
4975	Quick start guide for plugin developers, including design guidelines for CDFs, better documentation for time_double, file_retrieve, and other useful tools for creating load routines and GUI plugins		Mini-GEM		Cindy			
4967	SPEDAS wiki				Cindy	SPEDAS API documentation and other notes for plugin developers		
4924	Add new Alaska station and revived Arctic station to GIMA processing scripts, master CDFs, etc		Cindy		Cindy			
4743	Clean up GMAG processing scripts		Cindy	2	Cindy	many variations of wget wrappers, will be much cleaner when code is consolidated. Should also look into consolidating database schemas for the various scripts.		
4761	Add STEP polar magnetometer network (6 sites) to our data set.	9/17/2012	Vassilis		Cindy	4/04/2013: May take a year or more for Ian Schofield to collect and process Kanji Hayashi's data. Some 1-min data available for public use at step-p.dyndns.org/~khay (Dr. Hayashi's web portal).		
4481	New data product, AE index from THEMIS+std sites	1/9/2012	Vassilis	1	Cindy	awaiting Russian data 7/2/2012: Still need data from 2007-2010. 7/27/2012: Getting current data again, still waiting for older data. 12/17/2012: Older data in different formats, Sasha is getting some other people involved and expects to deliver by Sprin		

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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 pseu	10/19/2011	Vassilis	2+	Cindy			
4409b	Dixon (DIK) (AARI, Russia)	10/19/2011	Vassilis	2+	Cindy	Downloads in progress. Data from 2011 on has been made available; they have agreed to provide data back to 2007. No 1 sec data available (minimum 1 minute sample interval). Sasha pinged 04/2013.		
4409c	Cape Chelyuskin (CCS) (AARI, Russia)	10/19/2011	Vassilis	2+	Cindy	see 4409b		
4409d	Tixie Bay (TIK) (AARI, Russia)	10/19/2011	Vassilis	2+	Cindy	see 4409b		
4409e	Cape Wellen (CWE) - closed, replaced with Pebek (?) (AARI, Russia)	10/19/2011	Vassilis	2+	Cindy	see 4409b		
	Eric							
4935	Use FGS-FGL correlation, FGS-FGE correlation, and presence of spikes in dB/dt to detect timing issues in FGS data.				Eric	FGS-FGL and FGS-FGE comparisons should be performed and reported packet-by-packet. See if spikes are detectable in very low fields (e.g. ARTEMIS). Output format should be amenable to further processing. Alternate approach: compare integrals, as opposed		
4956	Detect/repair missing(?) samples near FGM range changes in both waveform and spin fit data		Vassilis		Eric			
4981	Generate GOES summary plots from GUI		Jim L		Eric			
4905	Acknowledgments for GOES data from NOAA?		Eric			Contact Howard Singer to find out who should approve acknowledgements		
4966	SPEDAS wiki				Eric	Document GOES plugin (data source, available data sets, processing notes if any)		
4974	Quick start guide for VM users (explain how to get the VM software from Exelis, how to install and start TDAS in VM)		Mini-GEM		Eric	Merge existing guide into users's guide, quick start guide, wiki		
4735	tsyganenko support in GUI	06/25/13	GEM-TDAS tutorial		Eric	Does this mean we'd have to distribute the DLM/DLL/so files with TDAS instead of providing a separate download? How would this work for the VM?		
4963	Elena Grigorenko help request		Vassilis		Eric	Use TDAS VM to plot particle distributions in phase space density.		
	Jim L							
4944	thm_load_fgm reloads and time clips state data if state is already loaded and less than a day is requested.		Pat		Jim L			
4983	Steps in plot of FGS-Tsyg -- related to timing problems or new issue?		Vassilis		Jim L			
4960	Glitches at eclipse entry/exit that look like FGM range changes; some real range changes seem to be handled improperly		Yuri K, Eric		Jim L	May be a problem with FGM L0->L1 processing and detection of range changes.		
4969	SPEDAS wiki				Jim L	Spin model and eclipse processing, L0->L1 processing		
4748	Jumps in FGS and FGL around times of FGM range changes	07/29/13			Jim L	May be a dropped sample at the time of the range change? Problem goes away with the start of the next L0 packet.		

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4142	tplot namespaces	9/30/2010	Vassilis	0	Jim L	May have fixed problem – if packet header time corresponds to spinphase between 0 and 143 degrees, timestamps need a -1 spin period correction (integration interval is V1 to V1, not MSSS to MSSS). Reprocessing L1 FIT to QA area to test.		
2266	Timing of Spin Fit data	10/16/2009	Jim McFadden	0	Jim L	See 4142 After 4764		
4921	Add data quality flags (1 minute cadence) to state CDF, similar to ROI/maneuver flags.					For example: SDT time intervals, spin rate out of bounds, boom deployments, shadows, misconfigured EEPROM tables		
4692	Repeated prompts to load STATE support data	4/12/2013	Aaron		Jim L	I'm unsure on whether or not I'm seeing the correct behavior when state support data is loaded for cotrans operations. For SSE/SEL transforms the SLP data is loaded once, kept in the gui, and the user is not prompted again. For transforms that require s		
4849	Change L0->L1 code to prevent out-of-order timestamps in iesa and isst configuration history.	1/29/2013	Nick		Jim L	Include configs from previous and next day, then clip to the desired day before writing into L1 CDFs.		
4831	Admin guide updates: eclipse spin corrections, chk_bfds_archive	1/3/2013			Jim L			
4815	Developer guide updates for GUI API, placeholders for rest of SPEDAS to plugin interface	12/7/2012	Vassilis	1				
4709	Manual eclipse processing resets "last processed" date for automated processing; some processing logs not preserved	7/24/2012	Jim L	1	Jim L	If the automated processing is up to date, and I manually reprocess a time range early in the mission, the "last processed" date will get reset to the earlier date, which could trigger an unintended reprocessing of the full mission. "last processed" date		
4716	Add examples of eclipse spin model corrections to crib sheets (fgm, efi, scm, fit, mom)	7/27/2012	Vassilis	1	Jim L	fgm, fit, mom, updated; efi, scm, new eclipse crib in progress.		
2078	bau_sunpulse_met assumes x86 endiannes (BugzID=13)		Vassilis	3	Nick	Tmtools libdecom code. On first call, do runtime call to check whether floats are big-endian or little-endian, set a static flag in that routine, then do appropriate conversion. JWL to test.		
4735	Socware ksh directory cleanup	8/24/2012	Jim L	1	Jim L	/disks/socware/thmsoc_dp_current/src/ksh out of sync with repository; some files/subdirectories not present in SVN; some junk files (emacs backups, etc)		
4326c	L1->L2 reprocessing for eclipse spin model corrections	8/18/2011	Vassilis	1	Jim L	After 4034a2, when eclipse spin model corrections are trustworthy enough to enable by default for L1->L2.		
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 "accumu	12/1/2011	Vassilis	1	Jim L	5/21/12 as per Vassilis - give it a shot; Awaiting flatsat availability - after SST table updates and ESA energy table updates. Probably will have to wait until NuStar launch/EOC. In Progress		
4451b	Modify instrument scripts to enable accumulate mode, flatsat testing	6/12/2011	Jim L	1	Jim L / Ops	When MOC support available, probably after NuStar.		
4451c	tdas mods - if accumulate mode approved discuss at S/W meeting	12/1/2011	Vassilis	1	Jim L	double chech slices and getspec as per Aaron (next up)		
4451d	Put one probe in accumulate mode and verify correct L0->L1 and L1->L2 processing with live data.	6/12/2011	Jim L	1	Jim L			
4476	Discuss thmsoc_dp_current deployment process, avoid unintended updates from trunk	1/5/2012	Jim L,David	1	Jim L	After QA, review CDF "software version" requirement with SPDF.		
4465	Diagnose, repair? Spikes in FGS data.	12/14/2011	Vassilis	1	Jim L	No code changes required. Document on web site (anomalies/watch out fors) as something to be aware of when		
2074c	quality flag for FGM data - Jim L perform analysis, define task - someone else to do development		Vassilis	1	Jim L	quality flags for FGM data: Hannes talked to Ferdinand and suggests some flags in the state CDF: times when eclipse spin		
4034a3	awaiting feedback and performing analysis	11/22/2010	Vassilis	1	Jim L	Tips of the Month at some point?		

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4236	Ferdinand P. suggests that we make available a diagnostic quantity produced by the eclipse spin modeling procedure. Add "phase" diagnostic quantity (from eclipse spin modeling process) to L1 STATE CDF, to give end users a sense of the expected angular err	5/23/2011	Ferdinand	1	Jim L		1-3 days	
2047	Separate E and B timestamps for spin fits: a) make a revised V02	before the	Vassilis	1	Jim L	Hard for SPDF to deal with, with their plotting tools - review		
4030	cross-check SST psir6 and psif data types for excess counts in psir6	4/8/2010	Jim McFadden	1	Jim L	Jim L talked to Davin and sounds like we can shut the data off. Jim L will send email on the time saved by shutting this off.		
4030b	Correct Existing Data	5/17/2010	Jim McFadden	1	Jim L	4030a prerequisite		
4030c	If scripts change - make changes to processing scripts	5/17/2010	Jim Lewis	1	Jim L	4030a prerequisite	4-5 days	
QA110	as you know we have a few folks here in our SPDF group who are using the THEMIS-B and C data for a lunar project. They have found and I've confirmed through CDAWeb, that the time stamps and associated data measurements for October, 9, 2010 THEMIS-B ESA,	2/7/2011	Tami	1	Jim L	Web Site - instruments will have a web page with "Sources of Data Anamolies". The first one being the ESA issue		
4301	"bad" themis thg l2 files - instrument files; L0->L1 processing produces incomplete/empty CDFs	8/1/2011	Tami	2	Jim L	one fixed - one priority 2 (data type VBx appeared once due to corrupted packet, produced empty CDF)		
2248	once in a while (maybe 10-20 occurrences per probe during the entire mission), the FGM range doesn't change on all three axes at once:	9/10/2009	Jim L	2	Jim L			
	Jim M							
4947	Evaluate despke algorithm from GSFC code				Jim M			
4943	Gaps and spikes in AE index as shown on summary plots.		Vassilis		Jim M	Code now in production		
4980	Adjust upper energy range of SST overview plots, multi-probe plots, and any other SST electron plots.		Vassilis		Jim M	Updated in repository, not yet in production		
4962	Reprocess THEMIS AE index & summary plots to remove spikes and gaps, fix SST energy ranges				Jim M?	After SST L2 reprocessing finishes (mid-January)		
4977	MAVEN plugin		Mini-GEM		Jim M	Start with the "boilerplate" plugin code to get a MAVEN tab implemented; "guts" of the plugin will be implemented as instrument leads develop their data products & load routines.		
4965	SPEDAS wiki				Jim M	ESA instrument info, data structures, calibration processes		
4732	Rename TDAS to SPEDAS for next release	06/25/13	GEM-SPEDAS		Jim M	Get some feedback from SVN users before committing to the repository reorg MAVEN and RBSP developers warned of impending doom 1-10-2014		
4758	Clean up s/c potential (onboard and ground), FBK and EFS data for time intervals when SDTs are running				Jim M?	Cleanup to be done in L1->L2 processing, using time intervals when SDTs were being run. Eliminate this contaminated data from summary plots and L2 data files. Time intervals to be provided by MOC and/or John Bonnell. After Jim L's task 4921.		
4927	Rename SPEDAS str_replace function to resolve conflict with Fanning's popular "Coyote graphics" IDL library.				Jim M			
4739	Investigate SVN-level access controls (e.g. keep SPEDAS developers out of ssl_general?)	07/01/13	Jim L		Jim M			
4690	thm_mom_cotrans_cltestsuite is obsolete, either needs a complete rewrite to conform to current thm_load_mom usage, or merge any non-redundant tests into existing test scripts.	03/04/13	Jim M		Jim M	This test script can be dropped. In fact, most of the "cotrans" CL test scripts should be folded into the instrument "load" CL tests, with the exception of tests like cotrans_all_combos.		
4820	Need IDL-only FITS reader code suitable for inclusion in SPEDAS	12/11/2012	Mini-GEM		Jim M	Checked into SVN, needs to be documented in developers guide.		

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4821	Use improved IDLDOC procedure to generate TDAS HTML documentation?	12/11/2012	Mini-GEM		Jim M	better format, more web-friendly? IDL 8.0+ versions OK since it won't be distributed with TDAS, only the HTML output.		
4779	SVN commit hooks for updating "Help->About" screen with current revision number. Possible for TDAS version string as well?	10/9/2012		1	Jim McT	It might be a good idea to add some functions like "get_tdas_revision" or "get_tdas_version_string", so that only a couple of files would be subject to version string updates, rather than having version string literals scattered around the TDAS code base		
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			
4694	Developers guide/admin guide update: troubleshooting SSH (SVN/rsync) access	7/6/2012	Jim L	1	Jim M	When setting up SVN access for a new user (or an old user using a new computer), or if a host key has changed, might need to do an interactive SSH login to answer the host key verification prompt before SVN or rsync will work. Dev guide due to SVN+SSH is		
4003	Document: ESA File and Calibration Processing	3/5/2010	David	1	Jim M			
4312	Quality flags for efi are wrong including electric field offsets in computation. On hold until Michael Hartinger sorts out.	8/8/2011	Vassilis	1	Jim M	discuss with Vassilis		
4208a	Enhanced MOM Instrument Web Pages	3/5/2010	David	2	Jim M	Talked to David first.		
	Nick							
4964	Populate SPEDAS wiki with content from user's guide				Nick			
4964	GOES summary plots (processing scripts, cron jobs, web site menus)				Nick	Need to update plot key and GOES acknowledgements		
4982	Can't return to GOES 24-hour plots from 2 hour plots, needs link to data availability tool		Vassilis		Nick	Need to click on "Display". Beta version updates immediately on any change, is that better? Might work better as a php page rather than the current javascript (for example, you could link directly to a particular plot).		
4984	Problem rubber-banding data that is constant – new plot Y-range of [0,1] does not necessarily include original data		Jim L		Nick			
4948	SPEDAS global configuration panel?		Jim L		Nick	Might be useful for non-plugin-specific configuration: tplot verbose level, command to launch browser, temp directory. Another tab in file configuration panel, or separate menu item for global vs. plugin config?		
4971	Crash when loading RBSP "ECT" particle data via CDAWeb		Mini-GEM		Nick	Related to 2-d array per sample?		
4961	Improve error reporting for cron jobs		Jim L		Nick?	The summary plot and AE index processing are particularly prone to misleading or confusing error reports. There is probably a lot of room for improvement in our logging and error reporting process for these and other automated processing jobs.		
	Pat							
	Updated FGM calibrations for solar array currents vs. spin phase?	5/30/2012	Vassilis	0	Pat	Last Recieved – Jan 2013. May need to remind FGM team if we go a long time without updates. Check again in mid-August 2013		
4718	Add new variables to SST L2 master CDF	06/06/13	SPDF		Pat	New SST calibrations working well enough to start making new L2 CDFs. Promoting to production 01-03-2014, will reprocess SST L2 for entire mission.		
4945	Bad formatting in tplot variable labels		Pat	2	Pat	#2 This one has been around for a while but...the formatting codes for tplot var labels have very limited fixed widths. If I print something wider, I get a bunch of "****"s. An easy way to get this is if you try to do a var_label with position in km ins		

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4978	FAST plugin		Bob Strangeway		Pat	Implement FAST plugin & gui tab; may duplicate some functionality from the CDAWeb interface but that's OK – it gives us a way to cleanly integrate any FAST-specific analysis and plotting tools, summary plots, etc.		
4929	Improve "basic" cribs		Pat		Pat	calc, trace, plotxy, plotxyz		
4973	Best way to load higher-dimensional data into GUI?				Pat	Will this require changes in tplot? How can we support high-dimension data in the GUI (to at least allow it to be loaded, and let plugins supply the visualization/rendering code?) Probably not for upcoming release, but we should at least have a credible		
4907	tplot namespaces		Pat		Pat	Add capability to create tplot variables in different namespaces (e.g. for creating tplot variables inside GUI without disturbing existing variables). Is it feasible to get this change implemented in time for the next SPEDAS release?		
2060	L2 cdf Quality Flags: for SST		Vassilis	2	Pat	Bitfields, or CDF_DOUBLE (like ESA quality flag)? Not for this reprocessing.		
4861	Code maintenance issue – GUI coordinate systems			1	Pat	But there may be a code maintenance issue since we maintain two lists of supported coordinate systems. (One in thm_ui_req_spin.pro & one in thm_ui_cotrans_new.pro I just used a comment to future programmers, but a single list would probably be more durab		
4627c	SST: We need to generate a combined spectrum product that includes the FTO(low) channel. This would be adding the FTO(low) channel to the F+FT combined spectrum that we've already created.	5/17/2012	Vassilis	2	Pat			
4267d	Write code to remove proton and electron contamination from the electron and proton distributions using data and efficiencies from the F & O channels.	6/27/2011	Pat	2	Pat	Working on noise removal, etc.		
4627e	SST: After #a-d are done, we need to reprocess SST L2 with sun contamination removed and new calibrations applied.	5/17/2012	Vassilis	2	Pat	need 4267c to be completed		
4603	make new SST Cal standard	3/22/2012	Vassilis	2	Pat	Revisit in July ** on hold **		
4717	A limitation for tplot came up for the EMIC plots. If you want to use the var_label feature(for example, to plot spacecraft position below spacecraft data) you can only put the var labels at the very bottom of the plot. In the case of EMIC, what we actu	8/2/2012	Pat	2	Pat	You can't actually do this in tplot right now. To work around this limitation for the EMIC plots, I'm going to do some tricks making separate plots in the z-buffer and concatenating them then reposting them to the z-buffer. This will work for the overvi		
4520	The bug that Drew had reported yesterday turned out to be not a bug, but because the bins that the sun decontamination code selected differed depending on the date selected and this wasn't clearly reported to the end-user. I put an informational message	2/22/2012	Pat	2	Pat			
4208b	Enhanced SST Instrument Web Pages	3/5/2010	David	2	Pat	See current ESA Instrument Web Pages - Make recommendations to Vassilis to improve.		