

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 data, and L2 data, including usage of the most common keyword parameters (probe, datatype, type, coord). They should also demonstrate how to calibrate already-loaded raw L1 data, and perhaps some examples of plotting or manipulating the data. Eclipse corrections and other more advanced analysis examples should be moved into one of the "advanced" cribs, or removed completely.		
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.		
4952	Obtain beta for upcoming IDL 8.3 release & evaluate for SPEDAS compatibility issues		Tami					
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		
4977								
4978								
4979								
4980								
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		
Aaron								
4468	Ongoing - Review all commits by Davin, Peter, etc for impact to TDAS.	3/27/2012	David	0	Aaron	Provide weekly report and spreadsheet		
4957	Slices code: coordinate keyword vs. rotation keyword		Aaron	1	Aaron	Coordinate keyword should specify well-known coordinate systems; rotation keyword should specify arbitray slice orientations relative to specified coordinate system. Current code muddles the two concepts – move rotation specifications into the code to handle the "rotation" keyword rather than "coordinate".		
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.		
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								

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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		
4970	Add Plugins menu to main menu bar, develop API routines so plugins can add their own menu items		Mini-GEM		Cindy			
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			
4976	Install & run test cases for WHAMP Fortran code at UCLA		Vassilis		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.		
	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 to samples or derivatives. Will any of this work for very low fields?		
4956	Detect/repair missing(?) samples near FGM range changes in both waveform and spin fit data		Vassilis		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			
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.		
4750	Add support for a standalone GSM->aGSM cotrans routine	08/02/13	Eric		Eric	Should accept either solar wind velocity data, or a user-provided rotation angle. Should live with other analytic transforms.		
4736	Add support for aGSM coordinates to neutral sheet model	06/27/13	Eric	2	Eric	Coding finished, verifying test results		
	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			
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.		
4142	issue with FGS processing - timestamps	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		

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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 state the user is prompted every time, unless all the required state data has been loaded manually. Might be related to thm_ui_check4spin, which never checks the spin model common block?		
	Jim M							
4947	Evaluate despoke algorithm from GSFC code				Jim M			
4943	Gaps and spikes in AE index as shown on summary plots.		Vassilis		Jim M	Looking for good all-purpose spike threshold to balance clean plots against discarding too much data.		
4962	Reprocess THEMIS AE index to remove spikes and gaps				Jim M?			
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 On hold until we're sure what the final name will be.		
	Nick							
4964	Populate SPEDAS wiki with content from user's guide				Nick			
4964	GOES summary plots (processing scripts, cron jobs, web site menus)				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. Will have to be careful to avoid premature deployment while QA-ing new master CDFs and L1->L2 code.		
4958	thm_load_esa_pot: nonstandard treatment of "datatype" keyword		Jim M		Pat	Rename datatype keyword to clarify that this is actually controlling where the spacecraft potential comes from, not the data types to load or process.		
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 path forward.		
4959	SST calibrations: exclude samples immediately before/after attenuator state changes		Pat		Pat	Attenuator changes not perfectly synchronized with telemetry indications; results in glitches that can look like injections. Exclude these samples in calibration & L1->L2 processing.		

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4945	Bad formatting in tplot variable labels		Pat	2	Pat	<p>split into components split_vec,'tha_state_pos_gsm' tplot,'tha_state_pos_gsm',var_label='tha_state_pos_gsm_x' ;var_label is all 'x's</p> <p>We should fix this. Whoever gets this should talk to me about it first though, cause there are some tricky aspects with tplot backwards compatibility. Specifically, we want tplot to use different formatting only in the cases when it would/will output '****'s. If you just switch over to variable width auto-formatting in all cases it will probably break tplot.</p>		
4929	Improve "basic" cribs		Pat		Pat	calc, trace, plotxy, plotxyz		