

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		
5024	L2 FGM and other CDFs do not exclude eclipse time intervals		Bob McGuire		TBD	Remove eclipse intervals from FGM L2, also add quality flags at 1 minute cadence. Then implement similar strategy for other instruments.		
5026	Add heat flux (derived from eflux) to L2 ESA		Tai Phan		TBD	Will implement after Tai does some testing to determine how useful the new quantity would be.		
5043	Develop workaround for loading POES data in IDL 6/7		Eric			Data files follow the netCDF 4 standard which is only supported in IDL 8+. The DLM and shared library from IDL 8 seem to work OK in IDL 6/7 but Exelis is reluctant to let us redistribute the DLM.		
5045	Develop mini-GEM tutorial with SPEDAS 1.00 updates		Vassilis					
5047	CDAWlib compatibility issues		Nick			The full CDAWlib as distributed by GSFC is incompatible with SPEDAS due to naming issues (upper/lower case, generic routine names that clash with routines in SPEDAS code), use of EXECUTE statements (don't work in VM), and the need for precompiling library routines (tricky to automate). Many of these issues are best resolved at their end, but we should expect some resistance to making these changes. They may be more receptive if we offer to do some of the work.		
5048								
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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		
QA030	Enhancement: 2d slices during eclipses?		Aaron			One of the researchers down here came by wondering if there was an option to apply the eclipse corrections when producing 2D slice plots. At the moment we can't use the corrections because the slices code assumes that energy and angle bins are static within a mode (this was primarily done to boost performance) and the only correction based on that assumption		

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QA076	Layout options (feature)		Aaron			(feature) I think it would be best to move the manual panel placement widgets from the panel options window to layout options (perhaps a new tab). That way all panel placement options would be in a single window, which seems more intuitive and should lessen potential conflicts.		
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. <b>OK to proceed.</b>		
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		
	<b>Cindy</b>							
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 February 2015		
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		
4990	Incorrect range_epoch values in L2 GMAG cdf		Tami		Cindy	In the file: thg_l2_mag_amer_20060309_v01.cdf we noticed that the range_epoch end time value is pretty crazy - 2163/03/09 00:00:00  We also noticed that there's no data for years 2007 and 2010.		
4997	Add support for new PG4 Antarctic magnetometer station				Cindy	Cron jobs, mirror scripts, etc		
5038	New GIMA ground station		Cindy		Cindy	There's a new station, Toolik Lake .		
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.		
	<b>Eric</b>							
5039	New Load Data tab for POES mission		Vassilis		Eric	Instrumentation and data availability should be similar to GOES		
QA142	Save/restore SPEDAS document: does not distinguish between scalar and 1-element arrays		Pat			We have some kluges in place but it would be nice to handle this more cleanly. (Deferred)		

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QA161	Unnecessary(?) "draw" operations in various option windows (x,y,z, panel)		Aaron			I noticed while testing #1 and similar bugs that many of our options windows (x/y, z, panel) are calling draws, or at least draw object updates, when they're opened. I'm wondering if there is a particular reason we've done that in some cases, or if it was just sloppiness. Since draw operations can be expensive and can lead to cases like #1 where an invalid setting cannot be fixed (hopefully we catch it beforehand) it seems like it would be better practice to not draw until we need to. For x/y axis and panel options I think there are general update methods called to populate/update the widgets that include draw calls. Separating the draws from those helper functions, or at the very least allowing a keyword to disable them in some situations, should work in those cases.		
5046	User guide updates				Eric			
	<b>Jim L</b>							
5042	FLATSAT testing to support new ultra-fast survey mode		Vassilis		Jim L			
5033	Draft document: "general" development guidelines				Jim L	Circulate to Davin, and then the rest of the change committee members		
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.		
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		
	<b>Jim M</b>							
5030	Document onboard vs. Ground S/C potential issues				Jim M	Similar to "Sources of Non Ideal Performance" for other instruments		
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		
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.		
	<b>Nick</b>							
5040	Youtube Tutorial		Vassilis			First of a series. We should perhaps start with SPEDAS installation and setup.		
5041	GMAG processing crashes with latest CDAWlib		Jim L			Worked around by reverting to the previous CDAWlib installation; latest SVN version quits with a syntax error when compiling the SPDF code, which stalled GMAG production		

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QA163	(minor) Apply to all does not propagate title size, font, and color to other panels.		Aaron					
4964	GOES summary plots (processing scripts, cron jobs, web site menus)				Nick	Need GOES acknowledgements for summary plots & "rules of the road" page – Eric to negotiate exact wording w Pis.		
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.		
	<b>Pat</b>							
	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. <b>Check again in mid-August 2013</b>		
4929	Improve "basic" cribs		Pat		Pat	calc, trace, plotxy, plotxyz		
5036	Troubleshoot/enhance CL test scripts for file_http_copy, file_touch		Jim L		Pat			
5044	noise level in FGM increases after eclipse		Xiaoyan		Pat	Recheck noise level after THC cal file update. FGS data might be a viable workaround.		
QA140	Mission-specific logic in spd_ui_loaded_data object		Jim L			Should be abstracted somehow so that general purpose SPEDAS code does not have dependencies on mission-specific variable naming conventions (possibly via new plugin API features)		
QA141	Mission-specific logic in call_sequence object		Jim L			Calls THEMIS-specific spd_ui_load_data2obj routine – should be abstracted somehow to avoid mission-specific dependencies in general-purpose SPEDAS code (perhaps via new plugin API features)		
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?		