| Task # | Task Description | Date | Reported By | Pri | Assigned To | Notes | Estimate | SCript; Suite; |
|--------|---|------|-------------|-----|-------------|---|----------|-----------------|
| | To be Assigned or Discussed | | | | | | | 1112: 11111112: |
| 4929 | Improve "basic" cribs | | Pat | | TBD | The tplot cribs under ssl_general/examples are good examples | | |
| 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 | | |
| 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 | | |
| | Develop mini-GEM tutorial with SPEDAS 1.00 updates | | Vassilis | | | Tutorial: incorporate examples using Van Allen probes, POES, | | |
| | spedas.org: add article with full list of capabilities (not just since last | | Nick | | | | | |
| | spedas.org: road map for future development | | Nick | | | | | |
| | Load Data tabs: each tab should get some text stating the time range for which data exists | | Nick | | | | | |
| 5054 | THEMIS web page | | Bob McGuire | | | Add page to THEMIS site describing pseudo-AE index products, which stations they are derived from. Bob M will update master CDFs at CDAWeb to link to this page. | | |
| | Recurring task: periodically check CDAWeb plots, legends, etc. To ensure that they're consistent with what our software produces. | | Bob McGuire | | | Especially important when new CDFs or variables are added, or when people are prepping for Senior Review | | |
| 5061 | Javascript isn't working for asi_map.shtml | | Nick | | Nick | Can get ATHA to show, but no other sites | | |
| 5062 | Can't load ESA L2 velocity via GUI | | Kevin Tham | | | THM_LOAD_ESA(244): Invalid data type detected: peif_velocity_gsm, peir_velocity_gsm, peib_velocity_gsm, peef_velocity_gsm, peeb_velocity_gsm | | |
| 5063 | Change ACE load routine to load mfi datatype h3 | | Xiaoyan | | Nick | | | |
| 5064 | Particle data doesn't load correctly if operation is repeated | | Drew Turner | | Pat | We've got some code that is supposed to prevent re-loading the data if you've already loaded it. The code is getting confused because normally particle data is stored in a common block, but /sst_cal data is stored as a tplot variable. | | |
| 2074c | quality flag for FGM data. (see also 5024, 4921) | | Vassilis | 2 | Jim L | 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 corrections not available, times when FGM data is noisy post-eclipse | | |
| | 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 | | |
| 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. | | |
| 5065 | Autodetect SDT intervals from science or housekeeping data? | | Jim M | | Jim M? | See 4921. We can get a list from the MOC but it would be a very manual process. If we can reliably autodetect SDTs from science or housekeeping data, that would be better. | | |
| 5066 | | | | | | | | |
| 5067 | | | | | | | | |
| 5068 | | | | | | | | |
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| | Hannes | | | | | | | |
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|--------|---|------------|----------------------|-----|-------------|--|-----------|----------------|
| | 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 | Lotiniate | TIG. DevG. |
| 4010α | New Cambration I GW parameters and spirit axis offsets | 3/10/2010 | Hamics | _ | Tiamics | 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 | | |
| 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. OK to proceed. | | |
| 4968 | SPEDAS wiki | | | 1 | Aaron | Slices (done), spectrograms (done), moments (in progress), background info & documentation for general particle | | |
| 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 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 | | |
| | New GIMA ground station (Toolik Lake) | | 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 | | |
| | Add revived Arctic Village station to GIMA processing scripts, master CDFs, etc | | Cindy | | Cindy | Station won't be reactivated after all (no money). | | |
| 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). | | |
| | Eric | | | | | | | |
| 5039 | New Load Data tab for POES mission | | Vassilis | | Eric | Instrumentation and data availability should be similar to GOES. CDAWeb now has several GOES, POES data sets online in CDF format and may have better processing and cleanup algorithms applied. | | |

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| | 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 | | | |
| | Jim L | | | | | | | |
| 5033 | Draft document: "general" developement guidelines | | | | Jim L | Circulate to Davin, and then the rest of the change committe 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 | | |
| 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 | | |
| | Jim M | | | | | | | |
| 5056 | FGM b_total data shows up as sometimes scalar, sometimes 1-element array | | Bob McGuire | | Jim M | Master CDFs corrected, issue was limited to FGM. Hold reprocessing until 5024 and related tasks (FGM quality flags) are implemented. | | |
| 5057 | Apply offset correction to equalize pxxm_pot with vaf s/c potential (optional keyword) | | Jim M | | | | | |
| 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. | | |
| 5058 | S/C potential incorrect in slow survey | | Tohban | | Jim M | Jim McT checked in a bug fix, is it working? How much do we need to reprocess? Should we do a patch release of TDAS? | | |
| 5060 | HTML docs for SPEDAS routines no longer available from website, spedas zip file | | Harald | | Jim M | | | |
| 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. | | |
| 4965 | SPEDAS wiki | | <u> </u> | | Jim M | ESA instrument info, data structures, calibration processes | | |

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| Task # | Task Description | Date | Reported By | Pri | Assigned To | | Estimate | LIC: DevC: |
| 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. | | |
| | Nick | | | | | | | |
| 5047 | CDAWlib compatibility issues | | Nick | | Nick | Compile a report of issues we had (mixed case filenames, execute() calls, namespace issues, required subset to support "Load Data from CDAWeb") and forward to Tami to see which changes can be easily made at their end. | | |
| 5059 | ucla_rmd2all occasionally reports missing calibration file (MATH.txt) | | Jim L | | Nick | Include more diagnostic details in error message? | | |
| 4743 | Clean up GMAG processing scripts | | Cindy | 2 | Nick | many variations of wget wrappers, will be much cleaner when code is consolidated. Should also look into consolidating database schemas for the various scripts. | | |
| 5048 | SPEDAS wikipedia page | | Nick | | Nick | add link to THEMIS wikipedia page, SPEDAS page should have | | |
| 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 | | |
| 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 | | | |
| 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 | | |