

| Task # | Task Description | Date Opened | Reported By | Pri | Assigned To | Notes |
|------------------------------------|---|-------------|----------------|-----|-----------------------------------|---|
| To be Assigned or Discussed | | | | | | |
| 4104 | try to compare density SST from onboard MOMent data and from the full distributions. But different value of density comes out. | 4/19/2010 | Igor Kirpichev | ? | ? | Vassilis wants to talk to Davin |
| Aaron | | | | | | |
| 2013 | 2-D, 3-D slices enhancements | | | | | |
| 2013ab | Mark one count level (dashed line) | | | | | Vassilis wants to talk to Jim Mcfadden |
| Jim L | | | | | | |
| 4030 | cross-check SST psir6 and psif data types for excess counts in psir6 | 4/8/2010 | Jim McFadden | 1 | Jim L | in progress: maybe a small change, maybe a retest, maybe head scratching |
| 4030a | Review Onboard Scripts for possible error. | 5/17/2010 | Jim Lewis | 1 | Jim McFadden, Davin, Robert Abiad | ESA and SST scripts reviewed. Doc for scripts received M. Ludlam. |
| 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 |
| 4070 | "Add support to thm_cotrans, ssl2gse, and ssl2dsl for /pseudo_dsl keyword. If keyword is present, look for and apply eclipse delta_phi corrections as appropriate." | 6/1/2010 | Jim L | 1 | Jim L | thm_load_fit and thm_load_mom, add keyword. In progress - send email waiting for Davin to describe how the tensor quantities in thm_load_mom need to be handled. Mods to be completed 7/23 and plots to be generated with mods and without mods and sent to Vassilis and Hannes for review. |
| Jim M | | | | | | |
| 3099f | Revise the calibration code for the particle data types (ESA, perhaps also SST or MOM?) to look for spacecraft potential in L1 FIT, if the moments are decimated | 3/2/2010 | Jim L | 1 | Jim M | Run independent test on thm_load_esa_packet as per Jim McFadden |
| 3090 | Then one needs to correct the particle distributions to be introduced in the same orientation. I.e., should use the corrected spinphase upon being introduced (on the fly). This means the particle loading software needs to read the above difference between corrected and uncorrected spinphase, and apply a rotation to the distribution functions upon reading. This should be done with a keyword first, and routinely when we get into orbit (by which time the shadow spinphase determinations will hopefully be automated). I think McFadden is the one to do this but he can also assign it. | 2/22/2010 | Vassilis | 1 | Jim McFadden | 3089 is prerequisite - Vassilis 4/23: un-rotate the V's from the dphi and the onboard spinphase) and compare with the ground-processed V from the distribution functions. ESA and MOM code to use new features of spin model. In progress and being done in conjunction with 3099f. Jim McFadden needs to review. |
| 3041 | Update overview plots to handle survey FFTs? | | | 1 | Jim M | John B: what you propose would work to put the FFF and FBK on a more equal footing, unit-wise. It would make the FFF like the output from laboratory spectrum analysers. I would suggest adding the description of the processing to the pop-up plot description, if possible, and point out that the displayed FFF data are thus different than what would be loaded for FFP, FFW, or FFF; yes? Vassilis: Yes, totally, we need to make sure the description is clear, so people realize that plotted is not the same product they will get from the L1 or L2 data. Maybe we should also call it AFFF (for amplitude) or something else. |
| 4057 | I noticed a bug in thm_load_efi when implementing the "raw" keyword in the gui. If you set the suffix keyword, it only applies the suffix to some of the quantities that it loads. Any tplot variables ending in _hed or _hed_ac don't receive the suffix. | 5/7/2010 | Pat | 1 | Jim M | Document in program and User's guide. Make sure Vassilis is okay with no program change. behavior of 'raw' keyword in thm_load_efi. Consensus: not a bug, no code changes required, document the behavior in the users guide and close the task - in progress |
| 2103 | EAC offsets | 8/1/2009 | John Bonnell | 1 | Jim M | John will send Jim M code from Chris Cully showing how the offset should be calculated. |
| 2228 | one outstanding issue with THM_LOAD/THM_CAL_EFI is that for some reason when I ask for the calibrated data in SPG (which should just be adjustment of gains and offsets, and conversion from ADC units to physical units, the code is trying to do some despin operations. Since this has direct impact on my ability to evaluate the EFI data quality, | 9/3/2009 | John Bonnell | 1 | Jim M | Jim M to create an option in thm_cal_efi.pro so that data in physical units can be gotten out before any spin dependent offsets are applied. |
| 2216 | Fix the sign reversal of e34. | 8/13/2009 | Michael | 1 | Jim M | John will send Jim M a date/probe combination that Forrest Mozer used to establish the correct sign of e34. Jim M will make the appropriate thm_spinfit corrections. |
| 2225 | L2 EFI cdf (quality flags) | 8/31/2004 | Vassilis | 1 | Jim M | Quality flags and L2 cdf will be addresses when we have a clue about offsets, spinfits, etc |
| Pat | | | | | | |
| 3025 | Particle Moment Calibrations | 12/18/2009 | Davin | 1 | Pat | need to reprocess MOM |

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|-------|---|------------|-------------|---|-------|---|
| 3025a | Determine scales and offsets for correcting on-board moments to match ground based moments during solar wind mode. | | | | Pat | |
| 3025b | Determine when spacecraft is in solar wind mode, and apply corrections. | | | | Pat | Jim L 4033a completed - this is ready to be worked |
| 3055 | SST calibrations | 12/18/2009 | Davin | 1 | Pat | |
| 3055c | Extend thm_pdist to populate all dist struct fields(mass etc...) so that moments can be correctly generated | 7/1/2010 | Davin | 1 | Pat | Davin to Review 3055c - 3055j and see if further changes needed |
| 3055d | 3055d1 Energy Scales. Scales for scaled raw energy boundaries. There will be 4 parameters. One for each sensor head. 3055d2 Energy Offsets. Offsets for scaled raw energy boundaries. There will be 4 parameters. One for each sensor head. 3055d3 Geometric factors. Scaling factors for raw fluxes. There will be 4 parameters. One for each sensor head. 3055d4 Efficiencies. Scaling factors for raw fluxes. There will be 16x4 parameters. One for each combination of energy bin/sensor head. | 7/1/2010 | Davin | 1 | Pat | |
| 3055e | Provide initial calibration file which contains calibration parameters that were previously hard-coded. This will serve as a template for future modifications. | 7/1/2010 | Davin | 1 | Pat | |
| 3055e | In first version, I had split time in calibration file; used separate column for year month date hour minute second, Davin asked that it be stored as one column. This is already done. | 7/12/2010 | Davin | 1 | Pat | |
| 3055f | The calibration file should include an additional factor: the nominal g-factor. The other 4 g-factor parameters will be corrections applied to the new factor. | 7/12/2010 | Davin | 1 | Pat | |
| 3055g | include 4 new parameters for the sst attenuator calibration | 7/12/2010 | Davin | 1 | Pat | |
| 3055h | Need to include new parameters for dead time corrections. I need to review code to determine appropriate number of parameters and verify with davin. | 7/12/2010 | Davin | 1 | Pat | |
| 3055i | Need to version calibration files. Looking at FGM for version control example/precedent. | 7/12/2010 | Davin | 1 | Pat | |
| 3055j | .Right now, the calibration files are one line only. timestamps are included in the files, but they are not yet used by calibration code. add support for time varying parameters. | 7/14/2010 | Davin | 1 | Pat | |
| 3055k | Davin delivers SST calibration parameters | 7/19/2010 | Davin | 1 | Davin | |
| 3055l | Install SST calibration parameters | 7/19/2010 | Davin | 1 | Pat | dependent on 3055k |
| 4072 | Put eclipse spin model correction code in SST as already has been done for esa packet pgm | 6/8/2010 | Jim M | 1 | Pat | wait for SST calibrations |
| 4068 | Lynn Wilson possible enhancements | 6/1/2010 | Lynn Wilson | 1 | Pat | Review Lynn's software and generate list of features |