

Rosetta Orbiter RPCMAG Archive Comments

ro-ss-rpcmag-2-prl-raw-v5.0

ro-ss-rpcmag-3-prl-calibrated-v5.0

ro-ss-rpcmag-4-prl-resampled-v5.0

ro-c-rpcmag-2-esc1-raw-v5.0

ro-c-rpcmag-4-esc1-resampled-v5.0

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Overview

- All of the ro-*rpc* review volumes share a large number of common files:
catalog files, documents, required files (Xxinfo.TXT), etc.
rather than repeating comments on those files in every presentation my
comments are all included here
- Most of the common files have been previously reviewed so there is an expectation that the files would be in pretty good shape.

Root Directory Files

- ✓ ro-c-rpcmag-2-esc1-raw-v5.00
 - aareadme.txt, voldesc.cat, errata.txt all present and acceptable
- ✓ ro-c-rpcmag-4-esc1-resampled-v5.0
 - aareadme.txt, voldesc.cat, errata.txt all present and acceptable
- ✓ dataset.cat - ro-ss-rpcmag-2-prl-raw-v5.0
 - aareadme.txt, voldesc.cat, errata.txt all present and acceptable
- ✓ dataset.cat - ro-ss-rpcmag-3-prl-calibrated-v5.0
 - aareadme.txt, voldesc.cat, errata.txt all present and acceptable
- ✓ dataset.cat - ro-ss-rpcmag-4-prl-resampled-v5.0
 - aareadme.txt, voldesc.cat, errata.txt all present and acceptable

Catalog Files

- ✓ catinfo.txt
- ✓ rosetta_mission.cat (various typos, content fine)
- ✓ rosetta_insthost.cat (various typos, content fine)
- ✓ rosetta_ref.cat
- ✓ rosetta_target.cat
- ✓ rpcmag_inst.cat (various typos, content fine)
- ✓ rpcmag_software.cat
- ✓ rpcmag_pers.cat
- ✓ dataset.cat - ro-c-rpcmag-2-esc1-raw-v5.00
- ✓ dataset.cat - ro-c-rpcmag-4-esc1-resampled-v5.0
- ✓ dataset.cat - ro-ss-rpcmag-2-prl-raw-v5.0
- ✓ dataset.cat - ro-ss-rpcmag-3-prl-calibrated-v5.0
- ✓ dataset.cat - ro-ss-rpcmag-4-prl-resampled-v5.0

Document

- ✓ docinfo.txt (all volumes)
- ✓ ro-c-rpcmag-2-esc1-raw-v5.0 and ro-c-rpcmag-4-esc1-resampled-v5.0 have hidden files in archive (.ro_igep_tr0009_eaicd.pdf) and calibration (.ro_igm_tr0002_cal_report.pdf, .ro_igm_tr0003_cal_analysis.pdf) directories

RID: remove these hidden files

- ✓ Archiving Subdirectory

ro_igep_tr0009_eaicd.pdf – ok, no changes requested

- ✓ Calibration Subdirectory

ro_igep_tr0028_calproc.pdf – ok, no changes requested

ro_igm_tr0002_cal_report.pdf – ok, no changes requested

ro_igm_tr0003_cal_analysis.pdf – ok, no changes requested

ro_iwf_tr0001_ac_analysis.pdf – ok, no changes requested

- ✓ Flight Reports Subdirectory

✓ ro_igep_tr0013_mcrr.pdf – ok, no changes requested

✓ ro_igep_tr0038_data_summary.pdf – ok, no changes requested

Calib Directory

- ✓ calinfo.txt (ro-c-rpcmag-4-esc1-resampled-v5.0 ,
ro-ss-rpcmag-4-prl-resampled-v5.0,)

RID: note that all of the rpcmag_stp00xx_008_calib_ib.asc and
rpcmag_stp00xx_008_calib_ob.asc files are identical and explain why
multiple copies that differ only in file name are included on the
volume.

- ✓ rpcmag_boom_align_corr_ef1.asc (.lbl) - no changes requested
- ✓ rpcmag_cvp_008_calib_ib.asc (lbl) - no changes requested
- ✓ rpcmag_cvp_008_calib_ob.asc (lbl) - no changes requested
- ✓ rpcmag_cvp2_008_calib_ib.asc (lbl) – same as
 rpcmag_cvp_008_calib_ib.asc
- ✓ rpcmag_cvp2_008_calib_ob.asc (lbl) - no changes requested
- ✓ rpcmag_gnd_calib_fsdpu_fmib.asc (.lbl) - no changes requested
- ✓ rpcmag_gnd_calib_fsdpu_fmob.asc (.lbl) - no changes requested
- ✓ rpcmag_sc_align.asc (.lbl) - no changes requested

Index Files

✓ `idxinfo.txt`

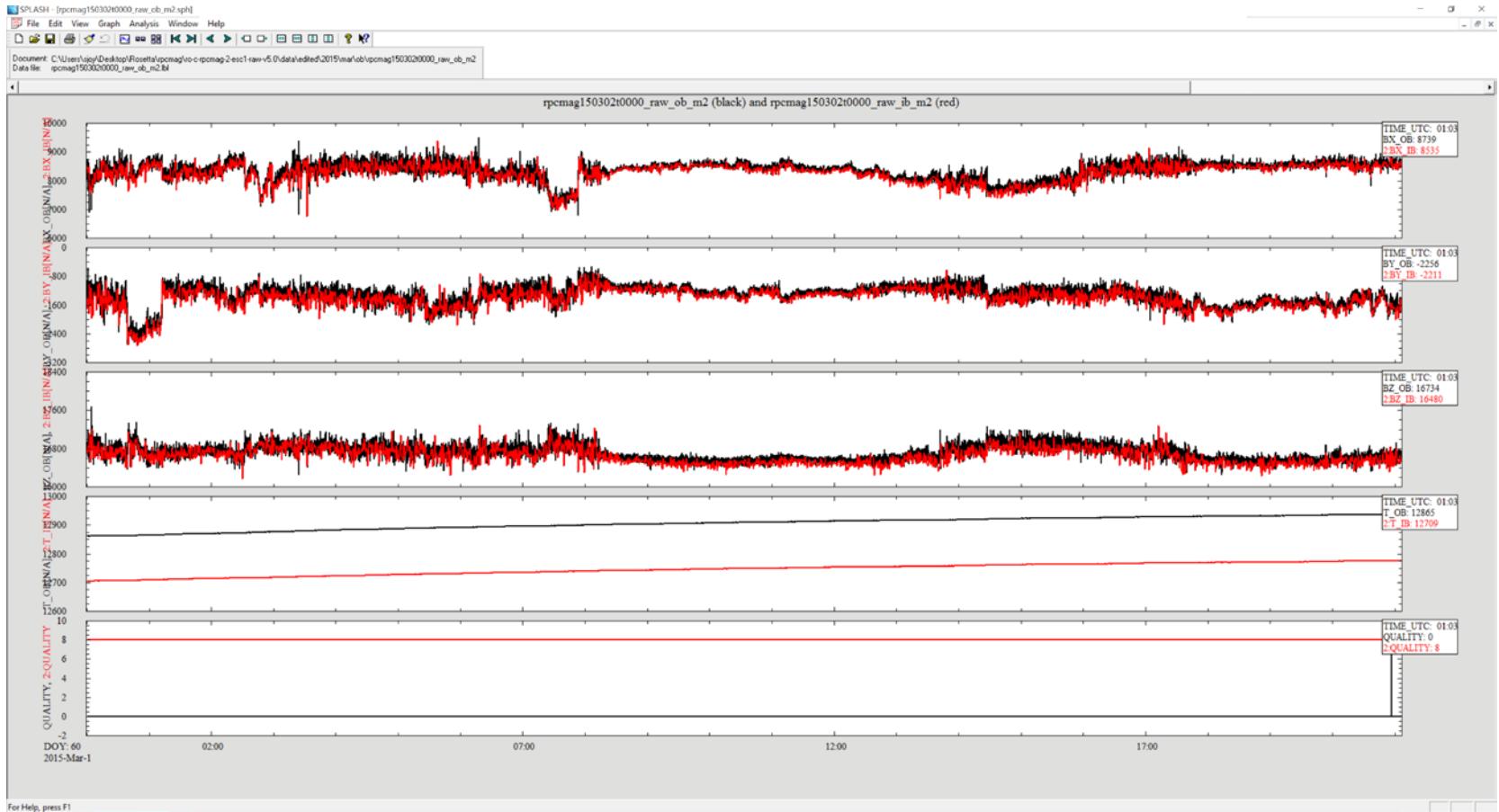
Does not mention checksum file or its usage, consider adding

✓ `index.tab (.lbl)`

✓ `checksum.tab (.lbl)`

Data Directories

ro-c-rpcmag-2-esc1-raw-v5.0



Comparison of `rpcmag150302t0000_raw_ob_m2` (black) and
`rpcmag150302t0000_raw_ib_m2` (red)

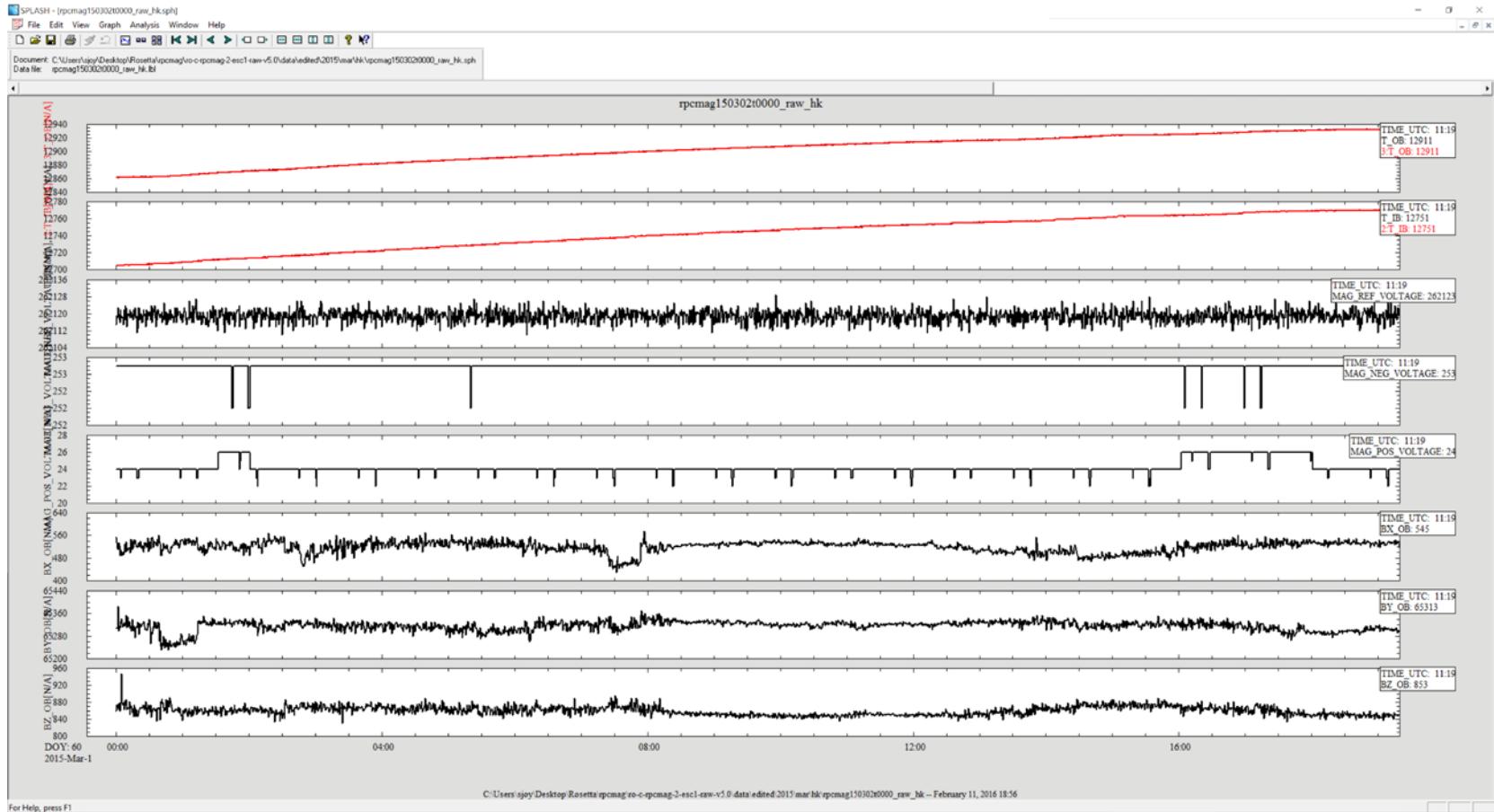
Both files read into software using PDS labels – labels valid for both!

Outboard data shifted to facilitate comparison

$\text{BY_OB} = \text{BY_OB} + 2190$; and $\text{BZ_OB} = \text{BZ_OB} + 2950$;

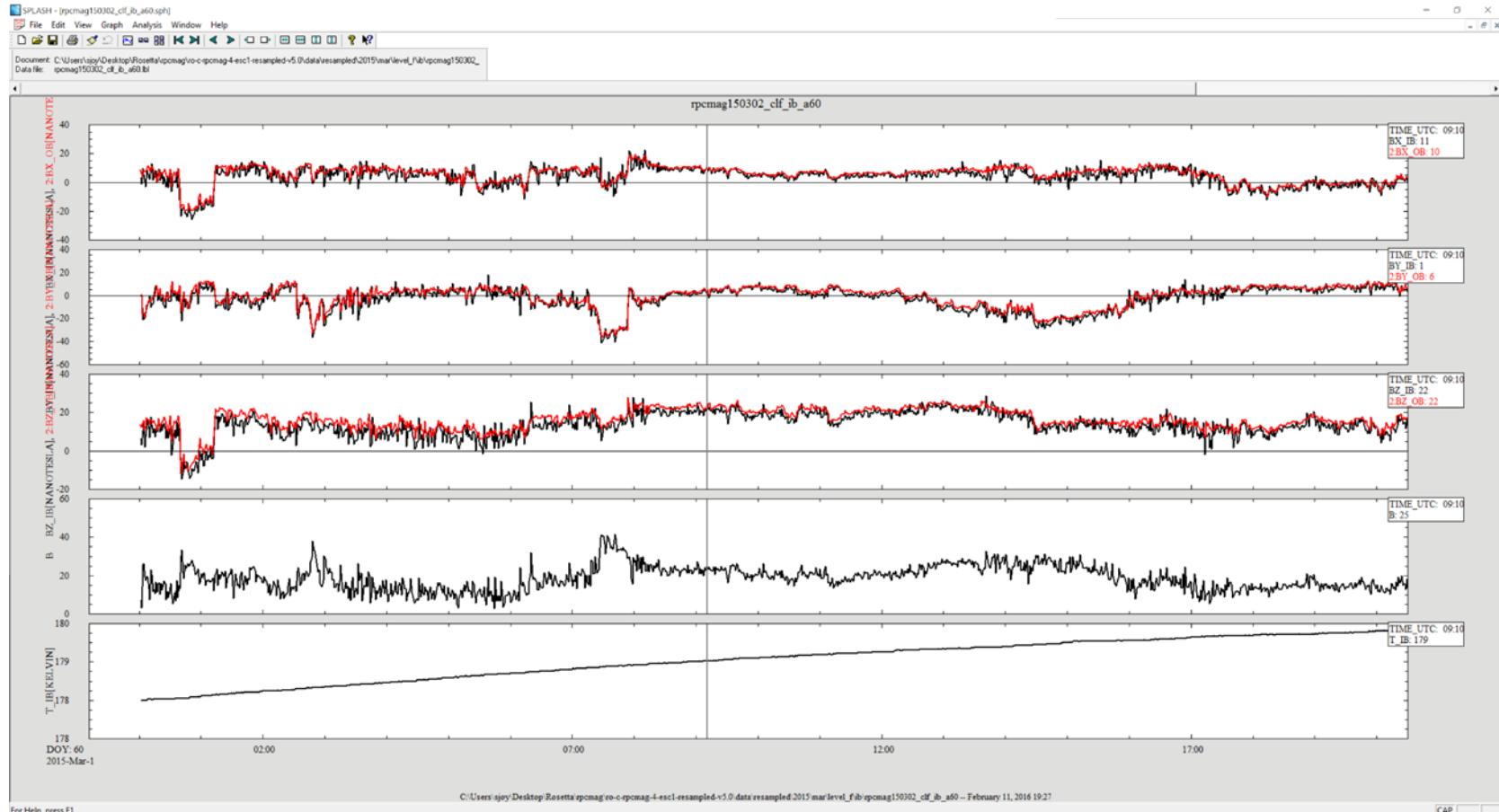
Data look good (for raw data)

ro-c-rpcmag-2-esc1-raw-v5.0



Housekeeping data for day shown on previous slide (rpcmag150302t0000_raw_hk)
Data read in by software using PDS label, label valid
Red temperature traces from IB and OB data files overlay black traces from HK file
Data and HK files are self-consistent!
HK data look good!

ro-c-rpcmag-4-esc1-resampled-v5.0



Comparison of rpcmag150302_clf_ib_a60 (black) and
rpcmag150302_clf_ob_a60 (red)

Both files read into software using PDS labels – labels valid for both!

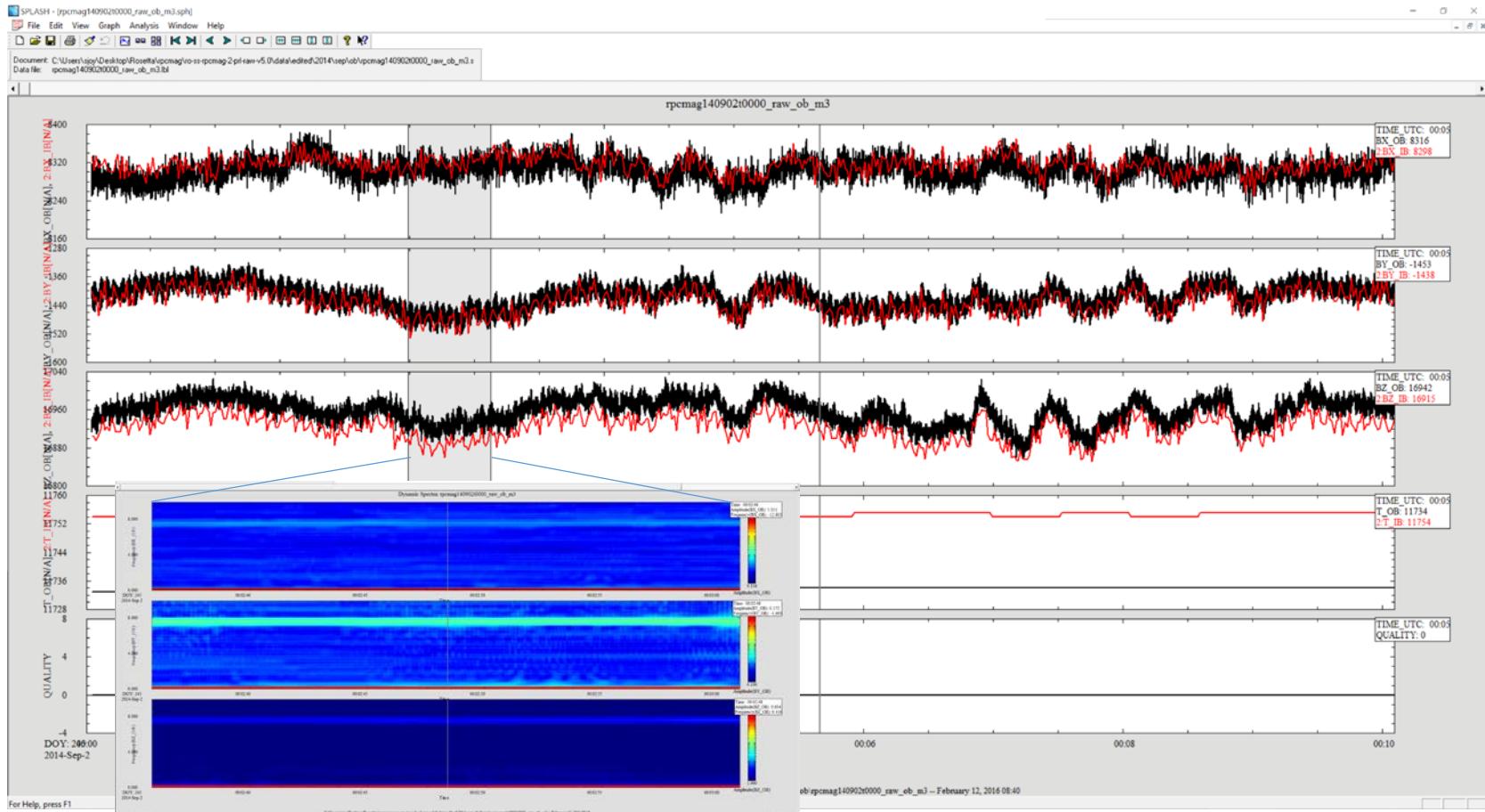
Outboard data shifted to facilitate comparison

BX_OB = BX_OB+1; BY_OB = BY_OB-16; and BZ_OB = BZ_OB + 6

Field magnitude computed by display software from inboard data for reference

Resampled data look good

ro-ss-rpcmag-2-prl-raw-v5.0



Comparison of rpccmag140902t0000_raw_ib_m3 (black) and
rpccmag140902t0000_raw_ib_m3 (red)

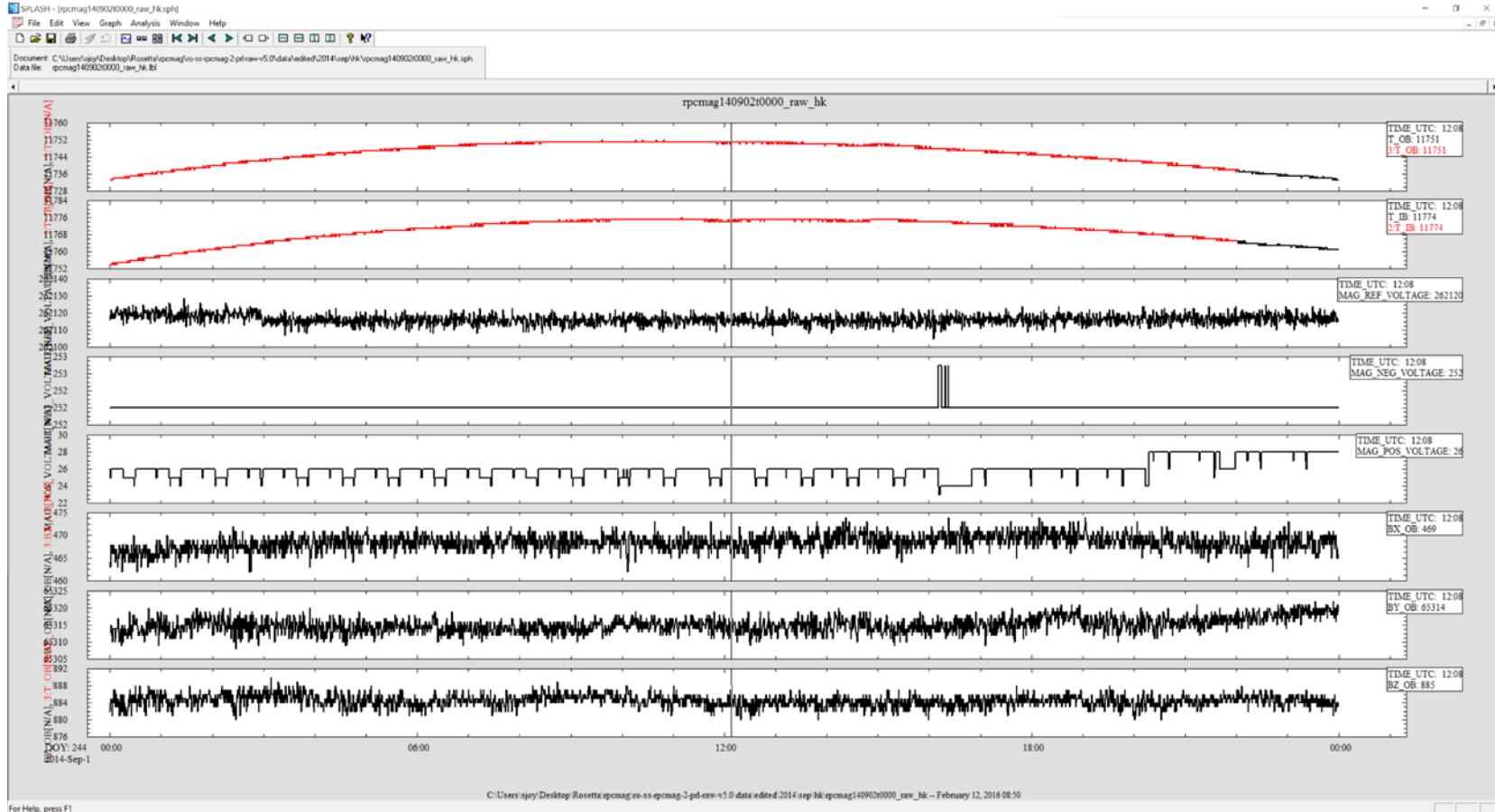
Both files read into software using PDS labels – labels valid for both!

Outboard data shifted to facilitate comparison

BX_OB = BX_OB+850; BY_OB = BY_OB+2150; and BZ_OB = BZ_OB + 2800;

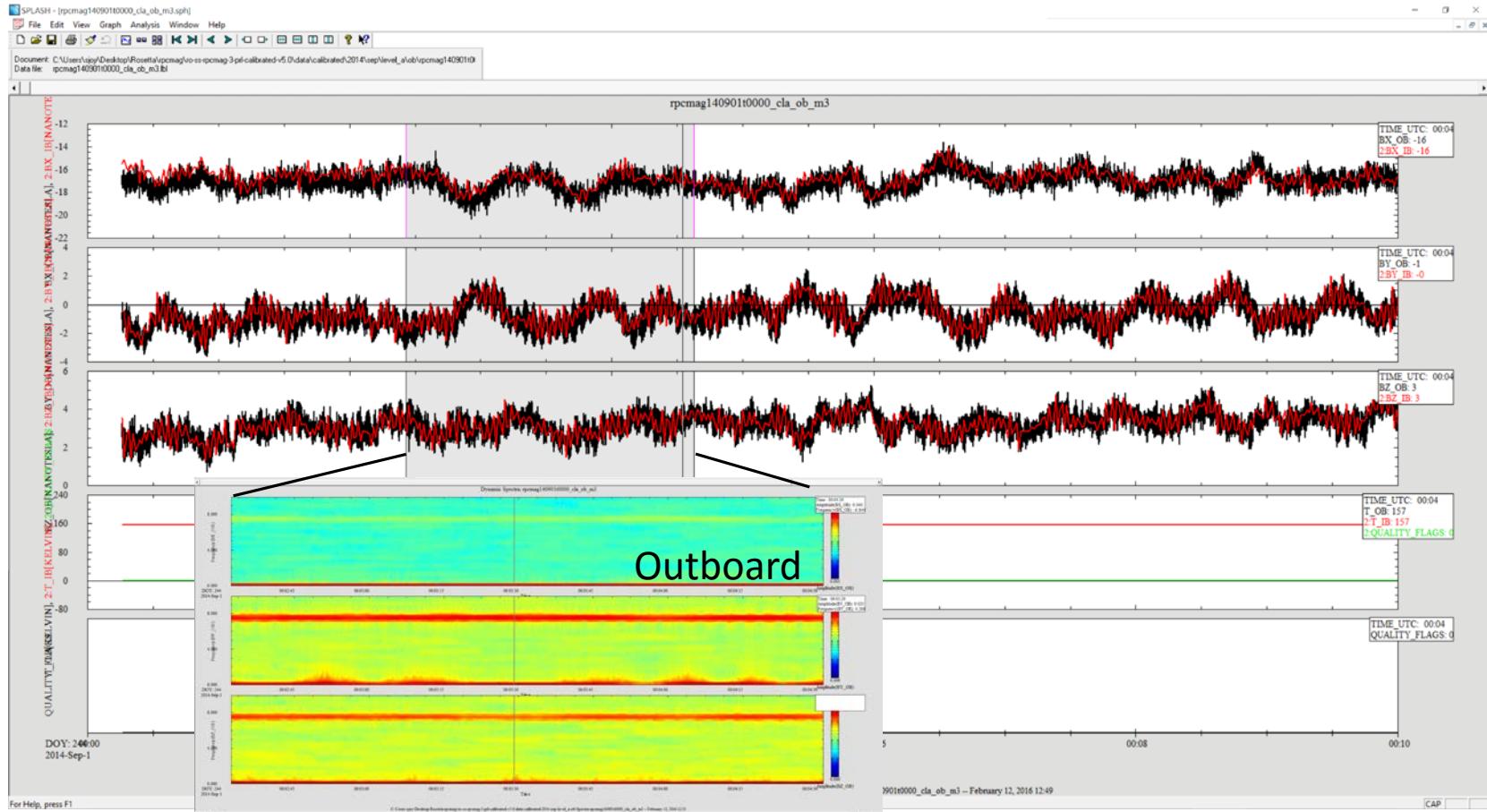
Raw data look nominal, lots of noise sources visible in high res data

ro-ss-rpcmag-2-prl-raw-v5.0



Housekeeping data for day shown on previous slide (rpcmag140902t0000_raw_hk)
Data read in by software using PDS label, label valid
Red temperature traces from IB and OB data files overlay black traces from HK file
Data and HK files are self-consistent!
HK data look good!

ro-ss-rpcmag-3-prl-calibrated-v5.0 - level a



Comparison of `rpcmag140901t0000_cla_ob_m3` (black) and
`rpcmag140901t0000_cla_ib_m3` (red)

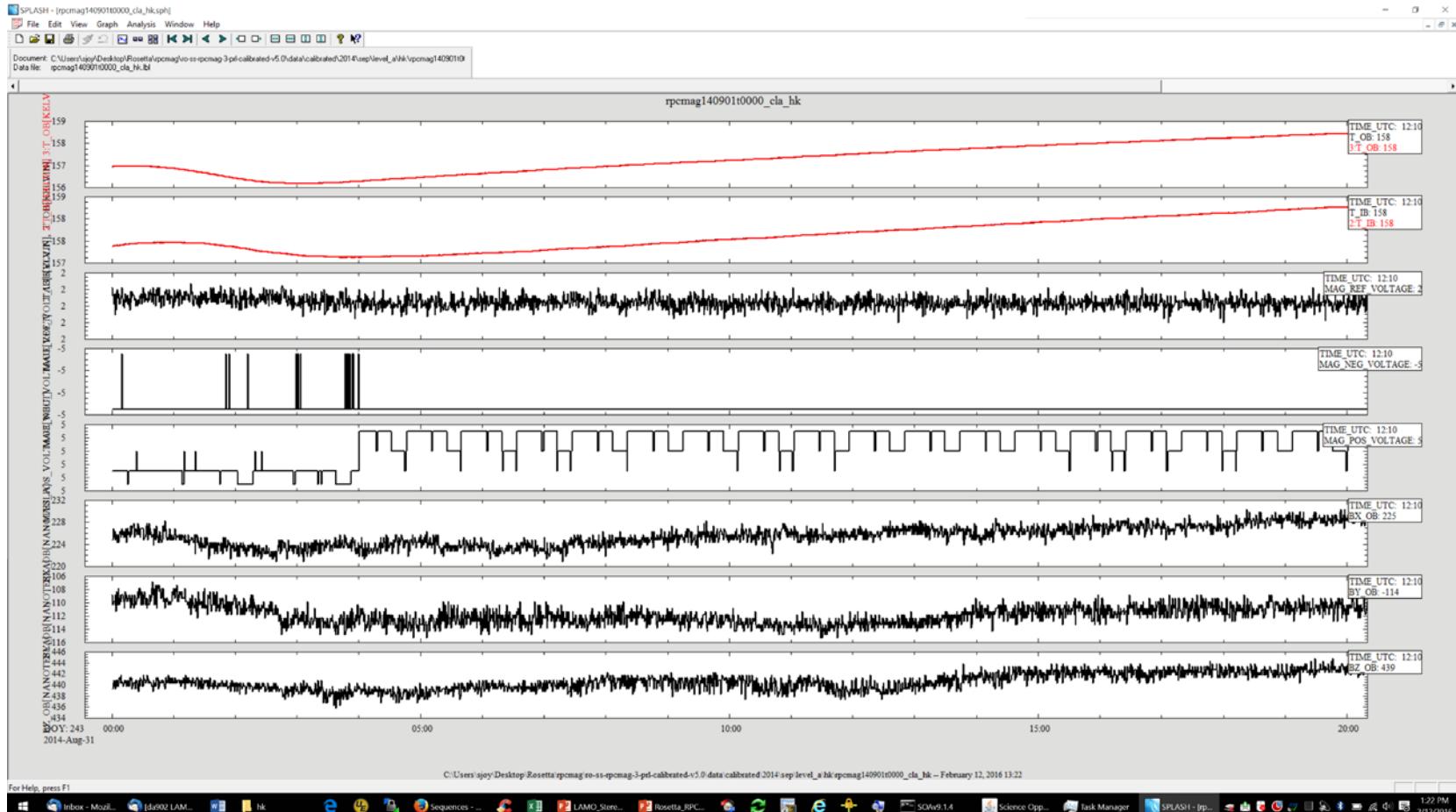
Both files read into software using PDS labels – labels valid for both!

Outboard data shifted to facilitate comparison

$BX_OB = BX_OB-15$; $BY_OB = BY_OB-1$; and $BZ_OB = BZ_OB + 2.5$;

Calibrated-a data look nominal, lots of noise sources visible in high res data

ro-ss-rpcmag-3-prl-calibrated-v5.0 - level a



Housekeeping data for day shown on previous slide (rpcmag140901t0000_cla_hk.lbl)

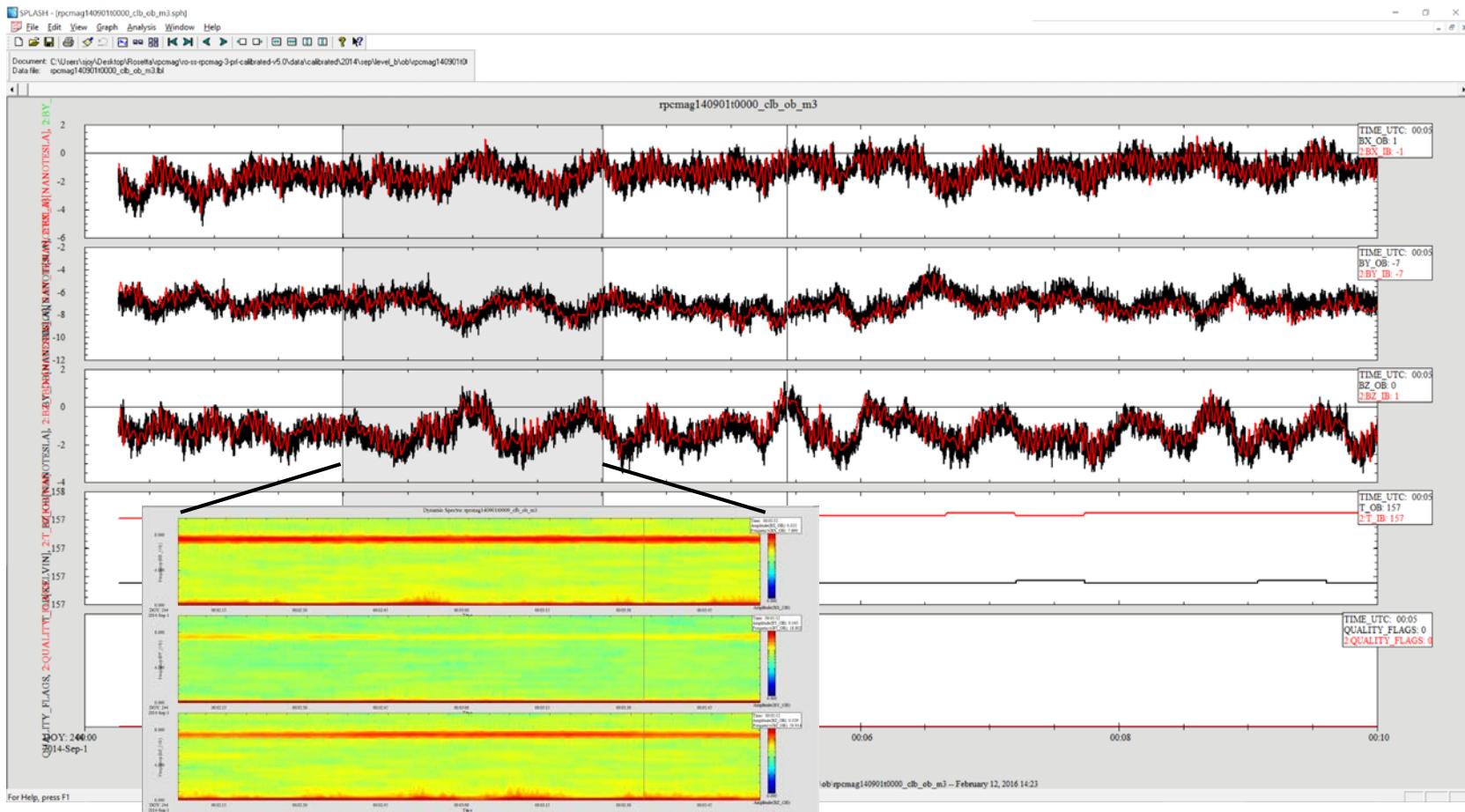
Data read in by software using PDS label, label valid

Red temperature traces from IB and OB data files overlay black traces from HK file

Data and HK files are self-consistent!

HK data look good!

ro-ss-rpcmag-3-prl-calibrated-v5.0 - level b



Comparison of `rpcmag140901t0000_clb_ob_m3` (black) and
`rpcmag140901t0000_clb_lb_m3` (red)

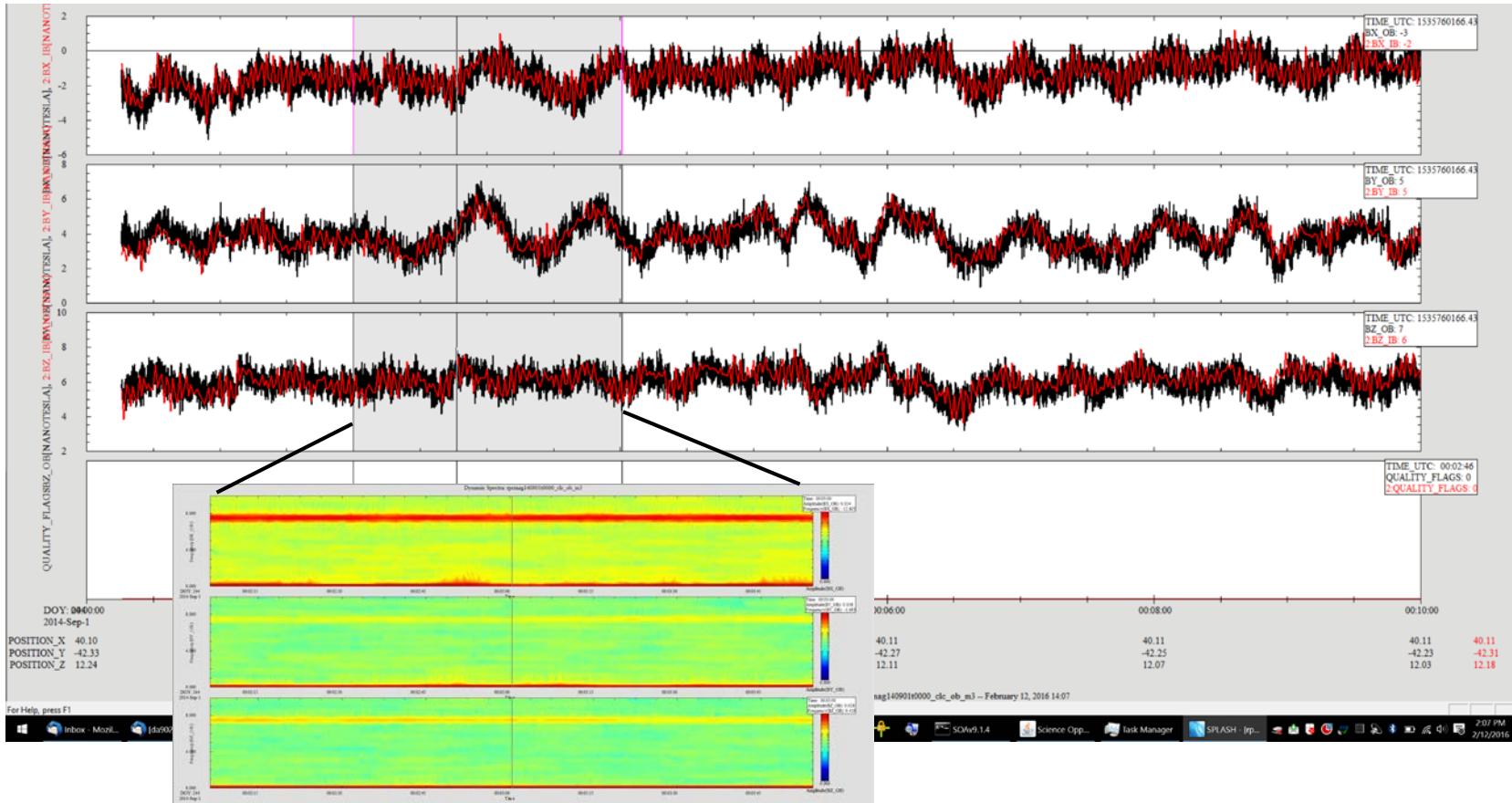
Both files read into software using PDS labels – labels valid for both!

Outboard data shifted to facilitate comparison

$\text{BX_OB} = \text{BX_OB-3}$; $\text{BY_OB} = \text{BY_OB-5}$; and $\text{BZ_OB} = \text{BZ_OB} - 2$;

Calibrated-b data look nominal, lots of noise sources visible in high res data

ro-ss-rpcmag-3-prl-calibrated-v5.0 - level c



Comparison of rpcmag140901t0000_clc_ob_m3 (black) and
rpcmag140901t0000_clc_ib_m3 (red)

Both files read into software using PDS labels – labels valid for both!

Outboard data shifted to facilitate comparison

BX_OB = BX_OB-3; BY_OB = BY_OB+2; and BZ_OB = BZ_OB + 5;

Calibrated-c data look nominal, lots of noise sources visible in high res data

Summary

- Other than fixing a few minor edits to some of the documentation and a few missing products in the ro-ss-rpcmag-2-prl-raw-v5.0 volume, things are in pretty good shape.
- RIDs:
 1. ro-c-rpcmag-4-prl-resampled-v5.0 and
ro-c-rpcmag-4-esc1-resampled-v5.0
add statement in calinfo.txt explaining to the user that all of the
rpcmag_stp00xx_008_calib_ib.asc and
rpcmag_stp00xx_008_calib_ob.asc files are identical and why
multiple copies that differ only in file name are included on the
volume.
- All of these data sets can be “certified” with liens.