

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 r0-*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 present and acceptable
 - RID: **voldesc.cat missing from ro-ss-rpcmag-2-prl-raw-v5.0 volume**
 - RID: **errata.txt missing from ro-ss-rpcmag-2-prl-raw-v5.0 volume**
- ✓ 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-ss-rpcmag-2-prl-raw-v5.0 – none present
 - RID: add/populate document directory
- ✓ 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 17 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

✓ index.lbl

✓ checksum.tab

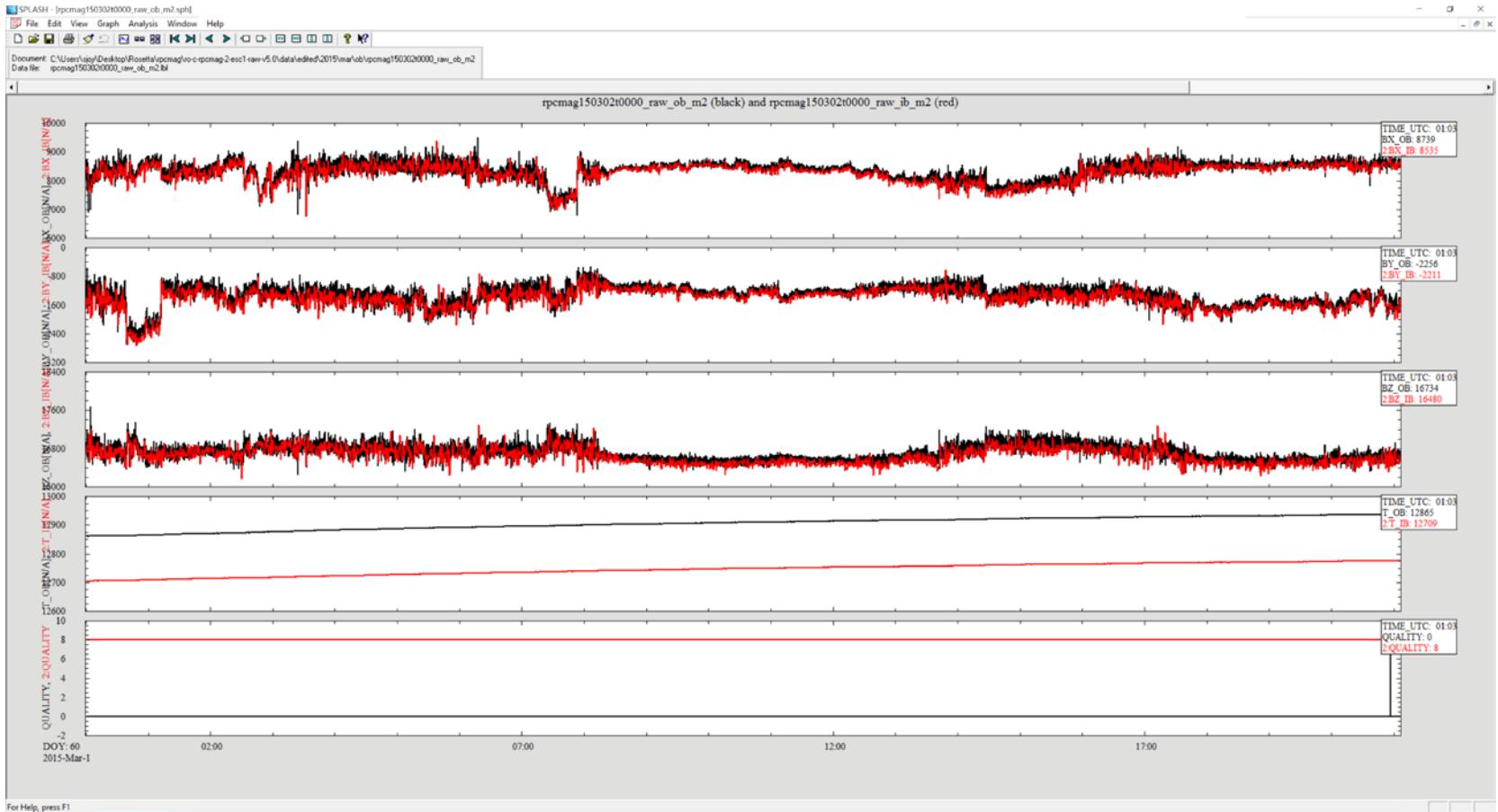
✓ checksum.lbl

✗ ro-ss-rpcmag-2-prl-raw-v5.0 volume does not contain an INDEX directory

RID: Create and populate the index directory for the ro-ss-rpcmag-2-prl-raw-v5.0 volume

Data Directories

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



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

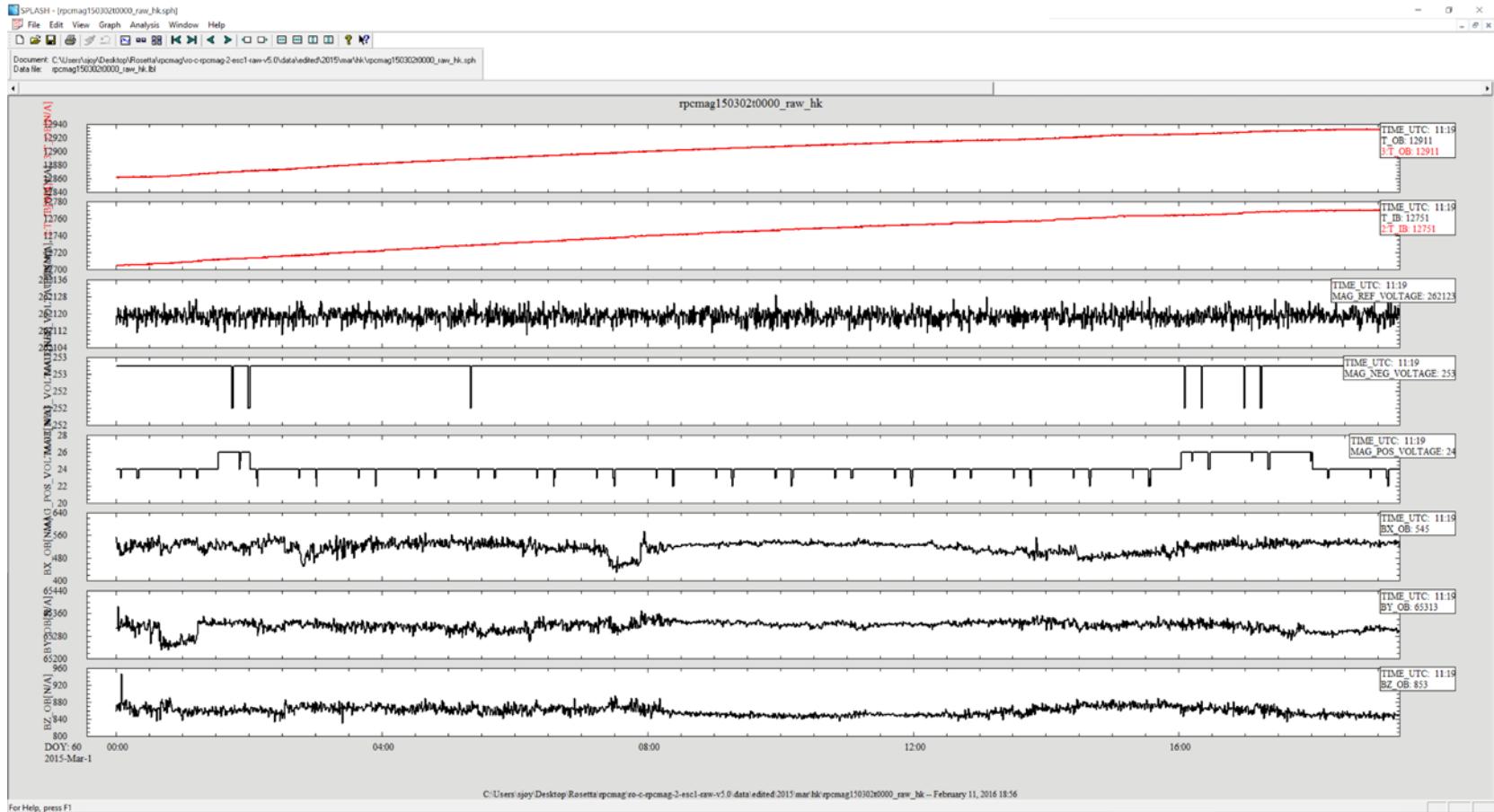
Both files read into software using PDS labels – labels valid for both!

Outboard data shifted to facilitate comparison

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

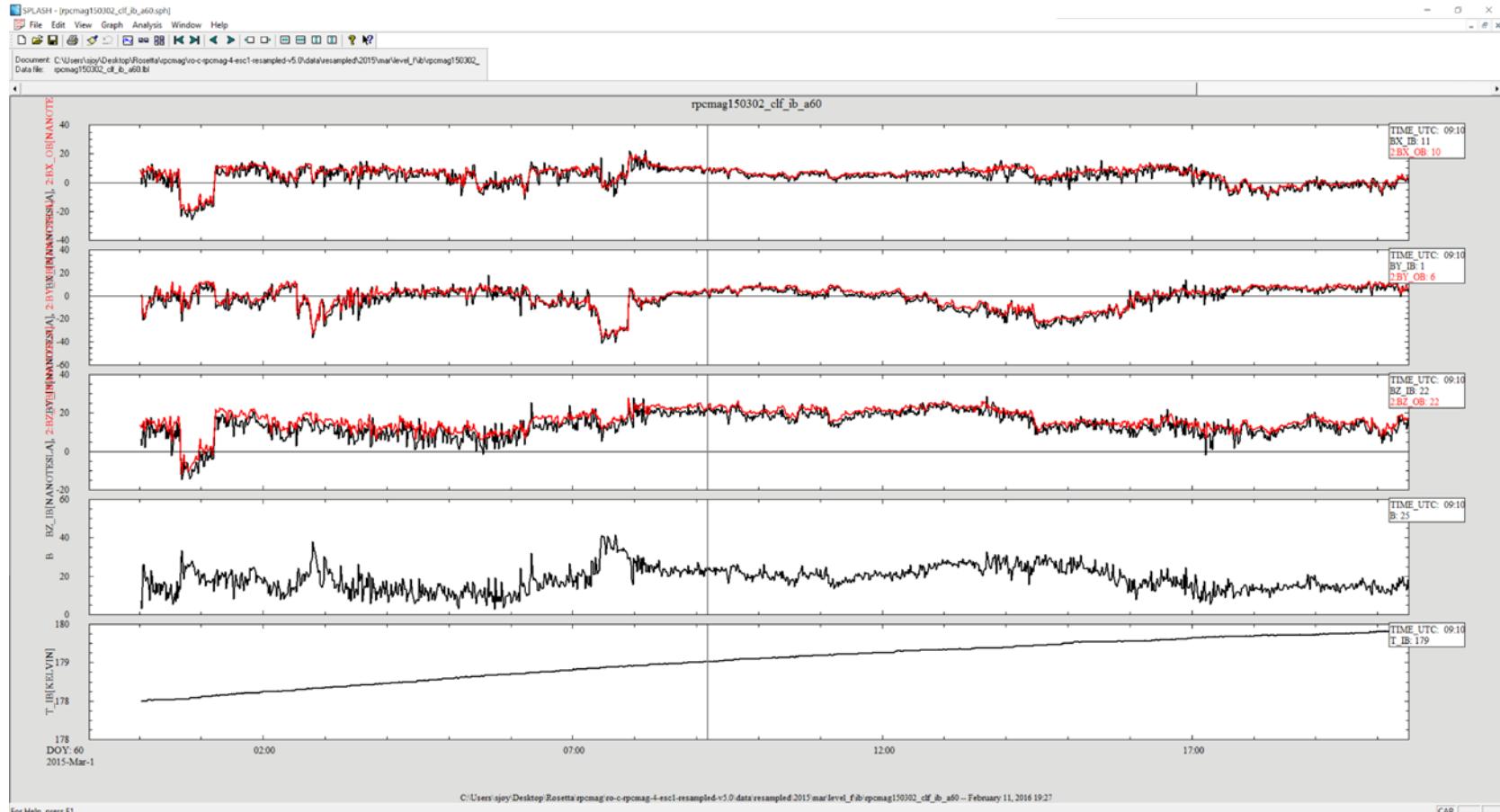
Data look good (for raw data)

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!

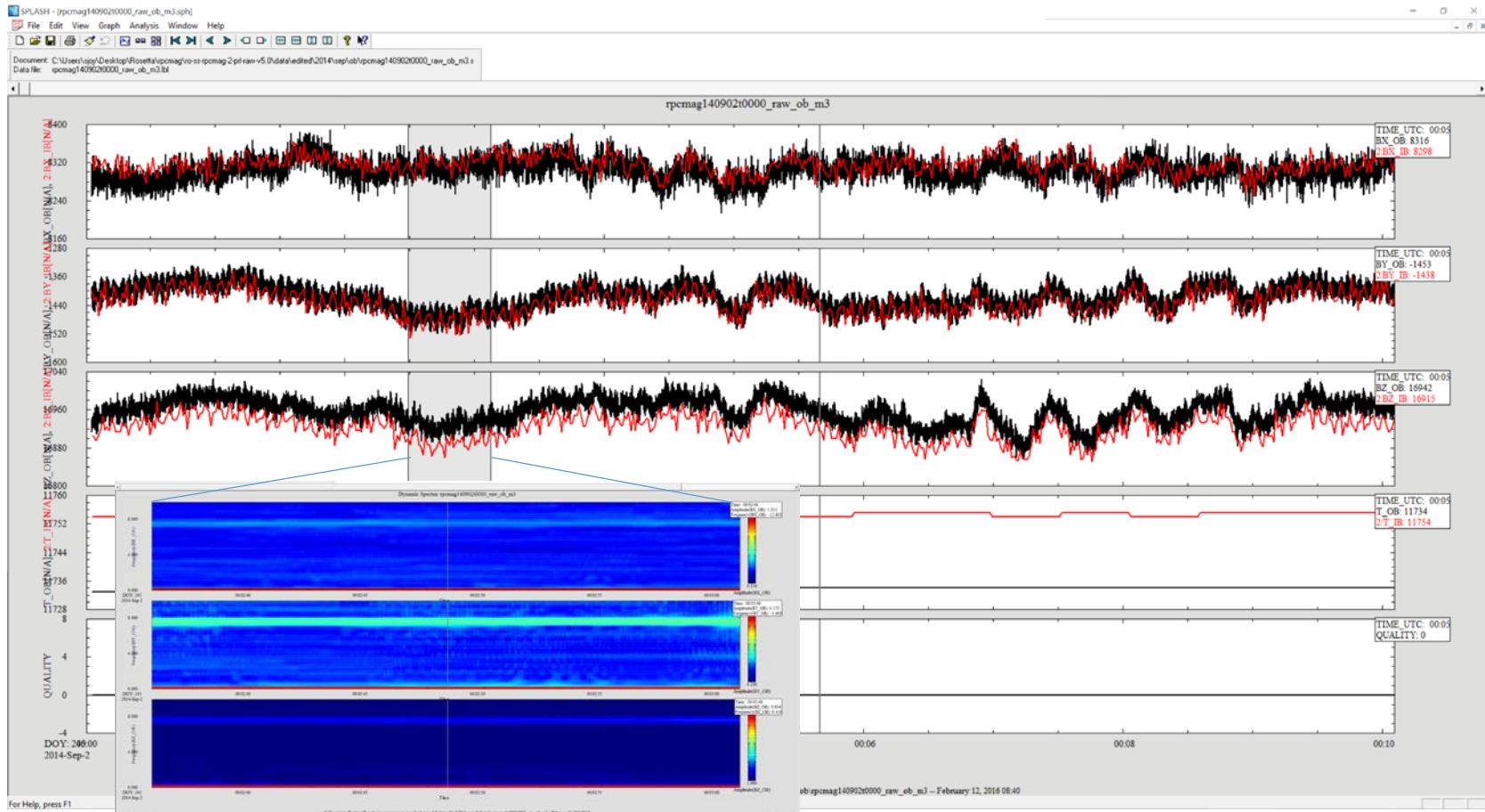
Outboard data shifted to facilitate comparison

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 rpccmag140902t00000_raw_ob_m3 (black) and
rpccmag140902t00000_raw_ib_m3 (red)

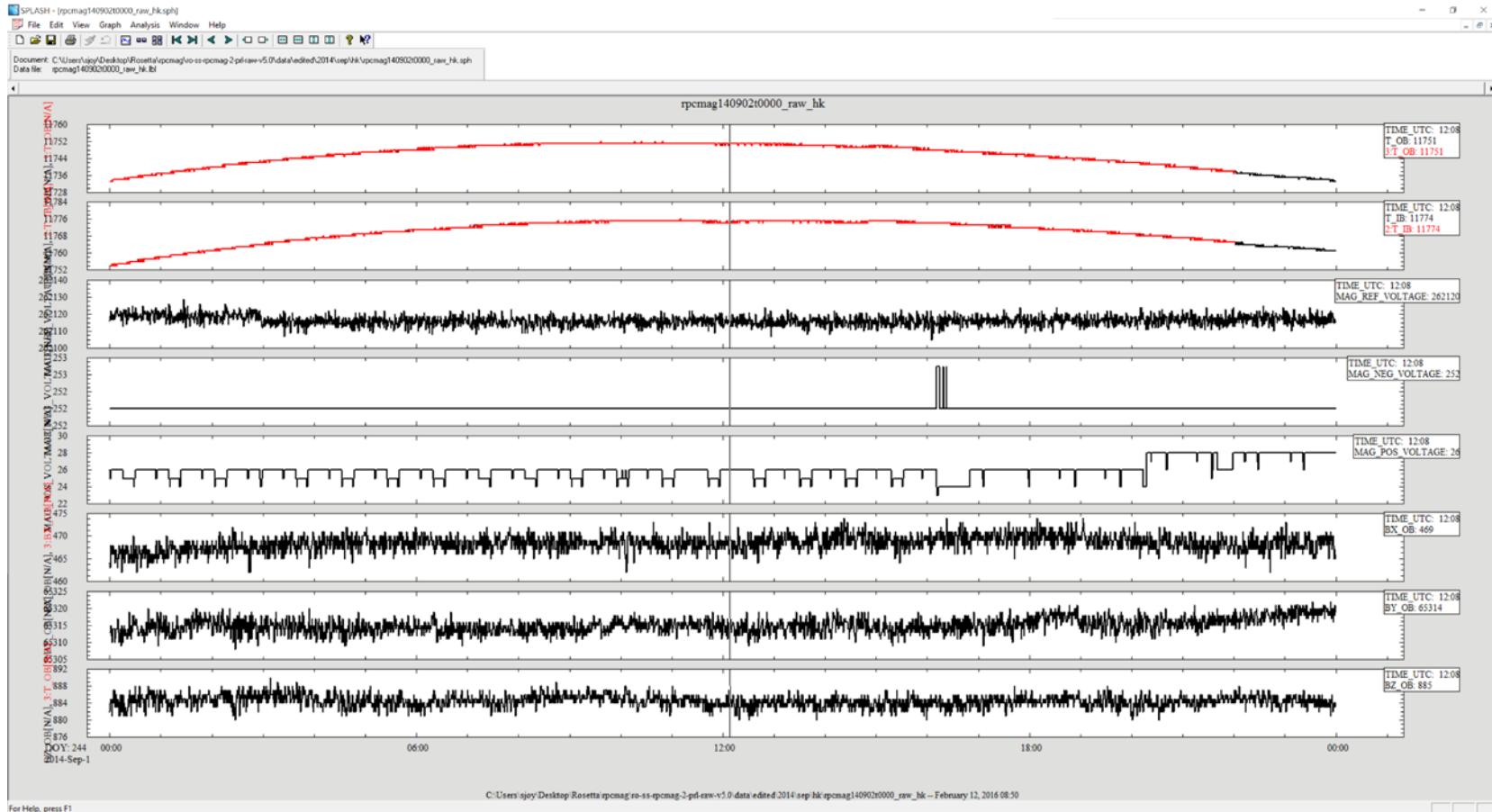
Both files read into software using PDS labels – labels valid for both!

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)

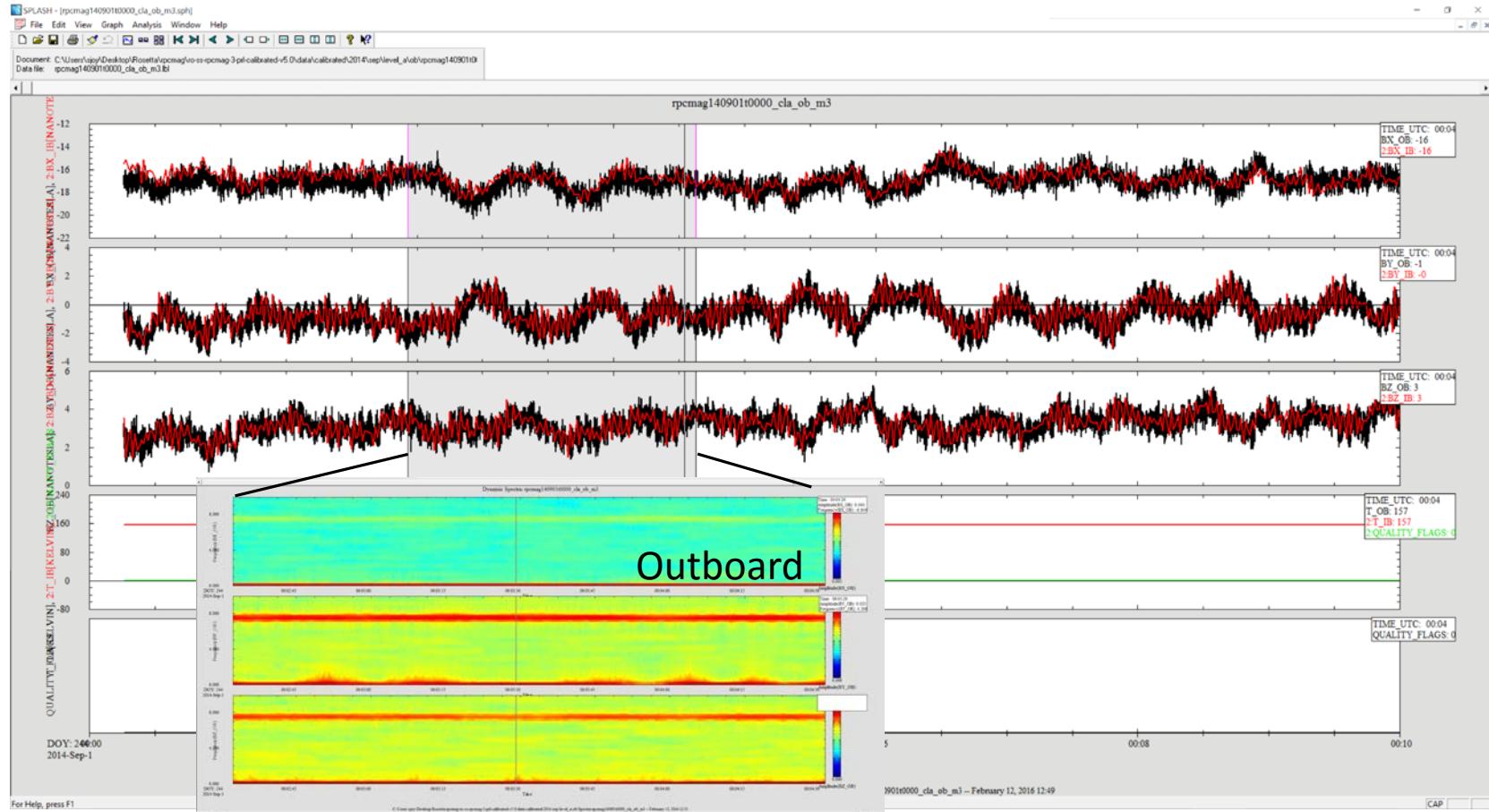
Data read in by software using PDS label, label valid

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_lb_m3 (red)

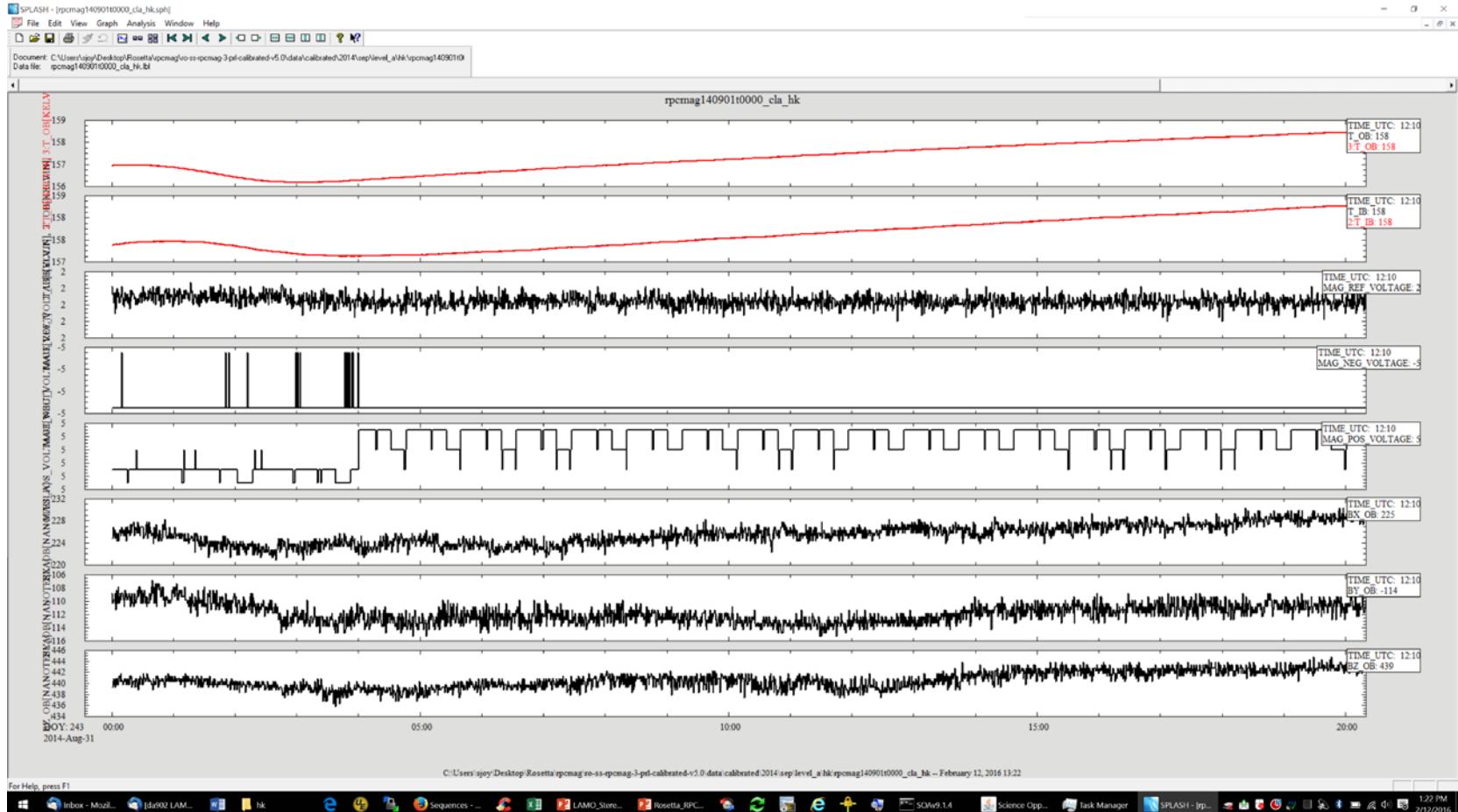
Both files read into software using PDS labels – labels valid for both!

Outboard data shifted to facilitate comparison

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

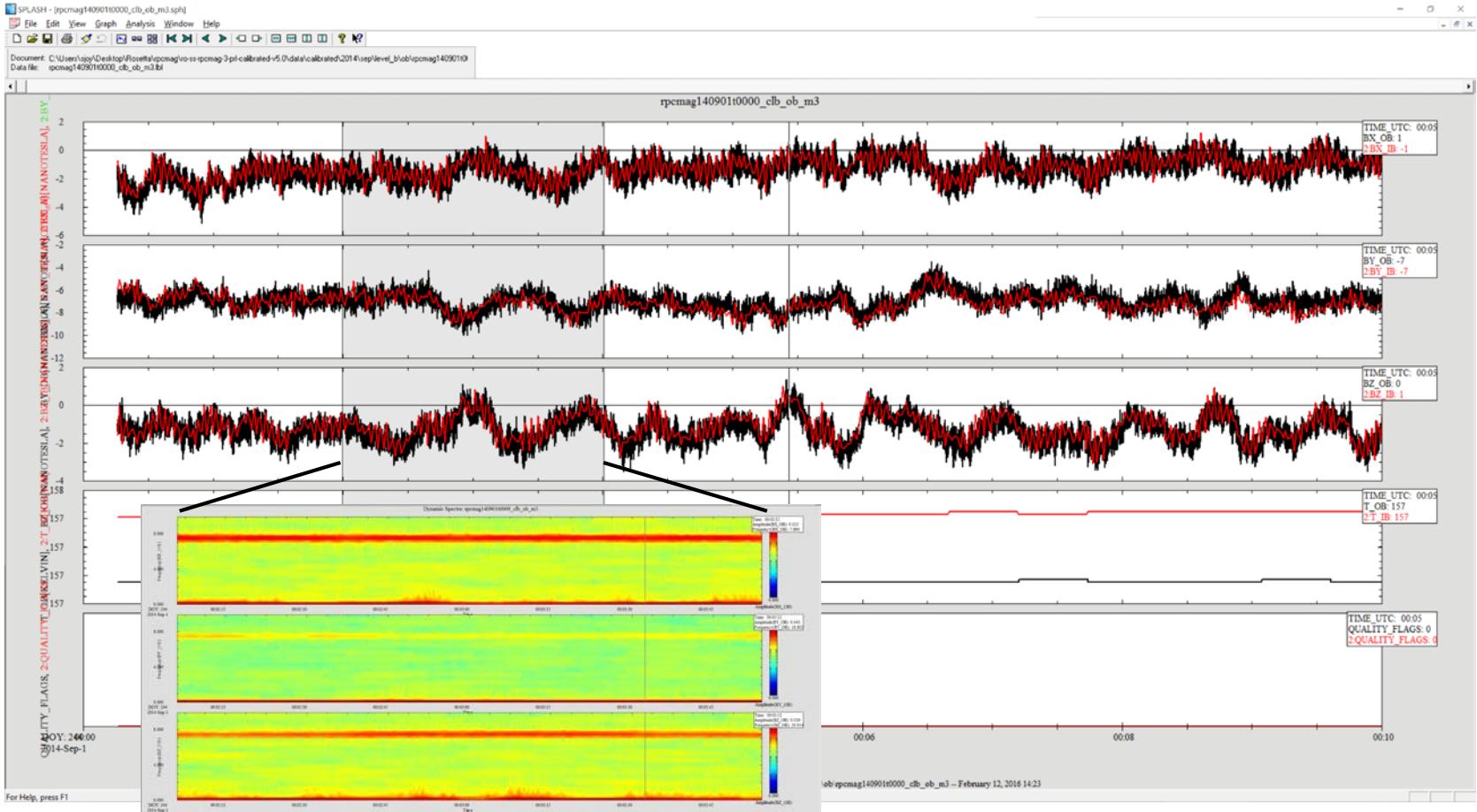
Calibrated-a data look nominal, lots of noise sources visible in high res data

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)

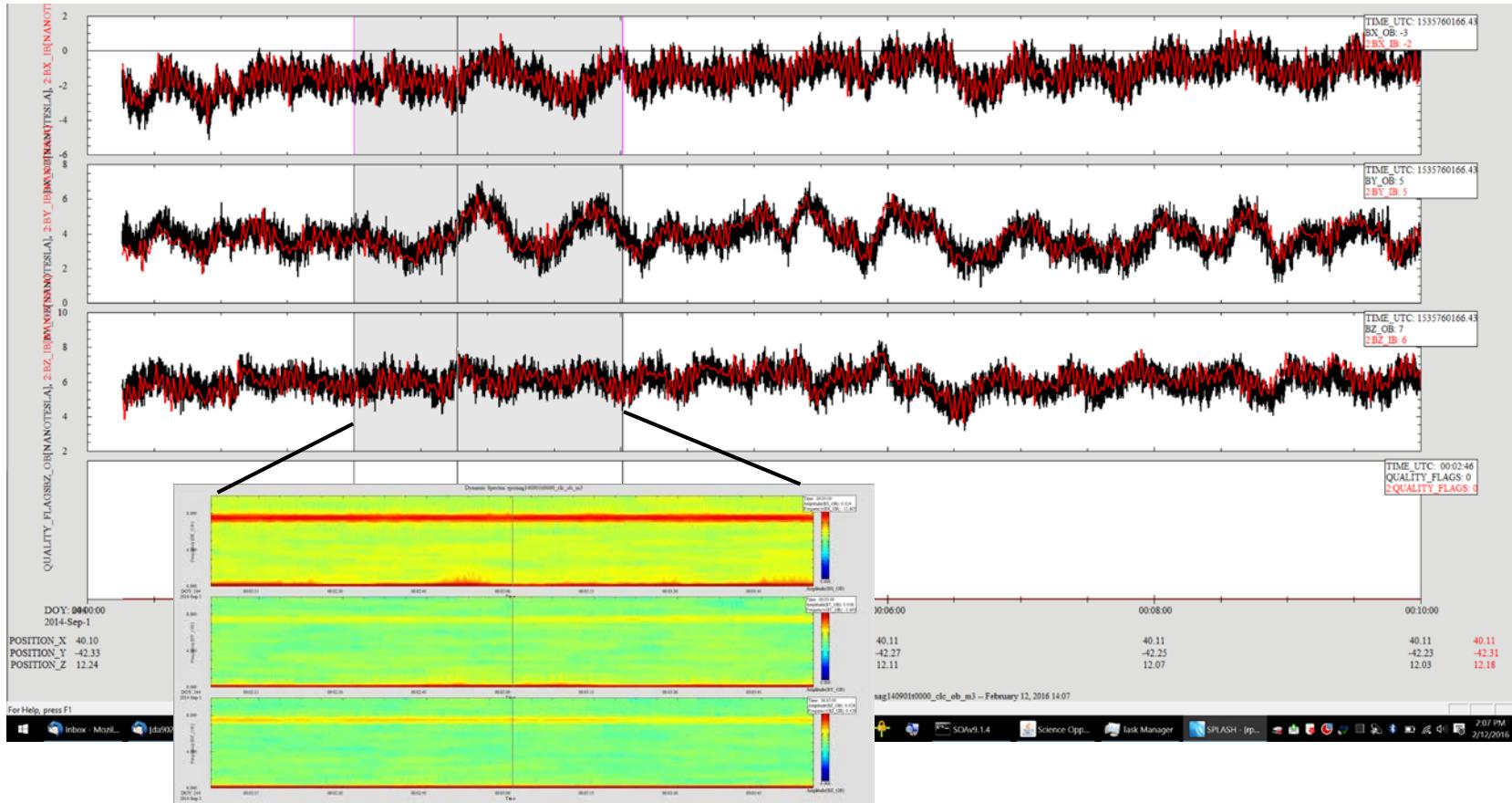
Both files read into software using PDS labels – labels valid for both!

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-ss-rpcmag-2-prl-raw-v5.0 voldesc.cat missing from volume
 2. ro-ss-rpcmag-2-prl-raw-v5.0 errata.txt missing from volume
 3. ro-ss-rpcmag-2-prl-raw-v5.0 – add/populate document directory
 4. ro-ss-rpcmag-2-prl-raw-v5.0 – add/populate index directory
 5. ro-c-rpcmag-2-esc1-raw-v5.0 –remove hidden files in document/archive and document/calibration directories
 6. ro-c-rpcmag-4-esc1-resampled-v5.0 – same as #5
 7. 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 17 copies that differ only in file name are included on the volume.
 8. ro-ss-rpcmag-4-prl-resampled-v5.0 – same as #7
- All of these data sets can be “certified” with liens.