### Rosetta Orbiter RPCMAG -4- Archive Comments

ro-ss-rpcmag-4-prl-resampled-v6.0 ro-c-rpcmag-4-esc1-resampled-v6.0 ro-c-rpcmag-4-esc2-resampled-v6.0 ro-c-rpcmag-4-esc3-resampled-v6.0 ro-c-rpcmag-4-esc4-resampled-v6.0 ro-c-rpcmag-4-ext1-resampled-v6.0 ro-c-rpcmag-4-ext2-resampled-v6.0 ro-c-rpcmag-4-ext3-resampled-v6.0

#### 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 (aareadme, errata, voldesc)

- ✓ ro-c-rpcmag-4-prl-resampled-v6.0 All files present and acceptable
- ✓ ro-c-rpcmag-4-esc1-resampled-v6.0 All files present and acceptable
- ✓ ro-c-rpcmag-4-esc2-resampled-v6.0 All files present and acceptable
- ✓ ro-c-rpcmag-4-esc3-resampled-v6.0 All files present and acceptable
- ✓ ro-c-rpcmag-4-esc4-resampled-v6.0 All files present and acceptable
- ✓ ro-c-rpcmag-4-ext1-resampled-v6.0 All files present and acceptable
- ✓ ro-c-rpcmag-4-ext2-resampled-v6.0 All files present and acceptable
- ✓ ro-c-rpcmag-4-ext3-resampled-v6.0 All files present and acceptable

#### Question to the MAG team:

Volume 1048 (-4-esc3) contains a "Comments from RPCMAG" section describing a timing error of up to 32 sec resulting from a missing data vector. This note does not show up in any of the other errata files for any of the datasets (-2-, -3-, -4-). However, the "logbook" documents show a missing mag vector nearly every day for all mission phases.

Has the team determined a way to correct this problem and forgotten to remove this note from volume 1048 or should this note be present on all of the MAG volumes?

### 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-ss-rpcmag-4-prl-resampled-v6.0
- √ dataset.cat: ro-c-rpcmag-4-esc1-resampled-v6.0
- √ ro-c-rpcmag-4-esc2-resampled-v6.0
- √ ro-c-rpcmag-4-esc3-resampled-v6.0
- √ ro-c-rpcmag-4-esc4-resampled-v6.0
- √ ro-c-rpcmag-4-ext1-resampled-v6.0
- √ ro-c-rpcmag-4-ext2-resampled-v6.0
- ✓ ro-c-rpcmag-4-ext3-resampled-v6.0

#### Document

- √ docinfo.txt (all volumes)
- ✓ logbook\_20140323\_20141121.asc ... logbook\_20160629\_20160930.asc all ok, no changes requested
- ✓ rpcmag\_instrument.pdf ok, no changes requested
- ✓ 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 ...
     ro\_igep\_tr0047\_data\_summary.pdf all ok, no changes requested

## Calib Directory

✓ calinfo.txt (All)

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. All of the .ASC files have the same creation date (8/28/14) across the 8 volumes but the labels have different creation dates within the time range of the data on the individual volumes, please explain.

RID: calinfo.txt gives wrong naming convention for "stp00xx\_008" files: RPCMAG\_yyyy\_mm\_phase\_008\_CALIB\_IB.ASC (or OB.ASC). Remark says that files were renamed to RPCMAG\_phase\_008\_CALIB\_IB.ASC (OB.ASC) but none of these volumes contains the "stp" phase. Please explain what stpXXXX means.

- ✓ 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

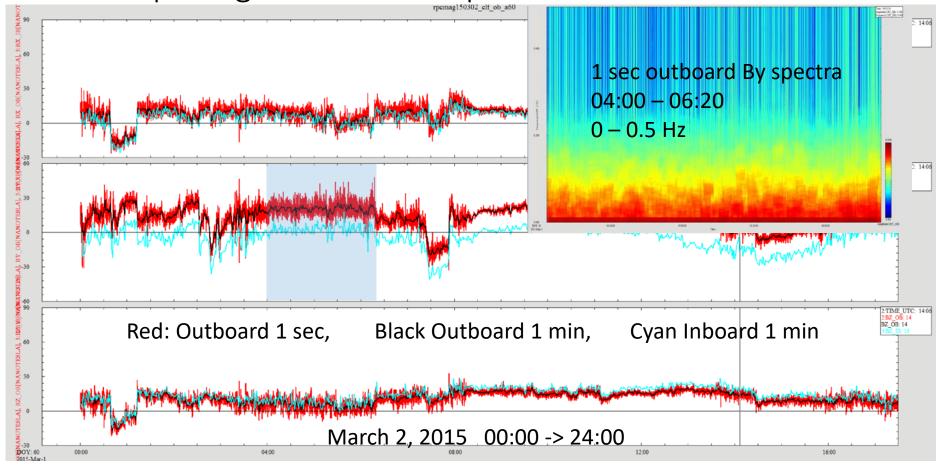
✓ indxinfo.txt

RID: This files does not mention the checksum file or its usage. In addition, this file describes BROWSE\_INDEX and GEO\_XXXX, neither or which are present on volumes. Please fix both issues so that the file describes the contents of the directory on these volumes.

- ✓ index.tab (.lbl)
- √ checksum.tab (.lbl)

## Data Directories

ro-c-rpcmag-4-esc1-resampled-v6.0



Comparison of rpcmag150302\_clf\_ob\_a60 (black) and rpcmag150302\_clf\_ob\_a1 (red) rpcmag150302\_clf\_ib\_a60 (cyan)

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

Resampled data look good, some residual offsets & noise in the inboard data

### Summary

- Other than fixing a few minor edits to some of the documentation and a few missing products in the ro-ss-rpcmag-4-prl-resampled-v5.0 volume, things are in pretty good shape.
- RIDs:
- All of these data sets can be "certified" with liens.