2017 Comet Review

6 October 2017

Attending:

Matthew Knight

Karl Hibbits

Mike Kelley (UMD)

Gerbs Bauer

Tilden Barnes

Ben Hirsch

Ludmilla Kolokolova

Emily Law

Silvia Protopapa

Bea Mueller (via WebEx)

Anne Raugh (recording)

Dennis Bodewitz

**Hartley 2 Photometry**

Matthew Knight’s presentation contains lists of various minor issues that should be taken as liens. Note that the data objects themselves have been updated, as well as the labeling migrated to PDS4, for this new version of the data set.

Mike Kelley’s presentation contains lists of various minor issues that should be taken as liens. Note that the issue of columns containing nothing but null flags is left to the discretion of the data preparer to resolve in a reasonable way.

The special case of this data set being revised so close to migration time may lead to confusion on the part of users. It will be important to make sure the relationship of this data set to the PDS3 version needs to be clear. We should consider having additional provenance attributes in the SBN dictionary, since this situation occurs regularly in our archive.

Mike K. sees a spike in the flux vs. time plot for one of the apertures in the data set. It looks like it might be right before the gap for the CN anomaly. This should be investigated and explained.

Emily and Richard (Chen) have standards compliance comments. Note that no target in this data set should have an Internal\_Reference. Emily also notes that one label referenced a non-existent data file, but it seems Validate did not pick this up. Emily/Richard will supply specifics so we can test.

Certification status: Certified for immediate release.

**Uranian Satellites**

Karly Pitman joined by WebEx.

Karl H. noted discrepancies in the data set description and what was actually presented, and found insufficient documentation to exercise what was there.

Silvia P.’s presentation contains issues that should be taken as liens. She notes significant discrepancies and raises issues specifically related to calibration with respect to the solar analogs. She also notes a discrepancy in the actual contents of the reduced FITS files and the description provided in the overview document. (This seems to be a misunderstanding regarding the storage order of a FITS file. Interestingly, the PDS4 label produces the correct interpretation, which suggests the misunderstanding is on the part of the original author of the document. This needs to be carefully verified in any event.) Plotting the data in various ways does not produce a clear answer for what is “right”. The raw data do not suffer from this issue.

An observing log would be a useful addition to the dataset to help facilitate calibration.

Emily notes that the URL for the PDS schema references would be better as https protocol. SBN should update docs to reflect and explain this. There is also an issue with missing lidvids in the inventory file.

Certification status: Not certified. Needs to return for full review, but could be done offline with a telecom for discussion if mutually agreeable.

**Comet ISON**

Eric Palmer joins by WebEx.

Mike K.’s presentation contains issues that should be taken as liens. Also note he has submitted separately a detailed list of liens in particular for documentation corrections.

It’s not clear what the appropriate organization is for these data. In some sense the abstracts seem to be dependent on the first one, suggesting they should all be one collection. Or perhaps an independent data collection would better serve the data. Also, there are some considerations related to assigning credit to the observers that may influence on collection structure.

The software routines are not sufficiently self-describing to be considered as documentation. They should probably be deleted and the algorithms described in the documentation.

Mike K.’s recommendation 7g actually applies to several cases of incorrect dates being reported. These need to be tracked down and corrected throughout.

Matthew K notes these data sit in a significant gap in ISON data, so getting this collection whipped into shape would be high-value. His presentation lists issues that should be taken as liens.

These data will need the ground-based geometry values at the very least for specifying pointing and North/East location and relationship.

[Carol Neese joined by WebEx.]

The raw data seem to be fine and potentially very useful. There are numerous calibration issues scattered through the dataset, though. Would it be reasonable to archive only the raw data?

Emily notes the subdirectory structure is not consistent from collection to collection, which is potentially confusing for reviewers. Inventory tables are also not complete. She also noted discrepancies between table lengths in the label and the actual length of the table in the file, and anomalies in XML label naming.

Certification Status: Not certified. SBN will help the data preparer to provide more robust labels and find reasonable solutions to the calibration issues prior to next review.