PDS Data Review

Lucy TTCam
Test Data

Tony Farnham May 30, 2023

Terminal Tracking Camera Instrument

- Single-filter pan-chromatic camera
 - Wide FOV (11.0 x 8.2 deg)
 - 2592x1944 pixels (74.1 μ rad)
 - Two TTCams on board
- Raw data format
 - FITS files, no extensions
 - Primary image (DN)
- Calibrated data format
 - FITS files with 5 extensions
 - Primary image (μ W/cm²/sr/nm), bad pixel map, radiance error, IOF image and IOF error image

Dataset

- Sample dataset
 - 1 raw image + label
 - 1 calibrated image + label
 - Draft version of the TTCam SIS document

Document

- Draft SIS
 - Description of data format, calibration process, etc.
 - Sections that are complete look pretty good
 - Many sections are incomplete
 - Not obvious if any sections are missing
- Section 2.3.2.2.1 Bad pixel correction
 - Section header implies that the bad pixels will be changed in some way, but it sounds like they are only being flagged in the bad pixel image. If they are not being corrected, the section header should be re-worded. If corrections are being applied, they need to be described

Data

Images are readable and contain the data as described



- XML Label and FITS header for calibrated image
 - Radiance units are given as μ W/cm²/sr

```
e axis_index_order

lmage Array

e Element_Array

e data_type

unit

Last Index Fastest

lmage Array

(data_type, unit?, scaling_factor?, value_offset?)

UnsignedMSB2

e unit

uW/cm^2/sr
```

- Missing "/nm"