

# New Horizons LORRI Data review

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## 1. Datasets overview

- PDS version: PDS3
- 2 data sets from the high res cam LORRI.

nh-a-lorri-2-kem1-v4.0

nh-a-lorri-3-kem1-v4.0

- Level: 2 raw and 3 calibrated
- Mission phases:

KEM1 v4.0 added new data (data downlink before 05/01/2020)

- Datasets comparison:

	Version 2.0	Version 3.0	<b>Version 4.0</b>
Image number	2115	4731	<b>8021</b>
Time range	2018-08-16 - 2019-01-05	2018-08-16 - 2019-07-13	<b>2018-08-16</b> - <b>2020-04-23</b>

- No new SPICE data provided for this review. No shape model provided too.
- Summary: Both level 2 and 3 datasets are well produced, and well documented. Find very minor issues.

## 2. Review process

- All processing and evaluation:



- Double checked a few items from last review of v3.0 data: (All GOOD)
- Compare difference between different level and different version sets with tools:
  - FileMerge 2.9.3
  - Beyond Compare 4.3.3
- Read all .fit and label files (all can be read correctly).
- Check the headers and labels
- Compare catalog files in all datasets, and analyze the difference
- Compare documents in document/directory

- Collect aspect data from all image headers, check consistency between levels

### 3. Catalog/Document/Index

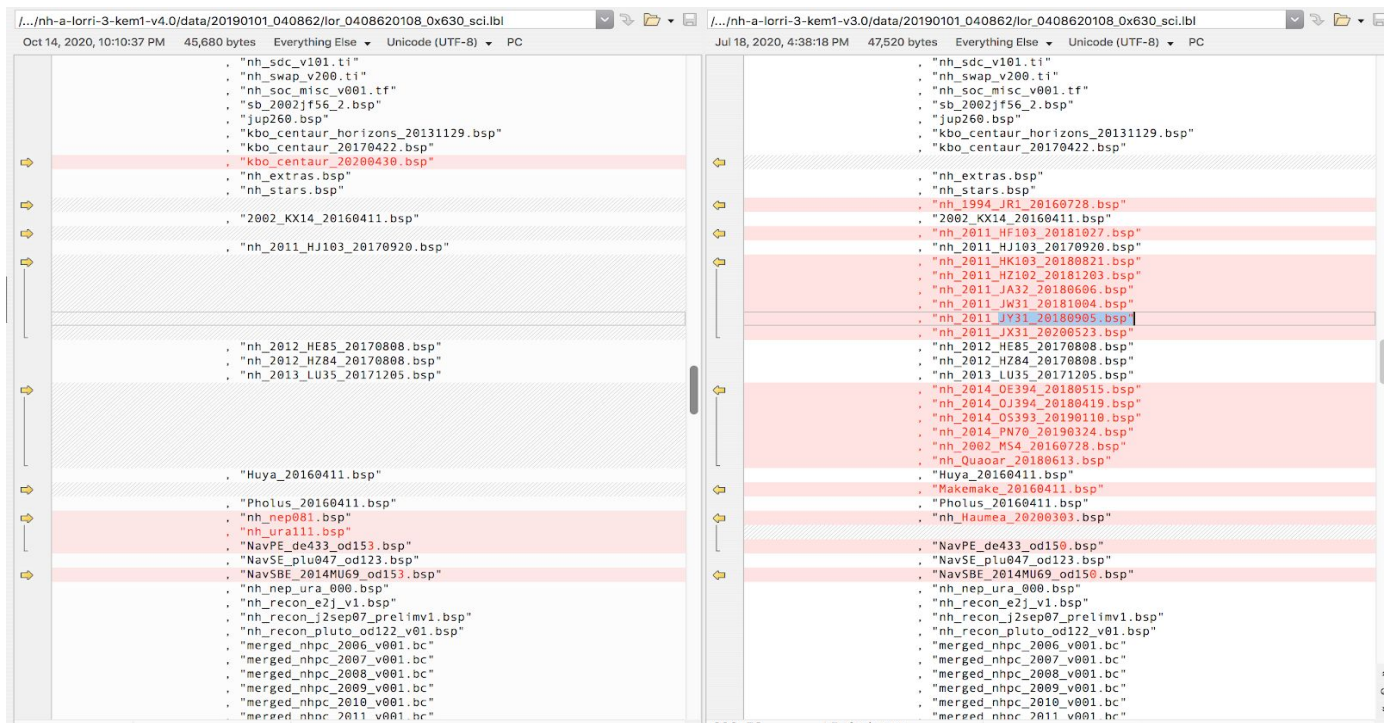
Labels:

Dataset.cat: "This version includes DKBO observations of 2011 HF103, 2011 HK103, 2011 HZ102, 2011 JA32, 2011 JW31, 2011 JX31, 2011 JY31, 2014 OE394, 2014 OJ394, 2014 OS393, and 2014 PN70.

There are also observations of 50000 QUAOAR (2002 LM60), ASTEROID 307261 (2002 MS4), ASTEROID 486958 (2014 MU69), HD 37962, INTERPLANETARY DUST, M7, NGC 3532, PLUTO, PROXIMA CENTAURI, TRITON, and WOLF 359.

"

- Noticed a few target SPKs were removed from V4.0 data labels.



### 4. Data

Files can be correctly read by python, IDL and ds9.  
No checking on geometry this time.

### 5. Conclusion: these v4.0 datasets are **certifiable**.