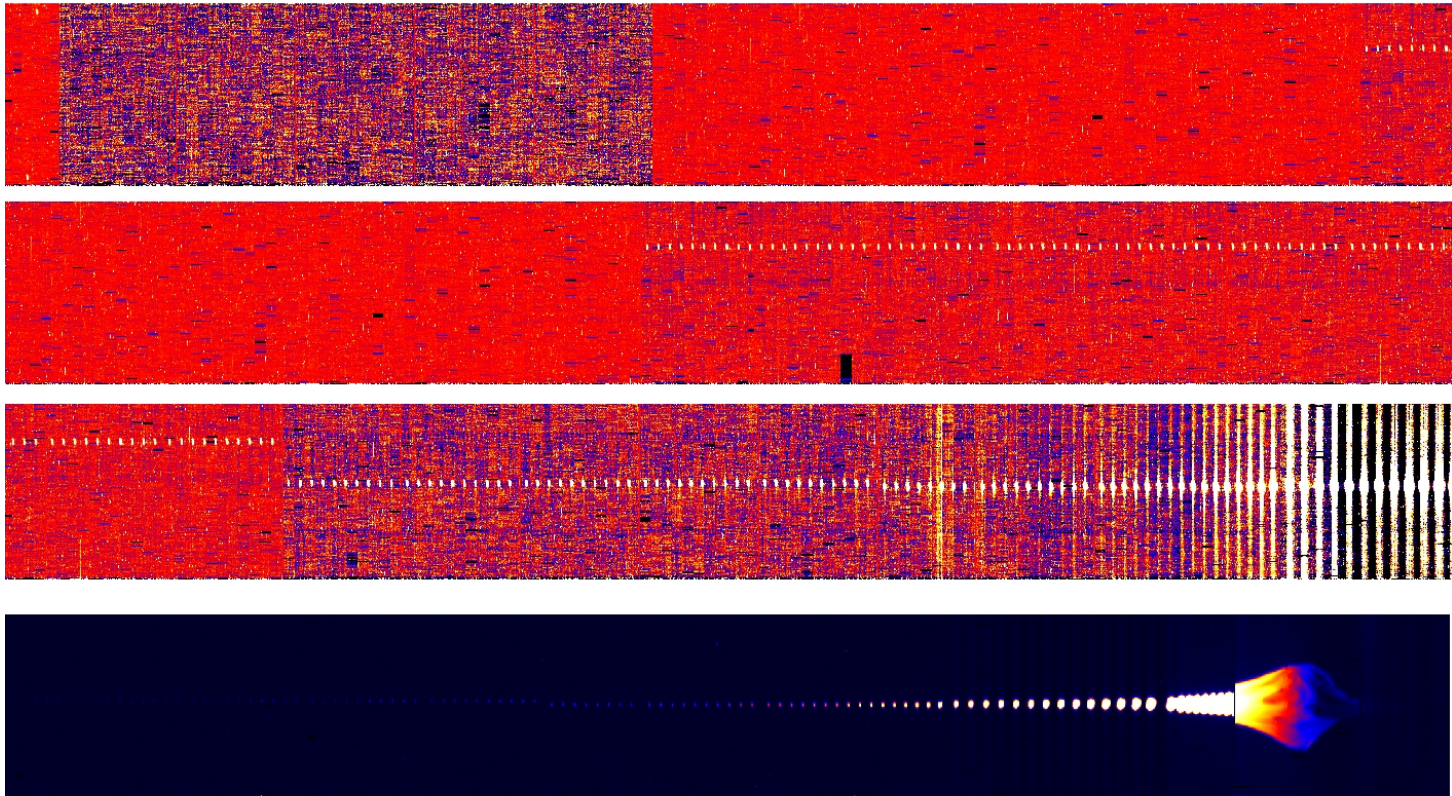


# Rosetta VIRTIS

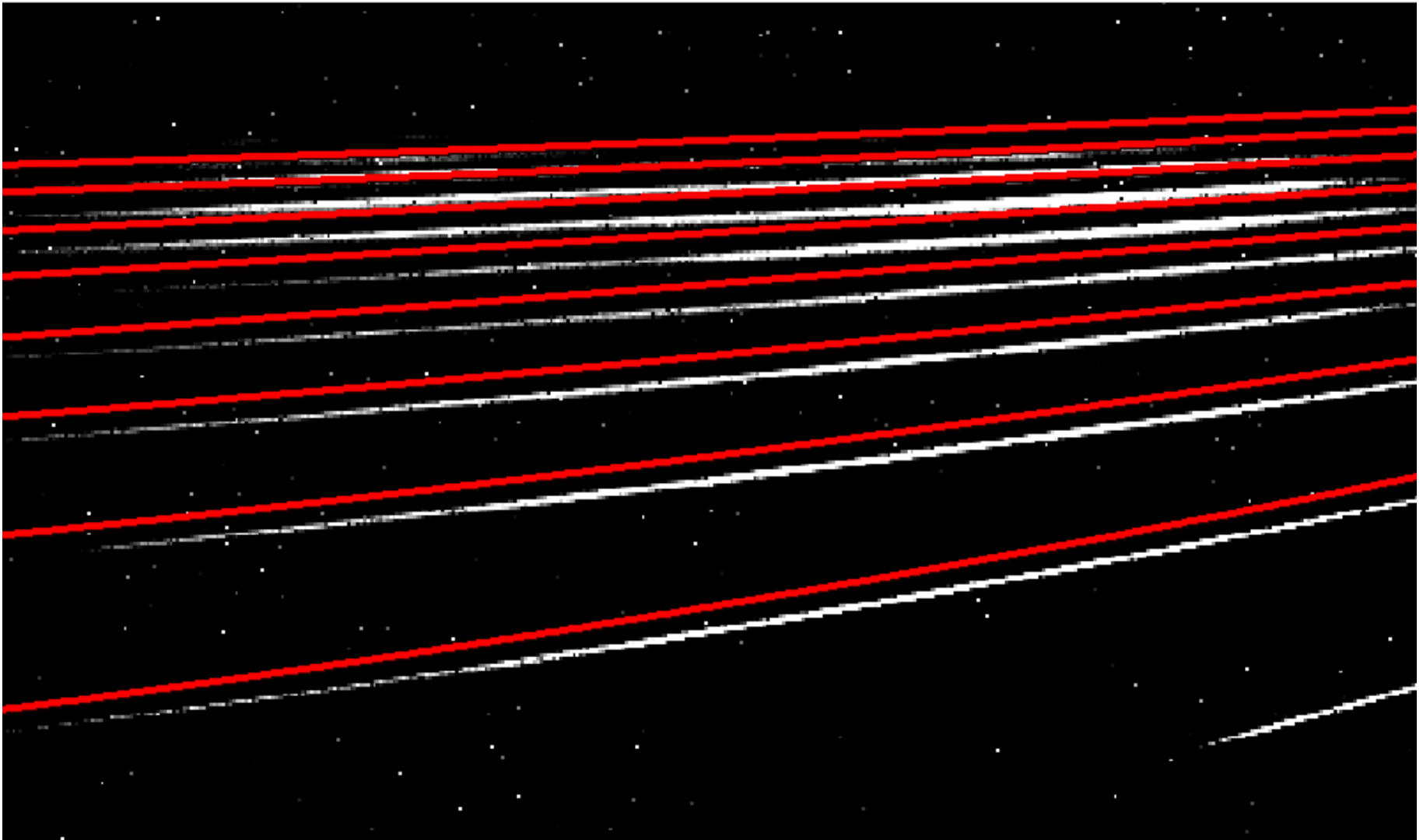


# VIRTIS

- Three independent cameras:
  - High-res spectrometer: VIRTIS-H (IR)
  - Medium-res spectro-imagers:
    - VIRTIS-M VIS
    - VIRTIS-M IR
- Archive consists of VIRTIS-M spectral cubes and VIRTIS-H cross-dispersed and extracted spectra.
- Spectra are of Arcturus, Lutetia, and (nominally) Vesta

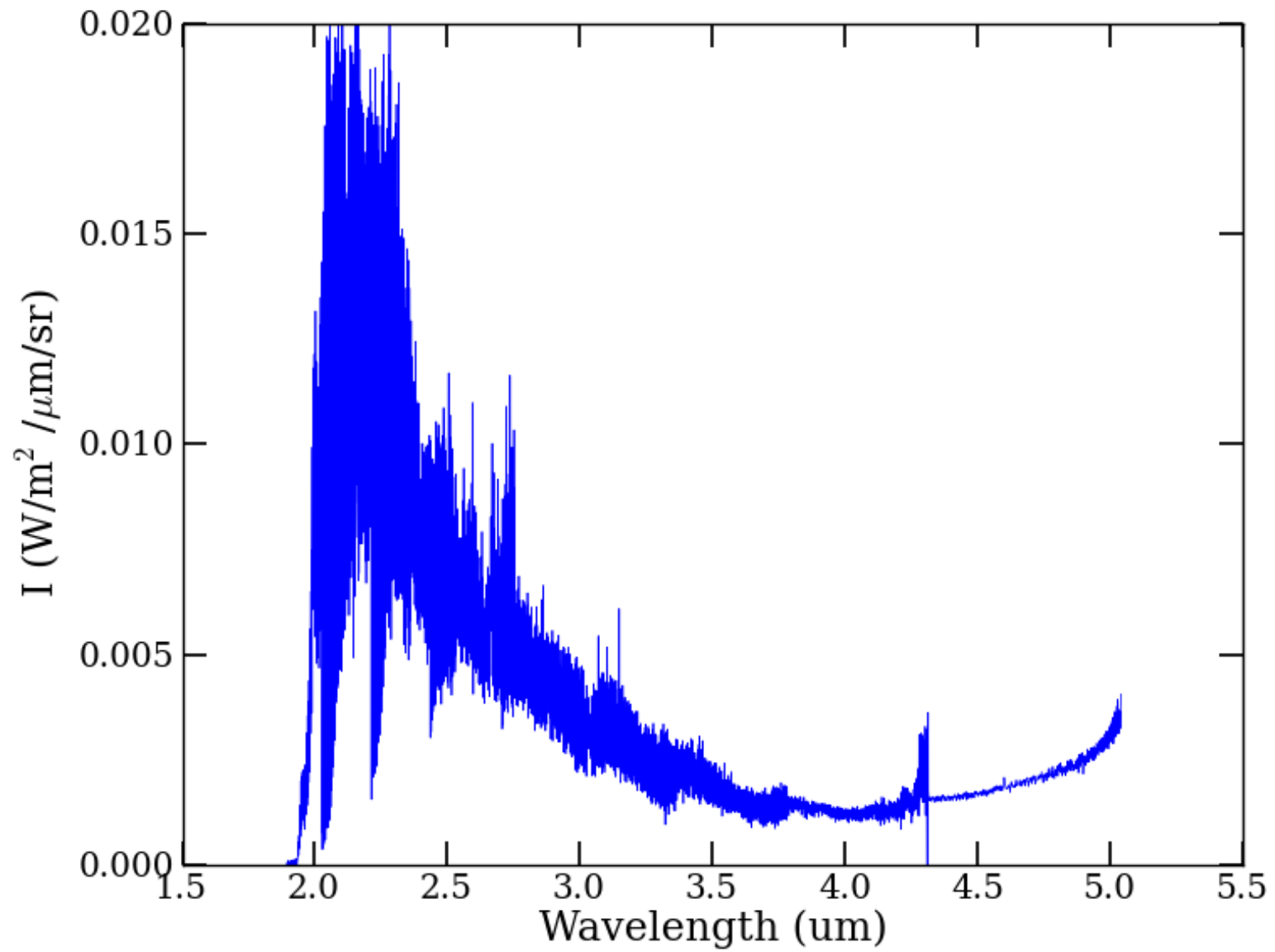
# VIRTIS Data

- DATASET.CAT appears to be named VIRTIS\_RAW\_DS.CAT... rename?
- Documentation needs to be updated to reflect the CALIB directory documents (spectral calibration files were changed).
- DOCINFO.TXT needs to be updated from Earth flyby to Lutetia flyby.
- VIRTIS-H aperture coefficients need to be clarified...

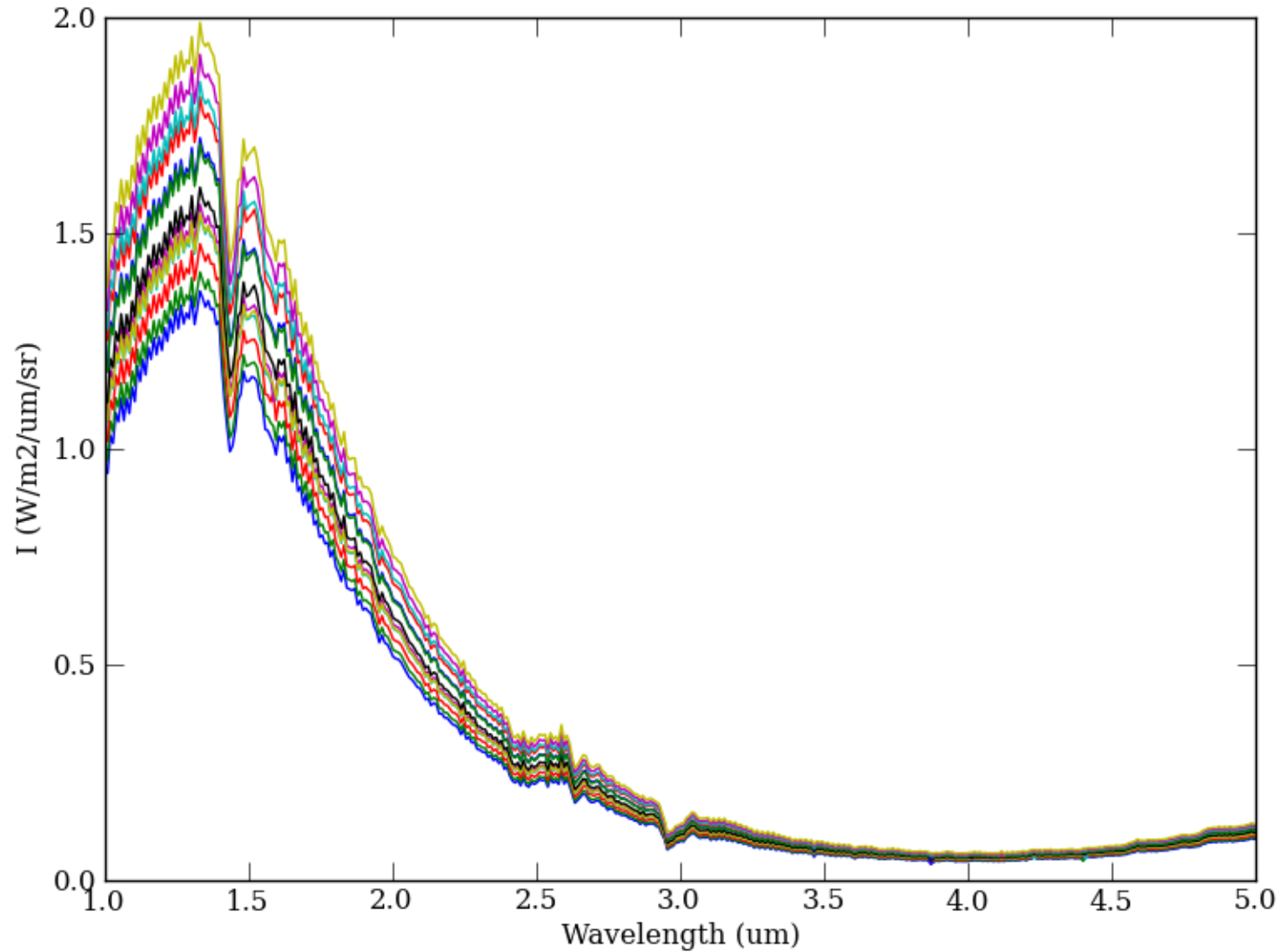


# VIRTIS Data

- The labels for VIRTIS-H calibration files are missing units, namely micrometers and  $\text{DN} \cdot \text{m}^2 \cdot \text{um} \cdot \text{sr} / \text{uW} \cdot \text{s}$ 
  - The wavelength calibration is generated from a set of 5th-order polynomial coefficients; only units on the result are necessary.
  - The units are given in the documentation.
- However, the spectrum doesn't agree with VIRTIS-M (I still need to work on this).



# VIRTIS-M IR, mean disk



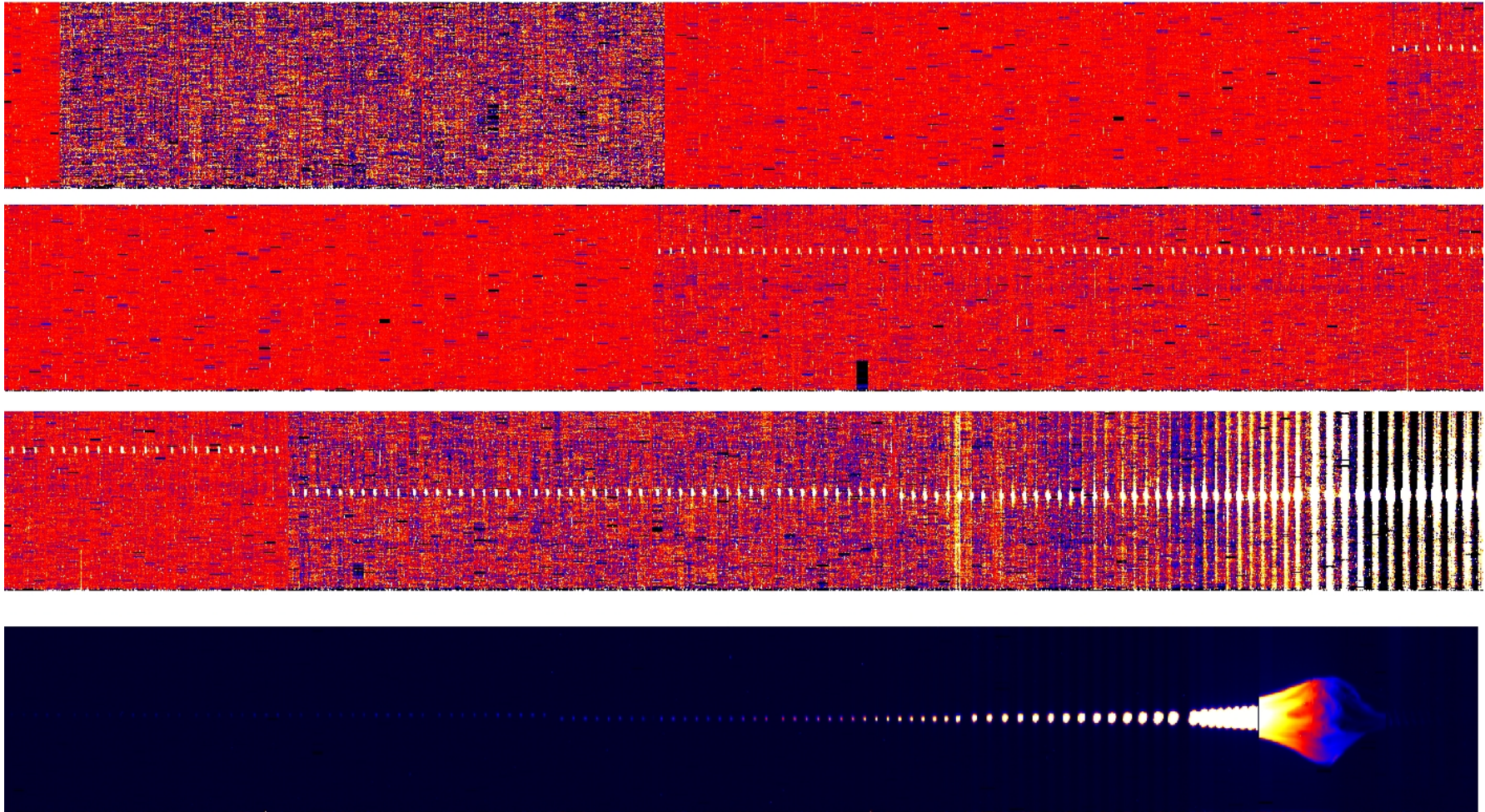
# Geometry

- Some geometry information is included in the VIRTIS-M image labels:
  - Sun-Spacecraft vector in Ecliptic J2000 coords
  - RA, Dec of the field-of-view
- **More information should be included**, nominally:
  - Position angle of Celestial N and E (or equivalent)
  - **All VIRTIS-H geometry is missing. If this cannot be added, a note should be added to DATASET.CAT.**
- **Geometry files and the description thereof are “TBW” according to the documentation.**



# Geometry

- There is a VIRTISROS\_GEOMETRY file in the documentation.
  - It isn't complete (several “TBC” comments),
  - Needs to be updated for Lutetia (Steins is discussed).



# VIRTIS-M IR lightcurve

## Mean 1.1-2.9 $\mu\text{m}$

