

This dataset contains the following subdirectories with data in the directory

Imaging/:

Raw/:

Comet images: filter exposure (sec)

wi080064.fits	I	60.000
wi080065.fits	I	200.000
wi080066.fits	I	10.000
wi080067.fits	I	10.000
wi080068.fits	I	10.000

Biases:

wi030001.fits	1 Free	0.000
wi030017.fits	1 Free	0.000
wi030028.fits	1 Free	0.000
wi030032.fits	1 Free	0.000
wi030036.fits	1 Free	0.000
wi030041.fits	1 Free	0.000
wi030051.fits	1 Free	0.000
wi030063.fits	1 Free	0.000
wi030083.fits	1 Free	0.000
wi030099.fits	1 Free	0.000
wi080001.fits	1 Free	0.000
wi080020.fits	1 Free	0.000
wi080055.fits	1 Free	0.000
wi080063.fits	1 Free	0.000

Sky flats:

wi030014.fits	I	8.000
wi030015.fits	I	13.000
wi030016.fits	I	20.000
wi030084.fits	I	40.000
wi030086.fits	I	14.000
wi080017.fits	I	40.000
wi080018.fits	I	85.000
wi080019.fits	I	120.000

Calibration/:

Zero.fits	Master Bias
flat1.fits	Master Flat in I filter

Processed/:

`cc' - means cosmic ray cleaned, `f' - flat-fielded and `b' - de-biased.

fbwi080064.fits	I	ccfbwi080064.fits
fbwi080065.fits	I	ccfbwi080065.fits
fbwi080066.fits	I	ccfbwi080066.fits
fbwi080067.fits	I	ccfbwi080067.fits
fbwi080068.fits	I	ccfbwi080068.fits

Document/:

Sept08_2013_Imaging.pdf	-	This document
preprocessing.cl	-	Preprocessing IRAF code
cosmic_rays.cl	-	IRAF code for cosmic rays removal

HFOSC CCD characteristics and Reduction procedure:

CCD:

Photometric data was obtained on September 08, 2013, using the Himalayan Faint Object Spectrograph and Camera (HFOSC) mounted on the 2.0-m HCT of the Indian Astrophysical Observatory (IAO) of the Indian Institute of Astrophysics (IIA), located at 4500 m above sea level, Hanle, Leh, Ladakh.

HFOSC is equipped with a Thompson CCD of 2048×2048 pixels with a pixel scale of 0.296"/pix and a field of view of ~10×10 arcmin. The readout noise, gain and readout time of the CCD are 4.87 e, 1.22 e/ADU, and 90 sec, respectively.

Reduction Procedure.

Basic reduction was performed by using IRAF-based script that employs IRAF procedure *ccdproc*, and includes trimming the frames to [50:1948,50:1948], *zerocombine* for bias subtraction, and *flatcombine* for flat-fielding. The code created Master frame called Zero.fits, and Master flat frame for Bessel I filter: Flat3.fits. The code *preprocessing.cl* is attached.

Cosmic rays were removed using IRAF-based script that employs IRAF task *crmedian*. The code *cosmic_rays.cl* is attached.