This dataset contains the following subdirectories with following data in the directories:

Imaging/May01-04/:

Raw/:

Comet images:	filter	exposure (sec)	Date-Obs
we010018.fits	R	120.000	2013-05-01
we010019.fits	R	150.000	2013-05-01
we010020.fits	R	150.000	2013-05-01
we010021.fits	V	240.000	2013-05-01
we010023.fits	"1 Free"	20.000	2013-05-01
we010025.fits	"1 Free"	20.000	2013-05-01
we040018.fits	"1 Free"	30.000	2013-05-04
we040019.fits	"1 Free"	30.000	2013-05-04\

Biases:

we010001.fits	"1 Free"	0.000
we010017.fits	"1 Free"	0.000
we010089.fits	"1 Free"	0.000
we010090.fits	"1 Free"	0.000
we010091.fits	"1 Free"	0.000

Sky flats:

we010008.fits	V	0.800
we010009.fits	V	1.000
we010010.fits	V	1.500
we010011.fits	R	2.000
we010012.fits	R	4.000
we010013.fits	R	7.000

Calibration/:

Zero.fits	Master Bias
FlatR.fits	Master Flat in R
FlatV.fits	Master Flat in V

Processed/:

`cc' - means cosmic ray cleaned, `f' - flat-fielded and `b' – de-biased, `t' - aligned

fbwe010018.fits	ccfbwe010018.fits	not aligned as very poor image
fbwe010019.fits	ccfbwe010019.fits	tccfbwe010019.fits
fbwe010020.fits	ccfbwe010020.fits	tccfbwe010020.fits
fbwe010021.fits	ccfbwe010021.fits	tccfbwe010021.fits

Document/:

preprocessing.cl   -   Preprocessing IRAF code
cosmic_rays.cl   -   IRAF code for cosmic rays removal
May_2013_Imaging.pdf   -   This document

HFOSC CCD characteristics and Reduction procedure:

CCD:

Photometric data was obtained on May 01 and 04, 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 x 2048 pixels with a pixel scale of 0.296"/pix and a field of view of ~10 x 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 [100:1945,100:1945], *zerocombine* for bias subtraction, and *flatcombine* for flat-fielding. The code creates Master bias frame called Zero.fits, and Master flat frames for each filter: FlatR.fits and FlatV.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.

Images taken in open filter "1 Free" (for spectrography) were not reduced.

Alignment.

Images taken on 01 May in R (2 frames) and V (1 frame) filter are aligned on the brightest pixel of the comet (optocentre) using IRAF procedure *imalign*.