PSF-Fitting Photometry for PreCam

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DES Calibrations Telecon

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DAOPHOT

DAOPHOT package in IRAF

- DAOPHOT is a PSF-fitting stellar photometry package (Peter Stetson 1987)
- Generally used for crowded field stellar photometry (e.g., in globular clusters)
- Analytical models for PSF model include gauss, moffat25, moffat15, lorentz, penny1, and penny2
- Allows for a PSF models that are constant or that vary linearly or quadratically over the focal plane

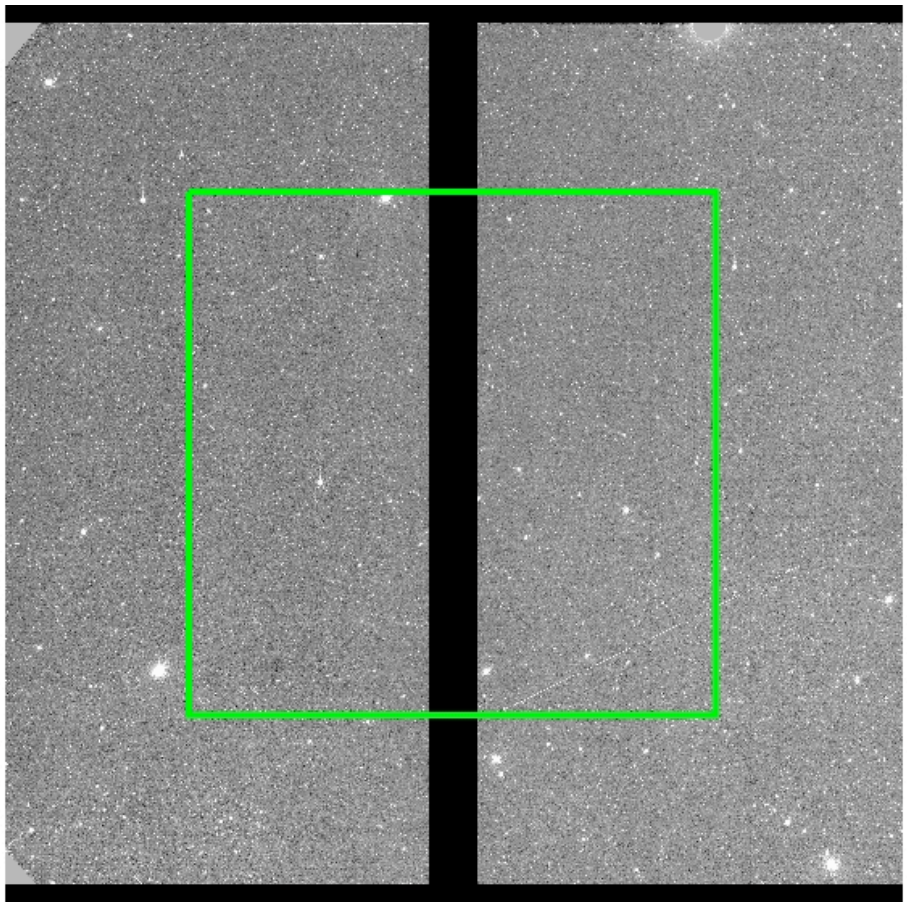
DARK ENERGY SURVEY

DAOPHOT:

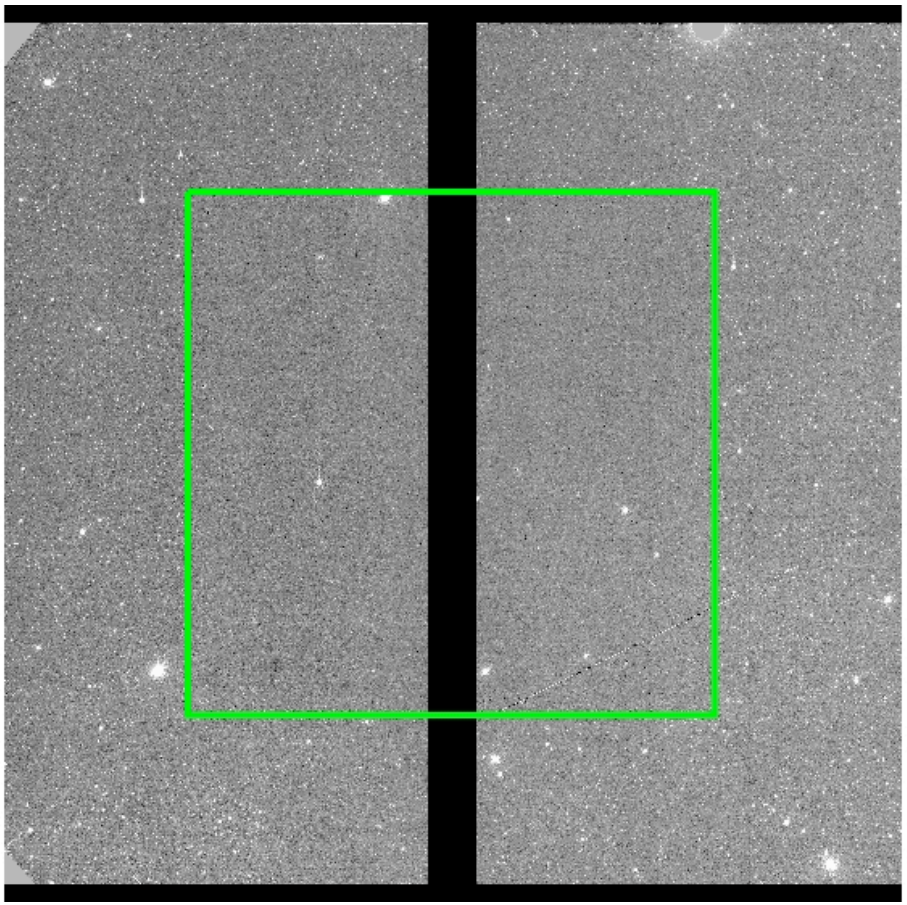
PreCam image V3-Ftttprecam_00019817.fits

Full Size

Original



Star-Subtracted



DARK ENERGY SURVEY

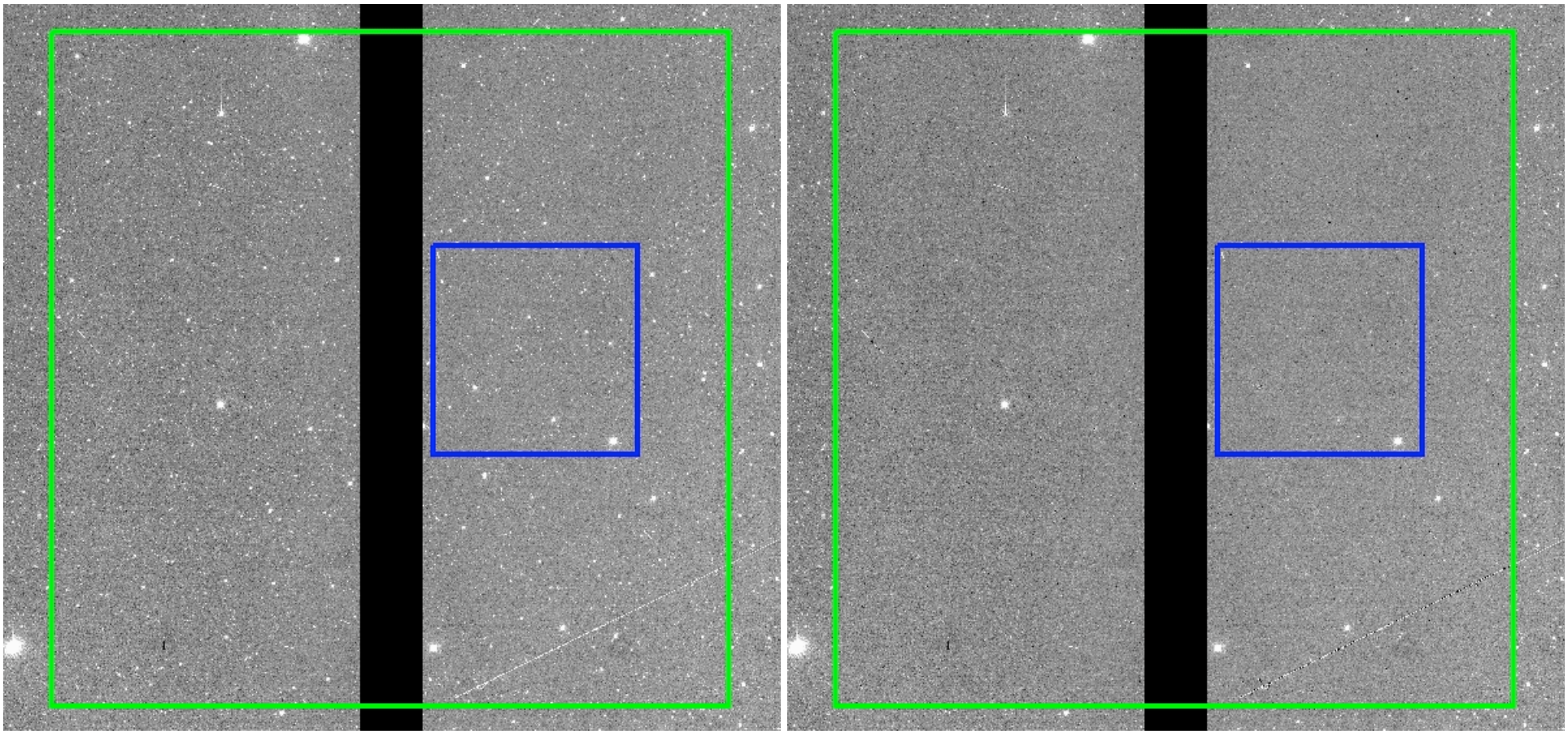
DAOPHOT:

PreCam image V3-Ftttprecam_00019817.fits

Zoom #1

Original

Star-Subtracted



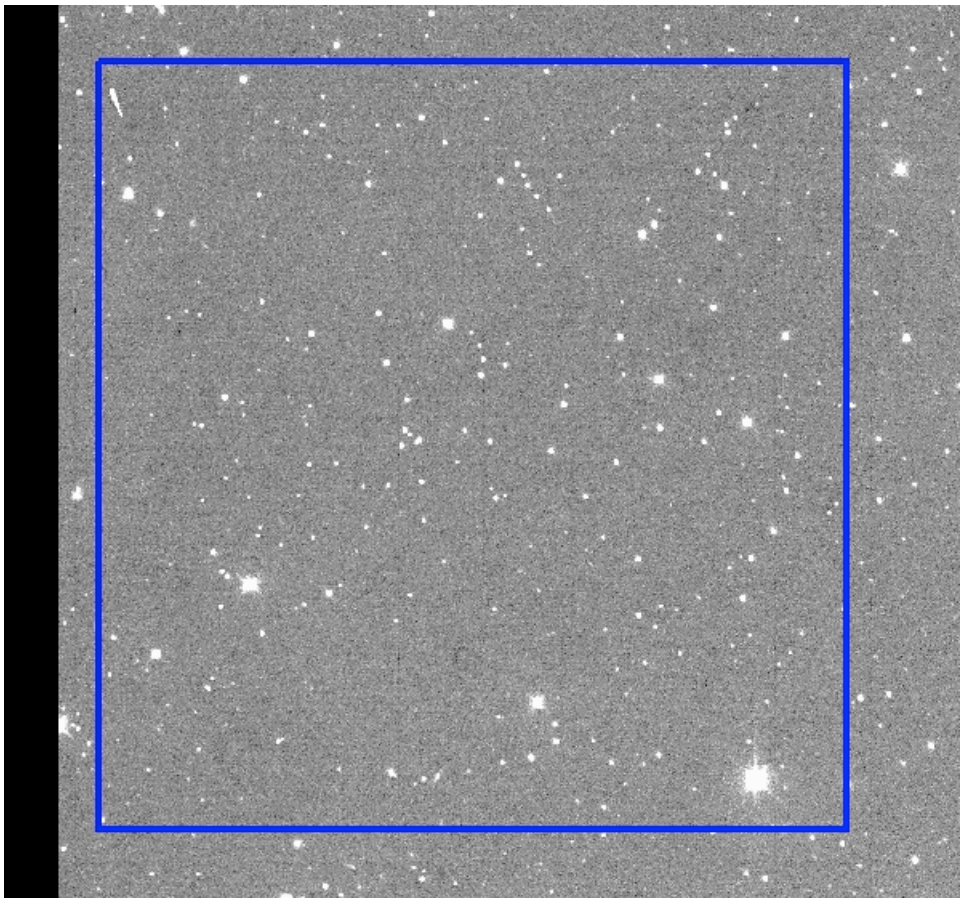
DARK ENERGY SURVEY

DAOPHOT:

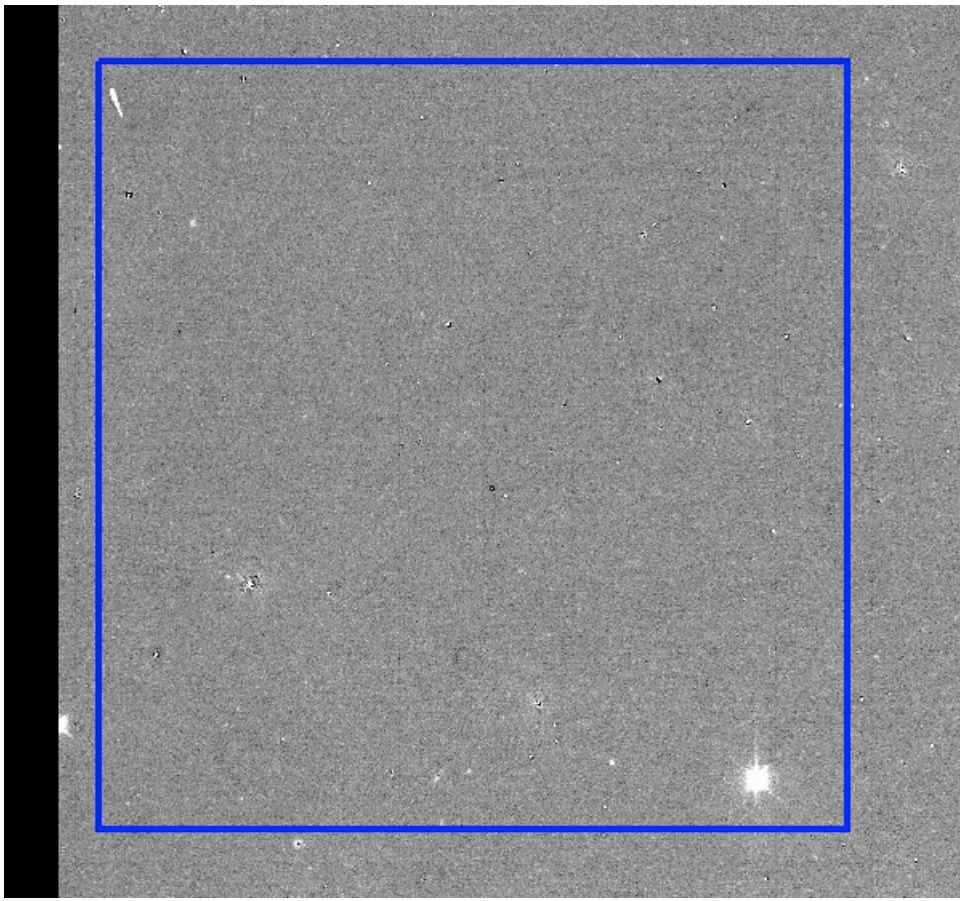
PreCam image V3-Ftttprecam_00019817.fits

Zoom #2

Original



Star-Subtracted

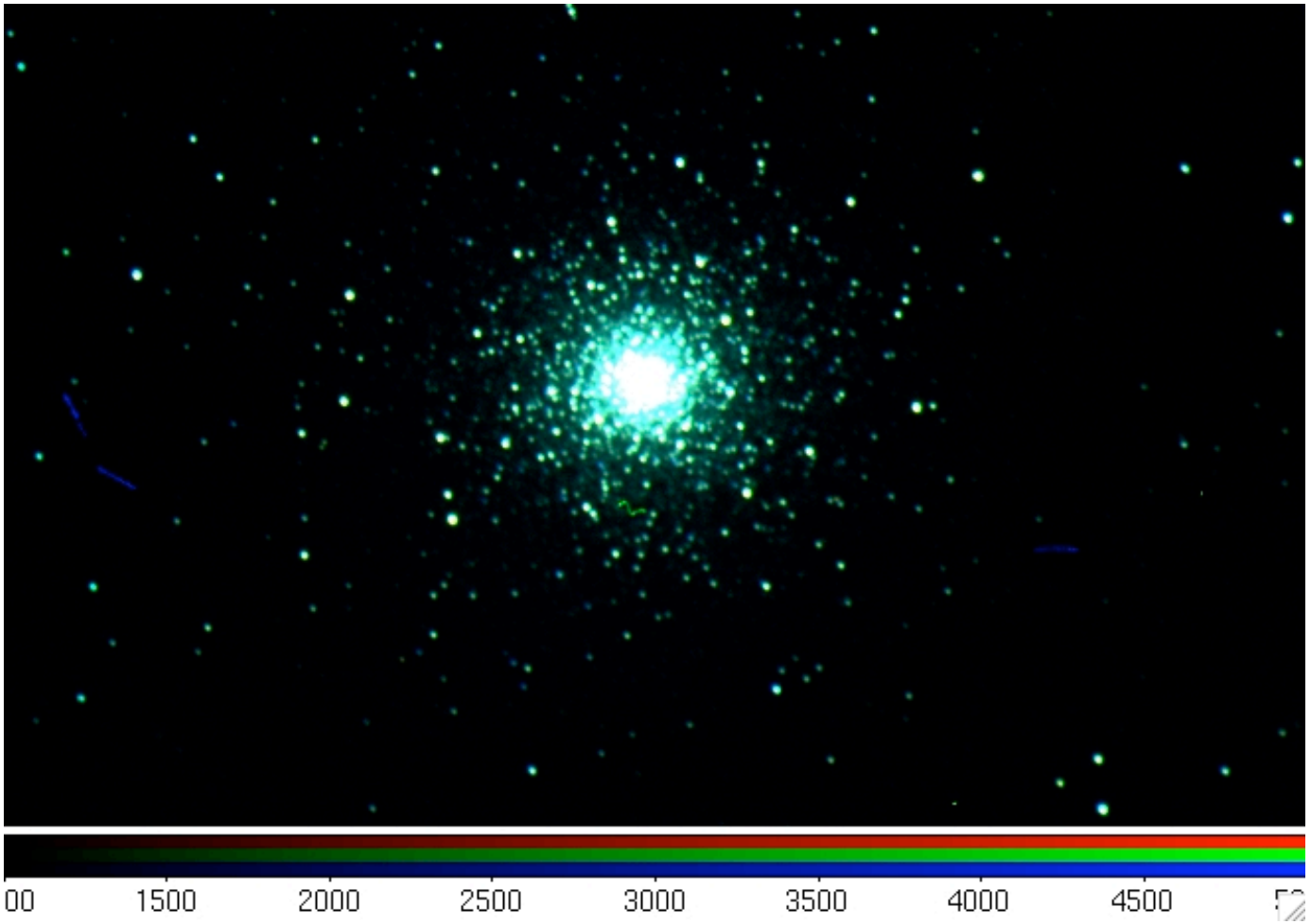


DARK ENERGY
SURVEY

Extra Slides

Globular Cluster NGC 1851
(no DAOPHOT photometry… yet)

DARK ENERGY SURVEY



- From PreCam images ccmap-wcs-Ftttprecam_00021604.fits, ccmap-wcs-Ftttprecam_00021605.fits, & ccmap-wcs-Ftttprecam_00024010.fits