

1 DECam Information

From the DECam Imager Handbook:

DECam has a three square degree field of view (2.2 degrees wide). It images

Table 2.1: DECam Characteristics

Effective Area of CCD Focal Plane	3.0 square degrees
Optical Corrector Field Diameter	2.2 degrees
Pixel scale @center/edge of FoV (arcsec/unbinned pixel)	0.2637 / 0.2626
Image CCD pixel format/total # pixels	2K x 4K/520 Mpix
Telescope focal ratio	F3.0

Figure 1: DECam Characteristics

at a resolution of 0.263 arcseconds per pixel. In particular, 0.2637 arcsec/pixel (center), 0.2626 arcsec/pixel (edge). 0.2637/0.2626 (arcsec/unbinned pixel). S Large focal plane array with a close to circular array of 62 CCDs and a total of 520 million pixels.

CCD Array Characteristics:

Array Dimensions: Axis 1: 2048 pixels Axis 2: 4096 pixels

Pixel Size: 15 μm

We are looking to use **resampled** images that have a zero-point associated with them. In the astro data archive, this corresponds to files with the process type (`proc_type`) of `resampled`, and the presence of the `MAGZERO` and/or `MAGZPT` fields.

MAGZERO data field: The (astronomical) magnitude corresponding to a single photon count in the image. This is located in the *Extension* headers of the FITS files, present in Level 2 data products (single, reduced exposures). (From the DECam data handbook)

2 Declination Range of the 2.3m Telescope

Physical Pointing Limit of the 2.3m

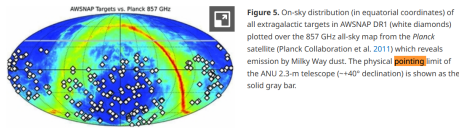


Figure 2: Enter Caption

3 link dump

github repo

source extractor tutorial

Table 2.1: DECam Characteristics

Effective Area of CCD Focal Plane	3.0 square degrees
Optical Corrector Field Diameter	2.2 degrees
Pixel scale @center/edge of FoV (arcsec/unbinned pixel)	0.2637 / 0.2626
Image CCD pixel format/total # pixels	2K x 4K/520 Mpix
Telescope focal ratio	F3.0

Figure 3: DECam Characteristics

3.1 DECam

NOIRLab astro data archive
data archive query example notebook
DES project data access
DECam imager data handbook
NOIRLab DECam information page (has more links)
DES Data Management
2.3m projects