V08a Sloan Digital Sky Survey: II. Camera

関口真木、The Sloan Digital Sky Survey (SDSS) Collaboration (本シリーズの講演 I を参照)

We have complated a large mosaic CCD camera, which is used for photometric observation of Sloan Digital Sky Survery (SDSS). The camera has 5 x 6 array of SITe 2K x 2K pixel CCDs for photometric observation and 24 of 2K x 400 pixel CCDs for astrometric/photometric observation of stars above 13th mag. The pixel size is 24 micron and image scale is 0.4 arcsec per pixel. The camera is physically the biggest mosaic camera and has the largest number of pixels ever built since the invention of CCDs.

The camera is operated in Time-Delay-Integration mode with a survey speed of 1.37 degree x 0.23 degree per 55-second in five color-bands (SDSS u, g, r, i, and z) simultiouly. This instrument is so powerfull that even a single night operation can see over 120 square-degree in five colors.

Japanese Participant Group home page http://indus.astron.s.u-tokyo.ac.jp/works/SDSS/sdss-j.html Camera photograph and First light image in http://indus.astron.s.u-tokyo.ac.jp/works/SDSS/first