Calibration and Standardization of Large Surveys and Missions in Astronomy and Astrophysics



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Photometric Calibration Strategy of the Dark Energy Survey

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The Dark Energy Survey (DES) is a 5000 sq deg grizY imaging survey to be conducted using a 3 sq deg (2.2degdiameter) wide-field mosaic camera (the DECam) on the CTIO Blanco 4-m telescope. The DECam is currently in the process of installation and commissioning on the Blanco, with DES operations expected in the second half of 2012. The primary scientific goal of the DES is to constrain dark energy cosmological parameters via four complementary probes: galaxy cluster counting, weak lensing, galaxy angular correlations, and Type Ia supernovae, supported by precision photometric redshifts. Here, we present the general photometric calibration plans for the DES, including a discussion of standard stars and field-to-field calibrations.

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