[P-125/GC-13] Optical/NIR Imaging of AKARI NEP-Wide Survey Field

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We present the results from a B,R and I band observation, and the current status of a NIR-imaging of the NEP-Wide survey field. The NEP-Wide is an AKARI survey of the North Ecliptic Pole covering 5 square degree area. Our optical/NIR imaging supports the AKARI IR imaging data by providing a crucial coverage in optical/NIR. The optical data were obtained from June 12 to August 5, 2007 at the Maidanak Observatory in Uzbekistan using the 1.5m telescope and the Seoul National Univesity's 4k x 4k CCD. The NIR data were obtained from June 13 to 23, 2008 using the FLAMINGOS on the KPNO 2.1m telescope. We used IRAF, SExtractor, SCAMP and SWarp for reductions of the raw data, I-band fringe pattern removal, astrometry, standard photometry calibration and mosaic of images. Source catalogs are created using SExtractor. After analyzing the catalogs, we present the astrometric accuracy, galaxy number counts, completeness and reliability including redshift tracks of some normal galaxies and QSOs on the B-R vs. R-I color-color diagram. The photometric data will be used for identifying optical counterparts of the IR data provided by AKARI and studying their SEDs, and the selection of interesting objects for spectroscopic follow-up studies.

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