## [¬GC-05] Optical Imaging of Infrared Sources from AKARI NEP-Wide survey; Deep Observation of Distant Universe from Uzbekistan.

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We present the results from the B,R and I band observation 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 survey supports the AKARI IR imaging data by providing a crucial coverage in optical. The observational 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 University's 4k x 4k CCD. We used IRAF, SExtractor and Swarp for reductions of the raw data, I-band fringe pattern removal, astrometry, standard photometry calibration and mosaic of images. The photometric data are being used for identifying optical counterparts of the IR data provided by AKARI and studying their SEDs, and the selection of interesting objects. We will present early science results based on the B/R/I data.

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## [\(\pm\)GC-06] A Catalogue of Local Post-starburst "E+a" galaxies Selected from GALEX and SDSS

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A new acronym "E+a", named after "E+A", stands for elliptical ("E") galaxies with a minority of A-type ("a") young stars. The conventional diagnosis of the A-type population in "E+A" galaxies is the Balmer lines, which become conspicuous only along with a significant amount (~10 % of total stellar mass) of young stars. As a result, the "E+A" sample does not fully represent the whole post-starburst galaxy population. Moreover, their still-limited number often hinders thorough statistical investigations. In order to overcome this drawback with Balmer lines, we can benefit from the UV fluxes from galaxies, which serve as the most direct way to detect recent star formation (RSF) activities. Here, a substitution of the NUV-optical colors for the Balmer lines enables us to define "E+a" galaxies as a new set of post-starburst galaxies that show UV-excess but no Ha emission. This is a conceptual generalization of "E+A". We present a catalogue of ~3000 "E+a" galaxies from Galaxy Evolution Explorer (GALEX) General Release 4 and Sloan Digital Sky Survey (SDSS) Data Release 4 plus. A comparison of stellar components between "E+A" and "E+a" galaxies indicates their intimate evolutionary connection, in that the local "E+a"s represent the milder cousins (if RSF was weak) or the living relics (if RSF was quenched quite a while ago) of "E+A"s. Given that "E+a"s and UV-dead red galaxies are in general indistinguishable by their optical signature, the GALEX "E+a" galaxies in our catalogue may exemplify the latest new-comers to the red sequence population. The catalogue will be available on our web site, and make possible to study RSF galaxies in a more statistically manner. This work was supported by the Korea Research Foundation Grant funded by the Korean Government (KRF-2006-331-C00134).