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Photometric calibration of the Kilo Degree Survey (KiDS)

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The Kilo Degree Survey will cover 1500 sq.deg. in Sloan u, g, r, and i using the OmegaCAM camera on the VST, at ESO Paranal. It is an ESO Public Survey that started October 15, 2011. Its main science driver is dark matter and energy from weak lensing analysis. Photometric calibration of OmegaCAM is based on the combination of (i) a very stable dome calibration unit, (ii) 3 times per night observations of a polar field and (iii) SA fields. A dedicated program until summer 2012 will establish OmegaCAM secondary standards in SA fields. KiDS photometric calibration makes also use of ATLAS, a contemporaneous ESO Public Survey on OmegaCAM. KiDS will be combined with its near-infrared sister survey VIKING (in ZYJHK). Together they will deliver on order 1e8 photometric redshifts out to median z=0.8. KiDS-VIKING is planned as input for Euclid. This is ESA's recently approved optical and near-infrared 15000 sq.deg. survey mission from space.

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