

Near Earth Objects: Photometric Observations of 1999 KX4 and Astrometric Observations of 2013 PY 6.

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As a member of the Table Mountain Observatory's Photometry and Astrometry team, data were collected of near Earth asteroid 1999 KX4 (13199) and of near Earth object 2013 PY 6 (P107QiZ). Photometric data acquisition of 1999 KX4 was performed following an observing model established by Dr. Michael Hicks to secure flat field images, Landolt standard fields and UBVRI color-bands. The data on 1999 KX4 were gathered over six nights then analyzed to establish period rotation, albedo, phase curve, and low resolution spectrum. Astrometric data were acquired over one night of NEO 2013 PY 6 and reported to the Harvard Smithsonian Minor planet center in an effort to confirm the objects status as a new near Earth object. Additionally, the data were analyzed to establish its orbit through the solar system.