

THE ROTATIONAL PERIOD OF 1406 KOMPPA

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Our observations of main-belt asteroid 1406 Komppa indicate a synodic period of $P = 3.508 \pm 0.002$ h, $A = 0.16 \pm 0.05$ mag.

Observations of 1406 Komppa were taken over 7 nights in 2011 August and September. The Shed of Science used a 0.35-m Schmidt Cassegrain (SCT) with an SBIG ST-10XE CCD camera working at f/8.5, resulting in a scale of 0.94 arcsec/pixel. Exposures were made through a Celestron UHC LPR filter. The Etsorn Campus Observatory of New Mexico Institute of Mining and Technology has two identical 0.35-m SCT operating at f/11 with SBIG STL-1001E CCD cameras resulting in an image scale of 1.25 arcsec/pixel. HUT Observatory has a 16-inch f/8 Ritchey-Chretien reflector by DFM Engineering. For these observations we used an Apogee Alta model U47 CCD with a Bessell R filter. The exposures were binned 2x2 for an effective image scale of 1.65 arcsec/pixel.

All images were dark and flat field corrected. Images were measured using *MPO Canopus* (Bdw Publishing) with a differential photometry technique. The *MPO Canopus* Comp Star Selector was used to link sessions. The data were light-time corrected. Period analysis was also done with *MPO Canopus*, incorporating the Fourier analysis algorithm developed by Harris (Harris *et al.* 1989).

Behrend (2011) reported a period near 7.0 h, or twice the period we are reporting here. Our current results are in close agreement with earlier work on this object by Polishhook (2009).

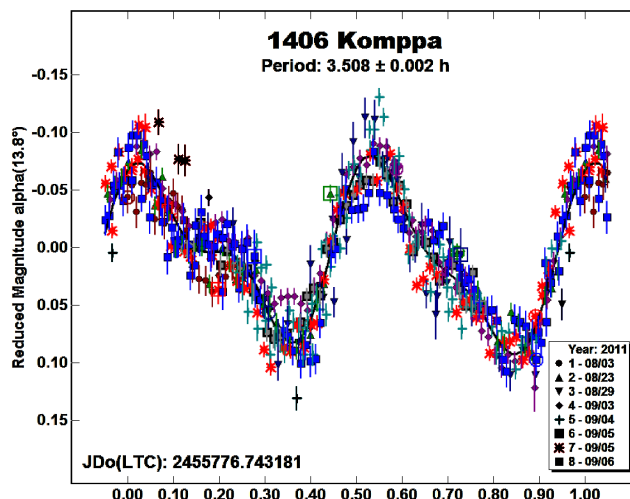
Acknowledgements

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ROTATIONAL PERIOD DETERMINATION FOR 1820 LOHMANN

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Observations of main-belt minor planet 1820 Lohmann were undertaken by Lenomiya Observatory during 2011 August-September. Data analysis found a period of 14.048 ± 0.001 h with amplitude 0.48 ± 0.01 mag.

1820 Lohmann is a main-belt asteroid, discovered in 1949 by K. Reinmuth in Heidelberg and named in honor of Werber Lohmann (1911-1983), an astronomer at Heidelberg (Schmadel, 2003). The asteroid was selected from Collaborative Asteroid Lightcurve Link (CALL) site's Lightcurve Targets list (Warner, 2011). A search of the Asteroid Lightcurve Database and other sources does not reveal any previously reported lightcurve results for 1820 Lohmann.

Observations of the asteroid were made at the Lenomiya Observatory with a Celestron CPC-1100 0.28-m Schmidt-Cassegrain (SCT) working at f/6.3 using a focal reducer. Images were guided and unfiltered using a Santa Barbara Instruments Group ST8XME CCD camera operating at -12° C. The images were binned 2x2, which resulted in an effective array of 765x510 18-micron pixels and scale of 1.92 arcseconds/pixel. The 1,442 images were exposed in the range of 60 s to 100 s, depending on atmospheric conditions, in order to maximize SNR. They were calibrated using *CCDSOFT* version 5.00.205 and measured using *MPO Canopus* version 10.4.0.4 (Warner, 2011).

Analysis of the data disclosed a bimodal lightcurve with a period of 14.048 ± 0.001 h with an amplitude of 0.48 ± 0.01 mag.