

LIGHTCURVE OF MINOR PLANET 7304 NAMIKI

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Lightcurve measurements of 7304 Namiki were performed April – May 2007. Data analysis produced a lightcurve with a synodic period of 8.8586 ± 0.0006 hrs and amplitude about 0.73 mag.

Our lightcurve of 7304 Namiki is the second attempt of photometry observations from Osservatorio Astronomico Margherita Hack, Firenze (MPC code A57). The target was selected from the list of asteroid photometry opportunities published by Warner et al. (2007). This list doesn't show any available information about Namiki. In addition, no information was found on the Minor Planet Center "Minor Planet Lightcurve Parameters" web page.

The observations were obtained with a SC Meade 0.25m LX200 Classic + Focal reducer f/6.3 and Optec TCF-S electronic focuser. The CCD camera was SBIG ST7 XME. Exposure times varied between 120 – 240 s. All the observations were performed on 5 nights between 25 April and 08 May 2007.

Analysis of the combined data sets was made using the MPO Canopus software. The derived synodic rotation period was 8.8586 ± 0.0006 hrs, which agrees with the one published by Brinsfield (2007) and Wagner (2007). The 19th session was performed under less than perfect weather conditions and a nearly full moon (phase = 94%) only 35° away. This resulted in more scatter within the data set due to lower S/N ratios. Regardless, the derived synodic rotation period was unchanged when using the data from the 19th session.

References

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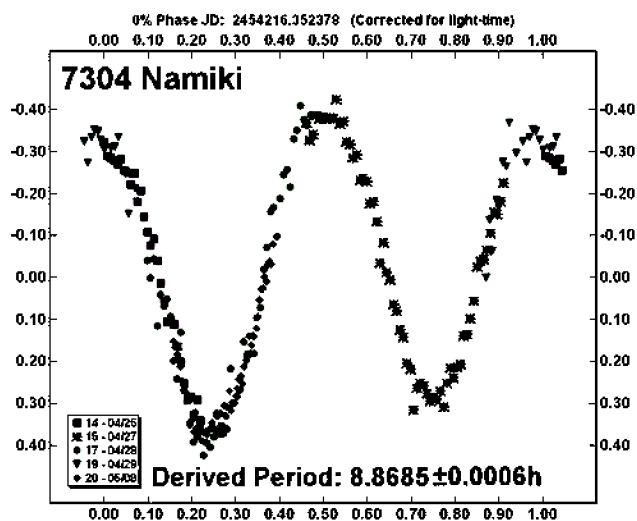
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THE ROTATION PERIODS OF 872 HOLDA, 3028 ZHANGGUOXI, 3497 INNANEN, 5484 INODA, 5654 TERNI, AND 7304 NAMIKI

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Lightcurves for 872 Holda, 3028 Zhangguoxi, 3497 Innanen, 5484 Inoda, 5654 Terni, and 7304 Namiki were obtained at the Via Capote Observatory in April and May 2007. The derived synodic periods were: 872 Holda, 5.943 ± 0.002 hr; 3028 Zhangguoxi, 4.827 ± 0.001 hr; 3497 Innanen, 7.181 ± 0.001 hr; 5484 Inoda, 14.144 ± 0.009 hr; 5654 Terni, 9.99 ± 0.01 hr; 7304 Namiki, 8.90 ± 0.02 hr.

Observations reported here were made using a Takahashi Cassegrain at prime focus with a focal length of 136 inches and focal ratio of 11.5. The CCD imager was an Alta U6 featuring a 1024x1024 array of 24 μ -meter pixels. The CCD was operating at a temperature of -30°C . All observations were made at 1x binning yielding an image scale of 1.43" per pixel. All images were guided, 120 second exposures except where noted. Images were dark and flat field corrected. Images were measured using MPO Canopus (Bdw Publishing). All observations were made using unfiltered differential photometry and all data were light-time corrected. Period analysis was done with Canopus, incorporating the Fourier analysis algorithm by Harris (1989).

872 Holda. The observations were conducted on six nights from May 5 thru May 18, 2007. A total of 138 observations were made spanning approximately 318 hours or 54 rotational cycles. The