

LIGHTCURVE PHOTOMETRY OF 551 ORTRUD, 1118 HANSKYA, AND 1916 BOREAS FROM SUNFLOWER OBSERVATORY

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Sunflower Observatory lightcurve photometry results from September / October 2001 are reported. 551 Ortrud was determined to have a period of 13.05 ± 0.05 h with an amplitude of 0.22 ± 0.02 magnitude. The period of 1118 Hansky was found to be 15.61 ± 0.01 h with an amplitude of 0.22 ± 0.02 magnitude. 1916 Boreas was determined to have a period of 3.49 ± 0.01 h with an amplitude of 0.33 ± 0.03 magnitude.

Sunflower Observatory is located in Olathe, Kansas and is a participant in the Center for Asteroid Physical Studies (CAPS). Target selection is made from the Collaborative Asteroid Lightcurve Link (CALL) web site "List of Potential Lightcurve Targets" (Warner 2001). Procedures and instrumentation used are described in Robinson (2001). Camera temperature during these runs was -10 to -15°C . Canopus software is used to measure the images and determine best fit of a lightcurve to the data. More information on this software may be obtained at <http://www.MinorPlanetObserver.com>.

551 Ortrud

This minor planet was discovered 1904 November 16 by M. Wolf at Heidelberg. It was named for the wife of Frederick of Telramund in the opera *Lohengrin* (1878) by Richard Wagner. A total of 269 observations were made of which 246 were used from data acquired on September 26, 27, 29, and 30, 2001 covering the entire lightcurve with no gaps. The period of the lightcurve was determined to be 13.05 ± 0.05 h and the amplitude 0.22 ± 0.02 magnitude. The curve has some unusual characteristics including a very steep drop from one maximum to minimum and a relatively long plateau at the other maximum.

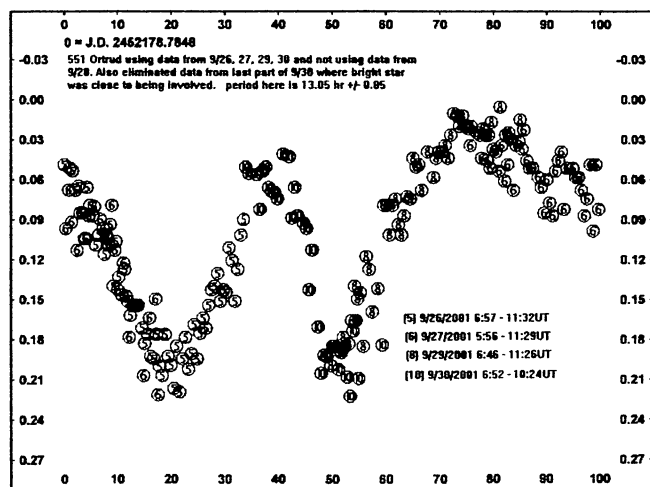
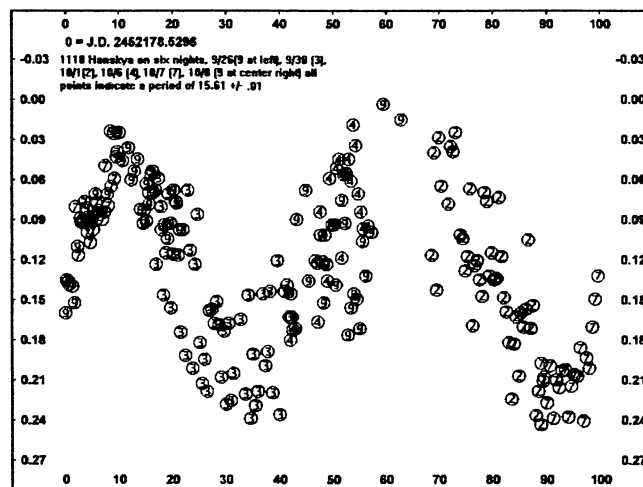


Figure 1. Lightcurve for 551 Ortrud. The derived period is 13.05 ± 0.05 h and the amplitude is 0.22 ± 0.02 m.

1118 Hansky

This object was discovered 1927 August 29 by S. I. Belyavskij and N. Ivanov at Simeis and independently discovered on 1927 August 30 by K. Reinmuth at Heidelberg and on September 17 by E. Delporte at Uccle. The minor planet was named in memory of Alexis Hansky (1872-1908), the founding astronomer of Simeis Observatory. Hansky is also honored by a lunar crater. A total of 260 photometric observations were made of which 234 were used from data acquired on September 26 and 30 and October 1, 6, 7, and 8, 2001 covering the entire lightcurve with no gaps. The period of the lightcurve was determined to be 15.61 ± 0.01 h and the amplitude 0.22 ± 0.02 magnitude. The data are relatively noisy, but the solution appears robust.



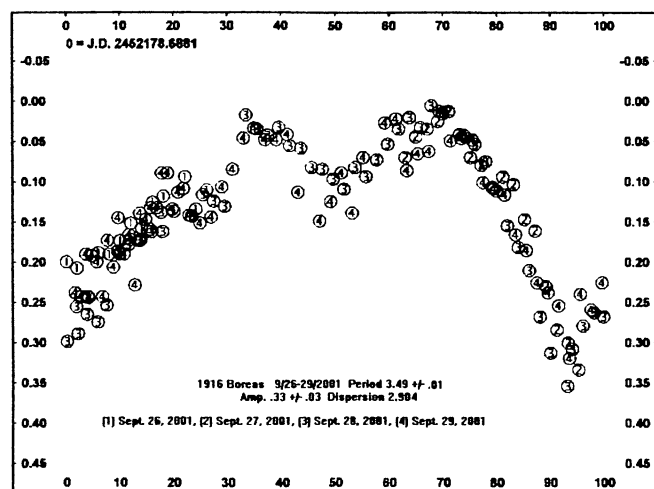


Figure 3. Lightcurve for 1916 Boreas. The derived period is 3.49 ± 0.01 h and the amplitude is 0.33 ± 0.03 m.

Acknowledgements

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References

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