

Solar System observed by german Amateurastronomers

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Abstract

During the last few years all the planets of our Solar System [1], [2] and the sun itself [3] have been observed successfully by german amateur astronomers in different wavelengths. The mainly used techniques were capturing videos with CCD-cameras not only in visible but also in ultraviolet (UV) [4] and near infrared (NIR) light [5], including observations in the Methane Band at 890 nm [6], [7].

Further more, moon transits across planetary discs, [8] stellar occultations and occultations of moons of the giant planets have been measured very precisely e.g. by means of light curves [9], confirming and improving the ephemerides of these objects.

Using highly sensitive CCD-cameras combined with narrow-band filters, facilitates daytime planetary observations [10],[11] and permits to extend the valuable observation time by a significant amount.

Observations included quite easy targets as Saturn "at the edge" (almost no rings visible, 2009) up to more ambitious thermal structures on the night side of Venus [12], [13].

Required observational techniques are briefly discussed and selected results are presented.

References

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