

Near Infrared Light as a new window for Planetobservation during daytime

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Abstract

During the last few years amateur astronomers have been using filters that are transparent in the near-infrared light and range from 665 to 1000 nm wavelength. This permits to enhance the contrast between dark and bright surface albedo features, such as those exhibited on Mars, [1] and to significantly reduce the adverse effect of turbulence in the Earth's atmosphere on image quality [2].

Using highly sensitive CCD-cameras combined with narrow-band filters, facilitates planet observations even during daytime, provided the position of a planet in the sky can be exactly matched .

This allows to extend the time available to observe a planet by a significant amount [3]. Required observational techniques are briefly discussed and some selected results are presented.

References

- [1] http://www.sternwarte-zollern-alb.de/beobachtungen/ir/index1_gb.htm
- [2] http://www.sternwarte-zollern-alb.de/beobachtungen/ir/index_gb.htm
- [3] <http://www.sternwarte-zollern-alb.de/mitarbeiterseiten/kowollik/jupiter/index2009.htm>