

## A New Slovak Observatory 500 km from Vienna

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Vyhorlatsky Astronomical Observatory (VAO, Slovakia) and the Astronomical Observatory of Odessa National University (AO ONU, Ukraine) are developing a new observatory at the Kolonicke Sedlo (VAO KS) in the Vyhorlatsky mountains (latitude: 48° 57' N, longitude: 22° 16' E, altitude: 465 m).

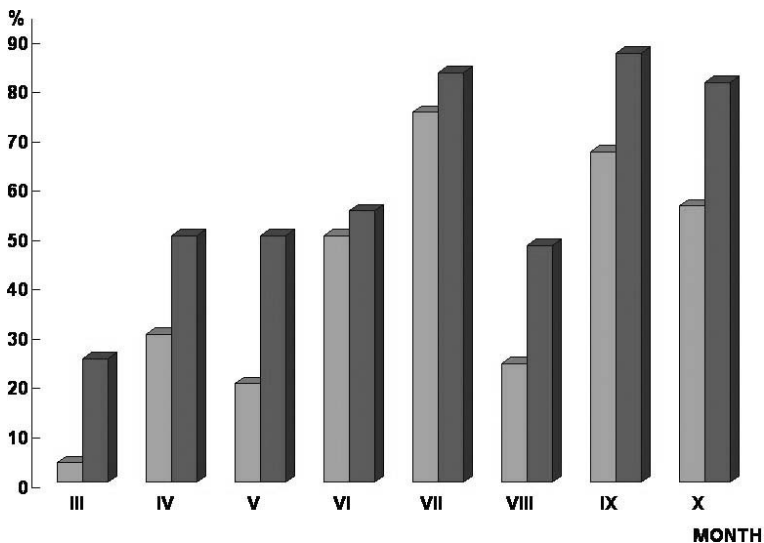


Figure 1: The percentage of photometric (grey blocks) and spectroscopic (black blocks) nights per month at Kolonicke Sedlo measured in 2006.

This site has a unique atmospheric transparency for central Europe (the seeing is about 2".5 in the best nights), small light pollution (night sky brightness about 20<sup>m</sup>.5 per square second), and up to 120 – 130 nights per year are usable for photometry.

At present the VAO KS is sufficiently equipped for astronomical observations: the work rooms possess electricity, computers, phone and internet. All other necessary facilities are provided. The 1 m telescope, which is the biggest astronomical instrument in Slovakia, is installed in a dome of 5 m diameter.

The telescope has a focal ratio 1:12 and field of view 25'. Currently it is equipped with a high speed two-star photometer, an analogue of the photometer described by Dorokhov & Dorokhova (1994).

A Ritchey-Chretien guider of 0.3 m diameter, 1:8 focal ratio and field of view 60' works with a CCD autoguider. Furthermore we suggest to mount a CCD camera to the viewing

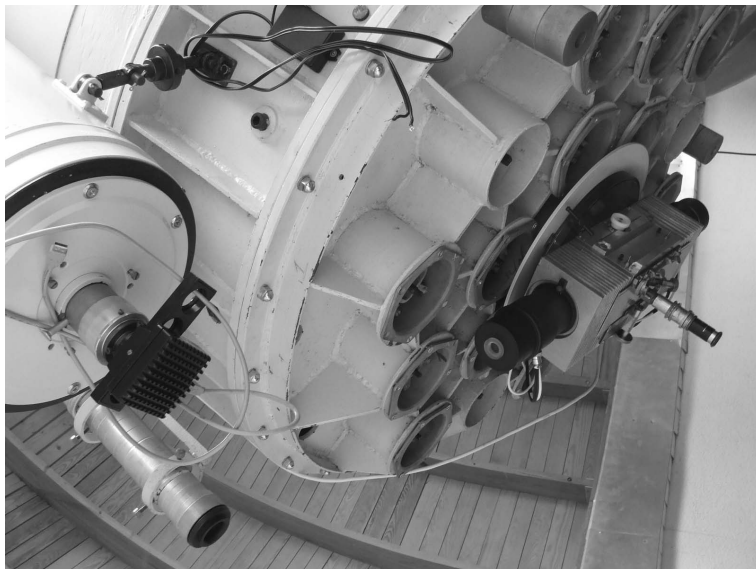


Figure 2: The 1 m telescope equipped with the high speed two-star photometer. Left: the CCD autoguiding system mounted to the guider.

channel of the photometer. In this way the third channel can be applied for autoguiding as well as for sky background or comparison stars measurements.

Besides the main instrument at VAO KS some small telescopes, a Newton 11 inch, a Newton 14 inch, etc., work with MEADE DSI Pro CCD cameras. Such a set of instruments allows to carry out monitoring programs and detailed investigations of the temporal variations of the revealed phenomena.

We now set up the complex, train the staff and students, and test and improve the performance of the photometer. The work is realized within the program context and standards of the global asteroseismic networks DSN (see, e.g., Breger & Handler 1993) and WET (Nather et al. 1990; Kalytis et al. 1993).

A more detailed description of the site, observatory, and facilities is available at the website: <http://www.astrokolonica.sk/>

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## References

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