

**Hvar Observatory** was established in 1972 as a joint endeavor of the Council for Scientific work of the Socialistic Republic of Croatia and the Astronomical Institute of the Czechoslovak Academy of Sciences, Ondrejov. The financial matters and the use of the Observatory are managed by cofounder, the Faculty of Geodesy of the University of Zagreb. It is located on the southwest part of the island of Hvar just above the city of Hvar, on a steep hill 240 m above the sea level, in the historical fortification Napoljun built by the French army in the 19th century during the Napoleonic wars. Because of its historical looks and idyllic position, the Observatory is often mistaken to be a touristic site, as it offers a beautiful view on the city of Hvar, surrounded by low mediterranean vegetation, which is gradually replaced by pine woods in the lower part of the hill.



### **HVAR ASTROPHYSICAL COLLOQUIUM**

Every two years Hvar Observatory organizes an international scientific conference Hvar Astrophysical Colloquium in the city of Hvar that visits between 50 to 100 scientists in the field of astrophysics. Since 2006, the Colloquium proceedings are published in The Central European Astrophysical Bulletin (ISSN 1845-8319), which is a continuation of the Hvar Observatory Bulletin that was founded in 1977 (ISSN 0351-2657).



More information about Hvar Observatory is available on our webpage:

## http://oh.geof.unizg.hr



Hvar Observatory Faculty of Geodesy University of Zagreb Kačićeva 26, HR-10000 Zagreb Croatia Phone: +385 1 4639 279 Fax: +385 1 4828 081

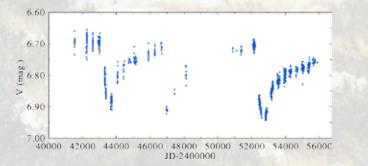
# HVAR OBSERVATORY Faculty of Geodesy University of Zagreb

#### THE STELLAR TELESCOPE

The 650 mm reflector, equipped with a photometer, is used mostly for the study of the variable stars. The Cassegrain telescope with secondary mirror of 300 mm and focal length of 7280 mm (f/11) is mounted on a German type mounting. For the aim of photometric observations the telescope was constructed at the Ondrejov Observatory of



Czechoslovakian Academy of Sciences and brought to the Hvar Observatory at the beginning of 1972. Immediately after the installation of the telescope, the UBV photometric monitoring program of variable stars has started and continued until today. This program is extension of the spectroscopic monitoring of Be stars at Ondrejov Observatory.



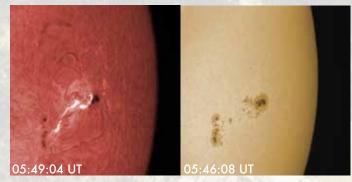
Forty years of monitoring of the light changes of the spectroscopic binary V744 Her (88 Her) with B7e primary, the very first spectroscopic binary discovered with the Ondrejov 2-m telescope. The plot is based on individual observations from the Hvar-Ondrejov archive (from Harmanec & Božić, 2013, CEAB, vol. 37).

#### THE SOLAR TELESCOPE

The double solar telescope was installed in 1972 at Hvar Observatory. It consists of two Carl Zeiss refractors mounted as one unit on a German mounting. One refractor is used as a photosperic telescope (white light filter) with objective of 217 mm (f/11), whereas the other refractor, with objective diameter of 130 mm (f/15) is used as a chromospheric telescope (H-alpha filter).



It provides valuable data for studies of rapid changes of chromospheric and photospheric features in great detail. Using a field of view of about 7 and 11 arcmin, its aim is to produce the high-resolution images of active regions on the Sun to complement patrol full-disc images.



Solar active region 12403 observed on August 27, 2015 with chromospheric (left) and photospheric (right) Hvar Solar Telescope.

#### THE AUSTRIAN-CROATIAN TELESCOPE

The Austrian-Croatian Telescope (ACT) was installed at the Hvar Observatory in 1997. It is a Ritchey-Chretien telescope with the primary mirror of 1060 mm placed on the English mounting. The observations can be performed with two different secondary mirrors, one with a



diameter of 400 mm (focal ratio of f/6.8), and the other one with a diameter of 260 mm (focal ratio of f/15). The telescope pointing and tracking are controlled by the computer. ACT is equipped with CCD camera and mostly used for observations of open clusters and variable stars.



Image of the open cluster NGC6823 taken by the Austrian-Croatian telescope on September 20, 2010 (Martin Netopil, Institute of Astronomy, University of Vienna, Austria).