

# COMPLEX OF 2-m TELESCOPE SPECTRAL EQUIPMENT FOR RESEARCH OF THE INTERSTELLAR ENVIRONMENT OF PEAK TERSKOL OBSERVATORY

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## ABSTRACT

It is informed about spectral equipments for the Cassegrain and coude focuses of 2-m telescope of the peak Terskol observatory (altitude is 3100m above sea level) (Northern Caucasus). Technical parameters and optical circuits for MAESTRO (MAtrix Echelle SpecTROmeter), TUVES (Terskol Ultra-Violet Echelle Spectrometer) and CMMS (Cassegrain Multi Mode Spectrometer) spectrometers are reported.

MAESTRO echelle spectrometer was mounted in the coude focus (F/36) of the 2-m telescope in 1997. The spectral resolutions from 45000 to 500000 with mosaic echelle grid (R2 and R5.7) with the combination of three Schmidt optical cameras (F=1900mm, F=875mm and F=450mm) are realized in this spectrometer. Echelle spectra are registered on the CCD-chip in a spectral range  $\lambda\lambda$  3500-10000Å.

TUVES echelle spectrometer was mounted in the coude focus in 2007. The spectra with the spectral resolution from  $\lambda$  3000 to 50000 Å with the help of three эшелле are registered on this spectrometer by three echelle grids (R2, R4 and R5.7).

CMMS spectrometer was created in 2004. The spectral observation modes from prismatic up to echelle are realized in this spectrometer. The spectral resolution is 14000 in the echelle variant.

Samples of spectra within the interstellar environment research received on these spectrometers are shown.