SPECTROSCOPING MONITORING OF AGN AT ROZHEN OBSERVATORY

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The Observatory

❖Rozhen National Astronomical Observatory is the biggest Observatory in Southeastern Europe and it is situated at 1745 m altitude at Rodopi mountains, Bulgaria.

Observations and equipment

We started a program to monitor spectroscopically selected Type I AGN. Our observations was made with 2 Ritchey-Chretien-Coude telescope with specific light-receiver called FoReRo2 (two-channel Focal – Reducer Rozhen) between January 16 and January 18 2015.

The parameters of 2m RCC telescope with FoReRo2 equipment are:

f= 5.6 m
Grizm- 4.3 A/px
Resolving power – R= 400

Goals :

❖ To measure accurately broad line widths and line ratios of newly discovered, relatively bright AGN.

❖ To monitor profile changes, including those of so called "changing look" AGN.

❖ To select objects, suitable for future reverberation mapping campaigns (relatively bright and variable).

❖ To classify unidentified, newly discovered gamma-ray (*Fermi*) sources, most of them probably AGN
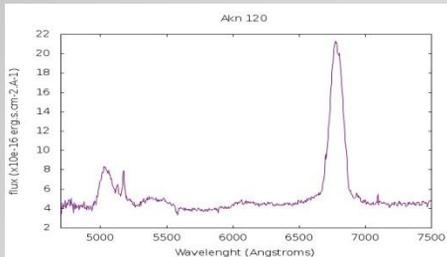

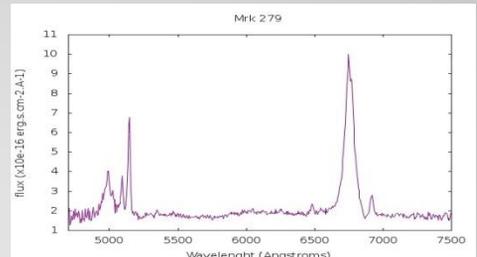Figure 1: Akn 120, January 16 2015

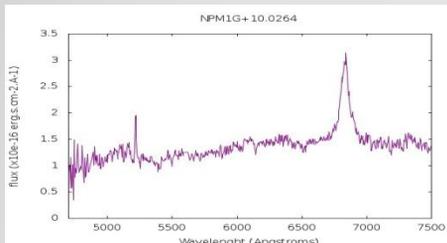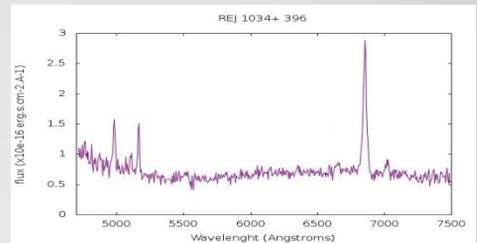

Figure 2: Ark 279, January 16 2015

Figure 3: NPM1G+10.0264, January 16 2015

Figure 4: REJ 1034+396, January 16, 2015