

THE SPECTRUM OF NOVA MONOCEROTIS

Two photographs of the spectrum of Nova *Monocerotis* were obtained with the 60-inch reflector and the Cassegrain spectrograph on the nights of February 28th and March 1st under rather unfavorable observing conditions. The first photograph was made with a 7-inch and the second with an 18-inch camera. One prism was used in both cases.

The negatives are somewhat underexposed but show the following bright bands: H ϵ , H γ , 4363, 4640, H β , 4959 and 5007. A trace of 4686 is also present. The bands have the characteristics so familiar in the spectra of temporary stars, great width and diffuseness with broad faint absorption lines superposed upon the bright bands. Of the two maxima thus formed, the violet is the stronger, particularly in the case of the lines due to nebulium. The hydrogen bands are more nearly symmetrical.

A comparison of these photographs with those of Nova *Geminorum* No. 2, made in 1912, shows marked similarity to those obtained six weeks after the discovery of the latter. The bands in Nova *Monocerotis* are somewhat wider and more diffuse, and the lack of symmetry in the bands of nebulium is more marked. An interesting difference is seen in the structure of the hydrogen bands. In the case of Nova *Geminorum* these are stronger on the red side, while in Nova *Monocerotis* the violet side is slightly more intense. The faint helium lines present in the spectrum of Nova *Geminorum* are not seen in the other star.

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THREE ADDITIONAL NOVAE IN THE ANDROMEDA NEBULA

Since the announcement in the December number of these PUBLICATIONS of a fifth nova in the *Andromeda* nebula (N. G. C. 224), three additional novae have appeared in this nebula.

A negative taken with the 60-inch reflector November 14, 1917, shows Nova No. 5 to have faded to magnitude 19. On this negative Nova No. 6 was discovered, magnitude 16.8; the distance from the nucleus is approximately 275" north and 165" east.

A photograph taken December 12th shows Nova No. 6 to have faded to magnitude 17.6. A very sharp negative taken on the