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A BRIGHT NOVA IN THE SURROUNDINGS OF THE ANDROMEDA
 NEBULA

In AJ 78, 375-376, 1973, van den Bergh, Herbst and Pritchett published a list of variable objects near M 31. Among them is variable "m" ($\alpha=0^{\text{h}}29^{\text{m}}28^{\text{s}}$; $\delta=+41^{\circ}41'$; 1950) which the authors saw only on two plates taken on August 26, 1971. Romano (AJ 82, 319-321, 1977) examined this object on plates of the Asiago Observatory. On this series of plates the star was always below the plate limit ($>19^{\text{m}}5$), except in the same period of time when van den Bergh et al. observed the variable near the maximum at about $12^{\text{m}}8$. I examined 295 plates of the Sonneberg field v And between J.D. 244 0802.....1988 (plate limit $\approx 18^{\text{m}}0$). Object "m" is visible only on 15 plates between J.D. 244 1192.....1217; on all the other plates it is beyond the plate limit. In Figure 1 the light curve is shown. The value $14^{\text{m}}9$ at J.D. 1209, given by Romano, seems to be too bright. I observed $15^{\text{m}}85$ at J.D. 1208 (3 plates) and $16^{\text{m}}25$ at J.D. 1210 (2 plates).

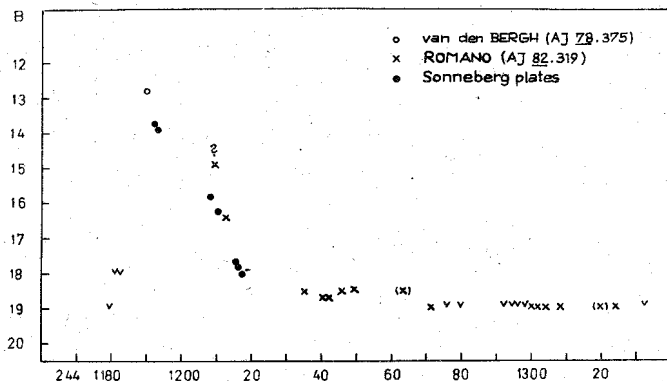


Fig. 1

This star is clearly a fast nova. It cannot be a supernova because no galaxy is seen near the star. It is also not a long-period U Geminorum star of the UV Persei type as suggested by Romano because

1. the amplitude of variation is higher than 8 mag. (it is very doubtful that the star is faintly visible on the Palomar Sky Survey as Romano believes. I rather think this impression belongs to another object)

2. the decline of brightness after maximum is too fast

3. no further outbursts are observed.

This object is probably a very bright nova in the halo of M 31. Similar objects - but not as bright - I observed on Tautenburg plates (see AN 294, 255, 1973 and Mitt. veränderl. Sterne 5, 177-195, 1971).

In order to get a better light curve observers are requested to look at their plates and to place their observations at my disposal. On Sonneberg Schmidt plates taken by Götz I measured a sequence of comparison stars (see Figure 2). The magnitudes are in the system of Arp (AJ 61, 15, 1956).

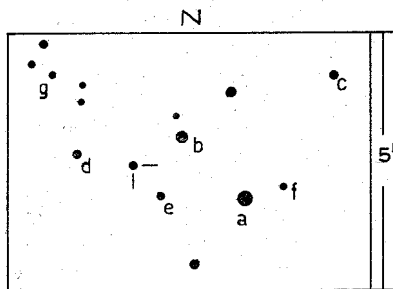


Fig. 2

	B	V
a	12. ^m 5	12. ^m 2
b	13.0	13.2
c	14.1	14.6
d	15.7	15.5
e	15.9	15.6
f	16.7	16.4:
g	17.7:	-

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