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RECENT OBSERVATIONS OF THE SUPERNOVA IN NGC 1058

The peculiar supernova discovered by P. Wild in 1961 was the object of previous photometric and spectroscopic work by the writer (Bertola, 1963, 1964, 1965) and Zwicky (1964), who has called this supernova of type V. Further photometric observations carried out at Asiago from January 1966 to February 1967 are given here. The supernova, which raised the maximum $(m_{pg} = 12.5)$ during the outburst of December 1961, was visible as a faint star of 18th magnitude since 1937. In the years 1963-65 the object was fluctuating around $m_{pg} = 18.5$ and an outburst of almost one magnitude was observed in September 1964. During the period covered by the present observations the supernova has fallen down to m $_{\mbox{\footnotesize pg}} \simeq 19.5.$ However, the last observation of February 9 shows again a small outburst. The following Table lists the observations. The asterisk near to the plate number indicates plates obtained with the 90-65 Schmidt telescope, the remaining were obtained with the 122 cm reflector. Emulsions 103a-0 without any filter were employed. The comparison sequence given by the writer (1963, 1964) has been further extended by assigning magnitude m = 19.6 to the star placed between \underline{n} and \underline{o} (see Fig. 1 of the 1963 paper).

TABLE

Plate No.	Date	UT	m pg
111+	Jan 19, 1966	17 ^h 33 ^m	18.8:
7621	Jul 17	1 49	>18
7647	Aug 12	0 10	19.5
7729	Sep 13	0 17	19.6
7772	22	0 51	19.5
363 ⁺	Oct 14	1 48	19.5:
370 ⁺	21	23 09	19.5:
378 ⁺	Nov 7	20 32	19.6:
7902	Dec 10	23 03	19.3
7948	Jan 15, 1967	23 56	19.2
7966	Feb 9	18 09	18.9

Because of the peculiarity of the light curve of this exceptional supernova, characterized by the presence of outburst at minimum, it is suggested a continuous survey of it.

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References:

Bertola F., 1963, Asiago Contr. No. 142. 1964, Ann. d'Ap. 27, 319. 1965, Asiago Contr. No. 171.

Zwicky F., 1964, Ap. J. 139, 514.