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OBSERVATIONS OF SUPERNOVA 1989 B

The supernova 1989 B was discovered in NGC 3627 (Evans, 1989). Due to its relative brightness (near 10th V in maxima) we have tried to use traditional methods for its observations. The observations were obtained during 16 nights in 1989 in Tian-Shan observatory of Sternberg Astronomical Institute with the 19th reflector and a computer controlled WBVR photometer (EMI 9863). The previous processing of these data was reported earlier (Tsvetkov et al., 1990). But later we have obtained more observations and the new method for galaxy flux reduction was used. We have measured the precise position of the supernova from nearby stars and later, when the supernova became invisible, the measurements were repeated with the same diaphragm of 29th. So we have obtained the estimation of the galaxy flux in our observa-

Table I. B, V, R data for SN1989 B

ID	В	V	R	B-V	V-R
2447587.273	14.07	12.88	12.03	1.19	0.85
588.412	14.29	12.98	12.10	1.31	0.88
589.408	14.26	13.00	12.11	1.25	0.89
590.369	14.32	13.06	12.09	1.26	0.97
591.350	14.41	13.09	12.13	1.32	0.96
592.398	14.51	13.25	12.23	1.27	1.02
597.372	14.65	13.48	12.61	1.17	0.87
598.345	14.67	13.48	12.55	1.20	0.93
599.416	(15.22)	13.70:	12.75:	-	0.95:
611.170	15.36	14.17	13.48	1.19	0.69
613.209	15.38	14.09	13.54	1.29	0.55
626.327	15.43	14.56	13.80	0.88	0.76
628.367	15.19	14.38	13.68	0.81	0.70
640.163	15.60	14.42	13.72	1.18	0.70
643.181	15.46	14.62	14.09	0.84	0.54
611 261	15.40	14.66	13.89	0.74	0.76

Table II. Ultraviolet data for SN1989 B

ND .	W	₩ -B
2447588.363	14.89	0.60
591.372	14.94	0.62
597 .8 58	14.88	0.21
612.189	15.09	-0.28
627.341	15.61	0.30
642.534	16.11	0.62

tions of supernova. All observations were corrected for atmospheric extinction and reduced to WBVR system using the standard star HD85217 (Khaliullin et al., 1985). The B, V and R magnitudes are given in Table I, where every point is the mean value from 2 to 5 measurements. The mean errors of these data are of the order of \pm 0.1 - 0.2. The counts of our photometer in W (ultraviolet) were too small, and we have to average even measurements from different nights to obtain reasonable values. These data are given in Table II. The mean errors are \pm 0.3 - 0.5. The observations on JD 2447599 were disturbed by an aurora. The galaxy flux in the supernova position corresponds to a GO V star.

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References:

Evans, R.O.: 1989, IAU Circular, No.4726.

Khaliullin, Kh.F., Mironov, A.V., Moshkalev, V.G.: 1985, Astrophys. Space Sci., 111, 291.

Tsvetkov, D.Yu., Kimeridze, G.N., Volkov, I.M., Bartunov, O.S., Ikonnikova, N.P.: 1990, Astron. Astrophys., 236, 133.