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BV PHOTOELECTRIC PHOTOMETRY OF SN 1987A IN SOUTH BRASIL

We present, in the Table I, the BV photometric observations of SN 1987A carried out at the Morro Santana Observatory, Porto Alegre, Brasil, during 1987, from 8 through 277 days after the core collapse.

The observations were made in the Johnson's B and V filters, by a photometer attached to the 0.50 m Zeiss Cassegrain telescope operated by Departamento de Astronomia, Instituto de Fisica, UFRGS.

As comparison stars we have used HD 38617 (spectral type K5 III, V = 7.52, B-V = +1.22), HD 36584 (F0, 6.02, +0.35), and Delta Doradus (A6 IV, 4.34, +0.22). Standard deviations of the measurements have typically varied from 0.01 through 0.14 magnitudes. Time has been counted from the observed Kamiokande-IMB neutrino pulse (e.g., Hirata, et al. 1987, Svoboda et al., 1987).

Table I: BV data

TIME (DAYS)	V	B-V	TIME (DAYS)	V	B-V
8.672	4 ^m .45	1 ^m .01	105.628	3 ^m .39	1 ^m .74
9.694		1.04	106.638	3.46	1.62
11.772	4.35	1.32	108.634	3.53	1.74
12.762	4.36	1.31	113.638	3.93	1.75
19.683	4.24		117.640	4.07	
20.764	4.20	1.52	122.630	4.33	
60.663		1.61	123.628	4.28	1.79
63.677		1.58	179.946	4.86	1.57
65.804	3.16	1.63	189.998	4.99	1.60
75.667	2.96	1.55	208.907	5.25	1.57
76.637	2.92	1.62	211.888	5.24	1.52
77.705	3.07		238.755	5.40	1.47
81.705	3.04	1.57	241.976	5.50	
92.670	3.01	1.62	249.838	5.59	1.39
103.613	3.38	1.67	250.843	5.54	
104.641	3.39	1.70	277.721	5.75	1.42

The observations summarized here constitute an additional independent although smaller photometric dataset for SN 1987A, others being those by Hamuy et al. (1988), Menzies et al. (1987), Catchpole et al. (1987a,b), and Dopita et al. (1988).

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