

COMMISSIONS 27 AND 42 OF THE IAU
 INFORMATION BULLETIN ON VARIABLE STARS
 Number 3784

Konkoly Observatory
 Budapest
 5 October 1992
 HU ISSN 0324 - 0676

PHOTOELECTRIC UBV OBSERVATIONS OF THE s-CEPHEID V1334 Cyg

V1334 Cyg, a small amplitude Cepheid has been known as a spectroscopic binary. The close companion to V1334 Cyg is a B-type star (B4 V according to Usenko's (1990) photometry; B8 III from IUE spectra (Henriksson, 1982) and B5-B8 V from TD1 spectra (Parsons, 1981)), with more reliable value of the orbital period about 1240^d (Szabados, 1991).

Photoelectric observations of V1334 Cyg have been performed in October 1988 at Abastumany Astrophysical Observatory (Georgian Academy of Sciences). Observations were made in the UBV filters with the 48-cm reflector AZT-14. HR 8169 (V=6.056; U-V=0.199; B-V=0.063 (Arellano Ferro, 1984)) was used as the comparison star.

The V, U-V and B-V data are listed in Table 1 together with the phases calculated with the elements according to Arellano Ferro (1984):

$$\text{Epoch} + \text{Phase} = (\text{HJD} - 2444863.767) / 3^d.33279$$

The uncertainties are 0^m.010, 0^m.020, and 0^m.010 in V, U-V and B-V respectively.

The light and colour curves of V1334 Cyg are plotted in Figure 1. The new data are denoted with dots. For comparison purposes data obtained by Millis (1969) (squares), Szabados (1977) (crosses), Arellano Ferro (1984) (triangles) are also shown. For all these data the phases have been computed from Arellano Ferro (1984) too. The colour curves U-V and B-V from various authors differ from each other completely, this is especially noticeable for the recent B-V data. Moreover, the scattering of the data supposes some amplitude variations for this interesting s-Cepheid.

Table 1
 Photoelectric observations of V1334 Cyg

HJD 2440000.+	V	U-V	B-V	Phase	HJD 2440000.+	V	U-V	B-V	Phase
7436.2766	5.834	0.625	0.340	0.879	7441.4705	5.905	0.672	0.330	0.437
7436.2839	5.845	0.609	0.303	0.881	7444.2258	5.988	0.652	0.369	0.264
7436.3111	5.841	0.638	0.316	0.889	7445.2334	5.948	0.650:	0.320:	0.566
7436.3146	5.853	0.632	0.325	0.890	7450.3086	5.908	0.644	0.327	0.089
7436.3330	5.858	0.624	0.279	0.895	7450.3161	5.908	0.623	0.331	0.091
7436.3476	5.863	0.636	0.244	0.900	7450.3305	5.903	0.628	0.315	0.096
7436.3587	5.864	0.614	0.310	0.903	7450.3379	5.910	0.631	0.311	0.098
7436.3630	5.852	0.617	0.313	0.905	7450.3492	5.903	0.652	0.312	0.101
7436.3969	5.815	0.651	0.360	0.915	7450.3578	5.902	0.642	0.331	0.104
7436.4625	5.831	0.630	0.300	0.935	7450.3655	5.905	0.591	0.332	0.106
7436.4634	5.843	0.616	0.288	0.936	7451.2482	5.998	0.669	0.365	0.371
7436.4706	5.855	0.602	0.301	0.937	7451.2544	6.003	0.671	0.355	0.373
7436.5098	5.857	0.597	0.319	0.942	7452.3398	5.939	0.638	0.322	0.698
7441.4009	5.913	0.658	0.345	0.416	7452.3641	5.935	0.622	0.308	0.706
7441.4578	5.907	0.679	0.332	0.433	7452.3712	5.928	0.644	0.342	0.708

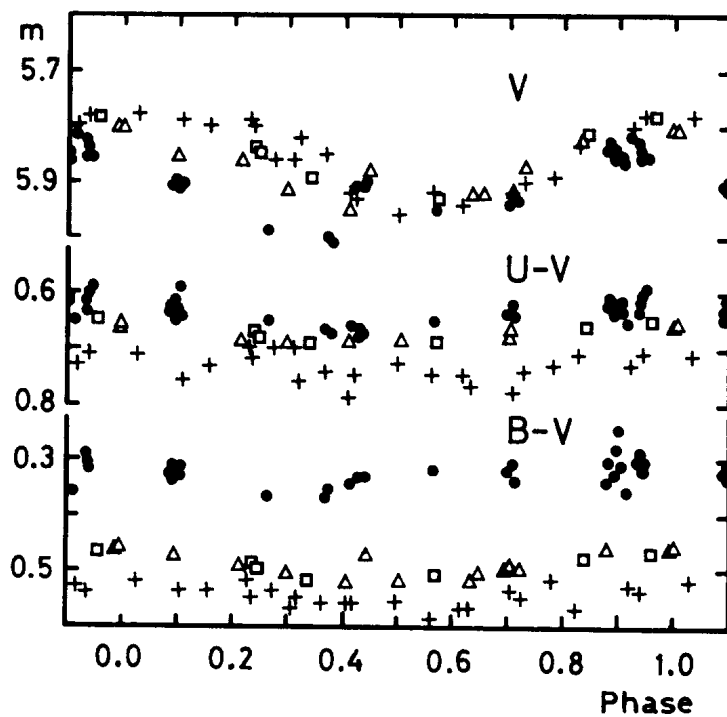


Figure 1. Light and colour variations of V1334 Cyg during October 1988,
(see the comments in the text)

IGOR A. USENKO
Department of Astronomy,
Odessa State University
Shevchenko Park, 270014, Odessa,
Ukraine

References:

- Arellano Ferro, A., 1984, *M. N. R. A. S.*, **209**, 481
 Henriksson, G., 1982, *Rep. Obs Lund.*, No. 18, 89
 Millis, R. L., 1969, *Lowell Obs. Bull.*, No. 148
 Parsons, S. B., 1981, *Astroph. J.*, **247**, 560
 Szabados, L., 1977, *Mitt. Sternw. Ung. Akad. Wiss.*, Budapest, No. 70, 63
 Szabados, L., 1991, *ibid*, No. 96, 175
 Usenko, I. A., 1990, *Kinematika i Fizika Nebesn. Tel*, 6, No. 3, 91