

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

Number 4145

Konkoly Observatory
Budapest

13 January 1995

HU ISSN 0374 - 0676

**PHOTOELECTRIC UBVR OBSERVATIONS
OF THE PECULIAR CEPHEID V473 Lyr**

We have observed V473 Lyr at the Mt. Maidanak observatory in September – October 1994. The 60-cm reflector was used and 63 UBVR_c differential measurements were obtained (Table 1); the accuracy of the individual data is near 0.01 mag in all filters. The magnitude of the comparison star HD 180316 in UBVR_c determined by us is: V=6.858, U–B=–0.479, B–V = –0.044, V–R_c=–0.037. This star is classified as Cepheid with irregularly variable amplitude in the GCVS. According to our data the amplitude of light curve (Fig.1) is near 0.4 mag. in V.

The phases are calculated with the elements:

$$MaxJD_{hel} = 2428738.767 + 1.490813 \times E.$$

This study was partially supported by the Russian Foundation for Fundamental Research through grants No.94-02-04344 and No. 94-02-04347.

Table 1

JD hel 2449600+	Phase	ΔV	$\Delta(U-B)$	$\Delta(B-V)$	$\Delta(V-R_c)$
19.2499	.105	–.834	-	.662	.385
20.2326	.764	–.750	.766	.696	.392
21.1950	.409	–.625	.825	.794	.444
21.2284	.432	–.622	.869	.771	.422
21.2957	.477	–.581	.867	.760	.453
22.1124	.025	–.919	.788	.630	.387
23.0957	.684	–.633	.842	.721	.419
23.1813	.742	–.708	.789	.709	.394
23.2006	.755	–.730	.776	.686	.398
23.2104	.761	–.735	.782	.678	.392
23.2494	.787	–.791	.777	.669	.375
23.2899	.815	–.832	.787	.661	.386
24.0972	.356	–.654	.857	.755	.434
24.1408	.385	–.615	.833	.753	.445
24.1635	.401	–.618	.847	.763	.421
24.1994	.425	–.605	.848	.763	.432
24.2186	.438	–.608	.871	.763	.430
24.2469	.457	–.585	.858	.757	.431
24.2745	.475	–.583	.845	.758	.445
24.2877	.484	–.590	.852	.764	.427

Table 1 (cont.)

JD hel 2449600+	Phase	ΔV	$\Delta(U-B)$	$\Delta(B-V)$	$\Delta(V-R_c)$
24.3259	.510	-.593	.869	.760	.428
25.0985	.028	-.909	.790	.617	.363
25.1573	.067	-.879	.820	.637	.366
25.1784	.081	-.856	.799	.661	.378
25.1968	.094	-.857	.797	.651	.374
25.2386	.122	-.815	.834	.656	.397
25.2608	.137	-.813	.787	.680	.385
25.2842	.152	-.780	.814	.675	.393
25.3057	.167	-.800	.811	.684	.404
25.3219	.178	-.783	.812	.701	.393
26.2075	.772	-.757	.758	.686	.394
26.2260	.784	-.771	-	.641	.389
26.2394	.793	-.801	.755	.658	.389
26.2612	.808	-.808	.761	.661	.381
31.0968	.051	-.893	.799	.643	.365
31.1650	.097	-.839	.807	.656	.373
31.1809	.108	-.822	.815	.669	.382
31.2086	.126	-.822	.821	.671	.384
31.2515	.155	-.790	.823	.677	.394
31.2900	.181	-.775	.821	.692	.399
32.1085	.730	-.678	.784	.699	.404
32.1550	.761	-.731	.793	.689	.396
32.1803	.778	-.766	.763	.665	.382
32.1968	.789	-.792	.764	.665	.376
32.2295	.811	-.830	.751	.645	.380
32.2611	.832	-.866	.774	.632	.349
32.3033	.861	-.913	.786	.636	.317
33.0987	.394	-.632	.841	.767	.433
33.1553	.432	-.605	.836	.782	.429
33.1807	.449	-.604	.818	.787	.439
33.2117	.470	-.600	.849	.770	.423
33.2333	.484	-.589	.831	.781	.439
33.2799	.516	-.578	.866	.772	.445
33.3015	.530	-.604	.849	.782	.426
34.1015	.067	-.882	.798	.666	.371
34.1330	.088	-.875	.816	.644	.373
34.1801	.119	-.824	.814	.672	.376
34.2060	.137	-.824	.778	.700	.373
34.2470	.164	-.793	.813	.703	.392
34.2698	.180	-.780	.848	.704	.407
34.2933	.195	-.770	.851	.691	.386
35.3079	.876	-.930	-	.598	.360

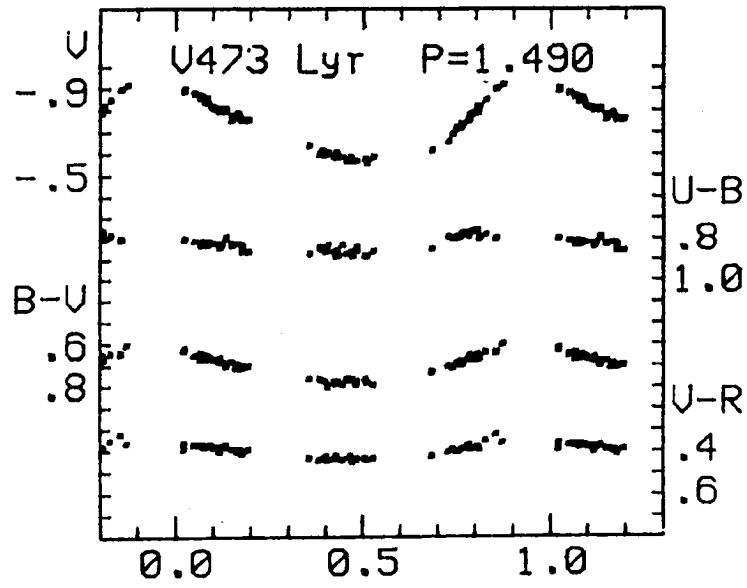


Figure 1

L.N. BERDNIKOV
O.V. VOZIAKOVA
Sternberg Astronomical Institute
13, Universitetskij prosp.
Moscow 119899, Russia

Reference:

Berdnikov L.N., 1992, *Pis'ma Astron. Zh.*, **1**, 654