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**BVR OBSERVATIONS OF THE DOUBLE-MODE CEPHEIDS
AS Cas, V367 Sct and BQ Ser**

Recently one of us (Berdnikov, 1992) has decomposed the available photoelectric observations of all double-mode Cepheids into two oscillations. It was pointed out as well that the number of existing observations is not sufficient for reliable investigation of light curve variations for the majority of these stars. Therefore we continue to carry out observations of all accessible double-mode Cepheids.

Photoelectric observations of double-mode Cepheids were carried out in summer – autumn 1994. The 60-cm reflector of the Mt. Maidanak observatory was used and 87 BVR_c measurements of AS Cas (Table 1), 83 BVR_c measurements of V367 Sct (Table 2), and 85 BVR_c measurements of BQ Ser (Table 3) were obtained.

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Table 1. BVR_c observations of AS Cas.

JD hel 2440000+	V	B–V	V–R _c	JD hel 2440000+	V	B–V	V–R _c
9617.3164	12.322	1.255	.863	9623.4090	12.112	1.314	.815
9617.3504	12.259	1.386	.852	9623.4310	12.123	1.298	.814
9618.3861	12.354	1.298	.883	9623.4534	12.151	1.329	.834
9620.3324	11.918	1.205	.737	9623.4716	12.191	1.324	.850
9620.3539	11.908	1.132	.736	9623.4832	12.170	1.336	.831
9620.3766	11.887	1.165	.754	9624.1588	12.503	1.538	.877
9620.4128	11.819	1.211	.721	9624.2814	12.569	1.490	.908
9620.4432	11.895	1.152	.764	9624.3650	12.584	1.506	.921
9621.1692	12.280	1.343	.857	9624.3841	12.565	1.518	.908
9621.3032	12.390	1.383	.874	9624.4003	12.515	1.523	.893
9621.3502	12.435	1.434	.862	9624.4195	12.542	1.530	.888
9621.3744	12.441	1.420	.874	9624.4383	12.528	1.505	.913
9621.4077	12.454	1.472	.876	9624.4607	12.505	1.484	.889
9621.4436	12.455	1.417	.863	9625.1723	12.529	1.504	.875
9622.3680	12.693	1.498	.906	9625.2322	12.521	1.468	.885
9622.4203	12.637	1.444	.901	9625.3175	12.533	1.463	.871
9623.3008	12.048	1.256	.799	9625.3804	12.498	1.406	.886
9623.3332	12.169	1.289	.790	9625.3995	12.492	1.451	.888
9623.3576	12.137	1.325	.801	9625.4333	12.460	1.453	.882
9623.3780	12.132	1.310	.816	9625.4523	12.441	1.461	.892

Table 1 (cont.)

JD hel 2440000+	V	B-V	V-R _c	JD hel 2440000+	V	B-V	V-R _c
9626.2049	12.403	1.348	.877	9633.4340	12.333	1.337	.862
9631.1784	12.654	1.550	.884	9633.4456	12.324	1.362	.868
9631.3015	12.686	1.508	.931	9633.4655	12.308	1.419	.853
9632.1944	12.210	1.336	.831	9634.2147	12.439	1.474	.850
9632.2367	12.218	1.327	.825	9634.3259	12.408	1.483	.876
9632.2991	12.293	1.321	.825	9635.3464	11.917	1.198	.764
9632.3259	12.208	1.379	.823	9635.3636	11.916	1.183	.776
9632.3449	12.159	1.286	.824	9635.3751	11.891	1.211	.756
9632.3457	12.182	1.395	.807	9635.3899	11.911	1.182	.795
9632.3758	12.250	1.407	.826	9635.4033	11.870	1.193	.718
9632.3922	12.285	1.345	.865	9635.4134	11.818	1.198	.721
9632.3940	12.116	1.293	.813	9635.4379	11.851	1.199	.759
9632.4123	12.244	1.406	.830	9635.4521	11.837	1.236	.747
9632.4317	12.288	1.374	.869	9635.4655	11.833	1.241	.743
9632.4552	12.280	1.399	.849	9635.4751	11.847	1.203	.776
9632.4740	12.238	1.334	.843	9635.4833	11.830	1.191	.752
9633.2048	12.309	1.395	.840	9635.4998	11.824	1.193	.744
9633.2313	12.401	1.346	.828	9640.2452	12.335	1.401	.876
9633.3173	12.427	1.383	.867	9640.3355	12.357	1.387	.866
9633.3380	12.391	1.356	.859	9640.4015	12.321	1.378	.857
9633.3590	12.339	1.345	.872	9641.3499	12.202	1.274	.821
9633.3734	12.311	1.400	.815	9647.3170	12.096	1.285	.806
9633.3949	12.342	1.369	.871	9647.4003	12.080	1.284	.786
9633.4108	12.312	1.400	.871				

Table 2. BVR_c observations of V367 Sct.

JD hel 2440000+	V	B-V	V-R _c	JD hel 2440000+	V	B-V	V-R _c
9514.3396	11.440	1.755	1.139	9534.3365	11.732	1.952	1.230
9514.4089	11.467	1.757	1.175	9535.2592	11.895	1.961	1.256
9515.3672	11.525	1.774	1.189	9535.3229	11.913	1.990	1.263
9516.3873	11.786	1.913	1.247	9535.3923	11.902	1.970	1.263
9517.3863	11.928	1.956	1.261	9536.2505	11.804	1.878	1.243
9519.4093	11.304	1.674	1.132	9536.3729	11.792	1.880	1.238
9521.3388	11.697	1.910	1.230	9537.2542	11.516	1.796	1.161
9522.3603	11.843	1.916	1.244	9537.3209	11.531	1.765	1.185
9522.4212	11.841	1.938	1.243	9537.3932	11.520	1.771	1.173
9523.3170	11.812	1.882	1.245	9538.2774	11.493	1.783	1.173
9523.3971	11.730	1.921	1.199	9538.3272	11.485	1.824	1.159
9524.2973	11.618	1.821	1.186	9539.2520	11.611	1.830	1.200
9524.3667	11.632	1.796	1.203	9539.3396	11.604	1.861	1.188
9524.4299	11.601	1.861	1.180	9542.3691	11.777	1.947	1.242
9525.2927	11.574	1.778	1.210	9543.2439	11.803	1.918	1.232
9534.2910	11.732	1.917	1.238	9543.3125	11.789	1.926	1.230
9534.3296	11.743	1.947	1.222	9545.2329	11.339	1.701	1.124

Table 2 (cont.)

JD hel 2440000+	V	B-V	V-R _c	JD hel 2440000+	V	B-V	V-R _c
9545.2881	11.365	1.685	1.144	9557.2403	11.576	1.812	1.208
9546.2361	11.505	1.786	1.180	9559.2140	11.502	1.825	1.190
9946.3026	11.508	1.801	1.172	9559.2894	11.512	1.854	1.187
9546.3769	11.535	1.811	1.188	9560.2235	11.776	1.940	1.237
9547.2263	11.752	1.926	1.238	9560.3277	11.775	1.977	1.244
9547.2830	11.773	1.932	1.248	9561.3035	11.924	2.013	1.248
9548.3120	11.915	1.969	1.259	9563.3070	11.322	1.684	1.123
9548.3508	11.934	1.971	1.265	9564.2313	11.478	1.814	1.173
9549.2258	11.788	1.908	1.215	9621.1487	11.572	1.811	1.144
9549.2979	11.793	1.868	1.237	9623.1519	11.958	1.935	1.252
9549.3458	11.756	1.898	1.224	9624.1356	11.938	1.978	1.253
9550.2969	11.421	1.687	1.155	9625.1434	11.685	1.877	1.168
9551.2928	11.501	1.761	1.179	9631.1407	11.771	2.036	1.193
9552.2914	11.678	1.825	1.224	9632.1379	11.659	1.859	1.200
9553.2830	11.716	1.843	1.209	9633.1322	11.348	1.715	1.144
9554.2971	11.714	1.815	1.223	9634.1418	11.512	1.856	1.174
9556.2860	11.736	1.949	1.251				

Table 3. BVR observations of BQ Ser.

JD hel 2440000+	V	B-V	V-R _c	JD hel 2440000+	V	B-V	V-R _c
9514.3464	9.755	1.568	.951	9534.2937	9.509	1.491	.907
9514.4133	9.751	1.575	.940	9534.3406	9.524	1.489	.911
9515.3724	9.241	1.315	.821	9534.3965	9.522	1.520	.903
9516.3902	9.409	1.458	.887	9535.2625	9.750	1.585	.936
9517.3892	9.709	1.592	.950	9535.3275	9.771	1.583	.955
9519.4131	9.364	1.391	.866	9535.3956	9.769	1.604	.950
9521.3329	9.540	1.480	.911	9536.2553	9.458	1.424	.866
9522.3627	9.576	1.518	.917	9536.3761	9.367	1.367	.854
9522.4247	9.597	1.513	.913	9537.2575	9.288	1.393	.856
9523.3214	9.656	1.521	.922	9537.3236	9.320	1.397	.855
9523.4009	9.648	1.491	.915	9537.3965	9.342	1.415	.859
9524.3012	9.230	1.355	.828	9538.2810	9.621	1.548	.919
9524.3704	9.244	1.331	.846	9538.3301	9.639	1.567	.932
9524.4329	9.238	1.342	.844	9539.2555	9.718	1.558	.939
9525.2976	9.457	1.473	.907	9539.3417	9.699	1.551	.929
9526.2867	9.733	1.584	.947	9539.3794	9.703	1.534	.932
9529.2874	9.553	1.541	.919	9540.2445	9.446	1.431	.887
9530.2713	9.652	1.541	.923	9540.3371	9.420	1.429	.870
9530.3559	9.650	1.530	.924	9541.2485	9.450	1.453	.874
9530.4108	9.636	1.534	.914	9541.3138	9.468	1.432	.884
9533.2732	9.318	1.400	.848	9541.3805	9.459	1.449	.883
9533.3506	9.321	1.399	.854	9542.2496	9.440	1.479	.883
9533.4046	9.322	1.409	.861	9542.3022	9.463	1.457	.895

Table 3 (cont.)

JD hel 2440000+	V	B-V	V-R _c	JD hel 2440000+	V	B-V	V-R _c
9530.3559	9.650	1.530	.924	9541.2485	9.450	1.453	.874
9530.4108	9.636	1.534	.914	9541.3138	9.468	1.432	.884
9533.2732	9.318	1.400	.848	9541.3805	9.459	1.449	.883
9533.3506	9.321	1.399	.854	9542.2496	9.440	1.479	.883
9533.4046	9.322	1.409	.861	9542.3022	9.463	1.457	.895
9542.3715	9.466	1.449	.883	9556.2931	9.729	1.595	.945
9543.2500	9.534	1.520	.904	9557.2447	9.632	1.462	.914
9543.3144	9.549	1.508	.922	9559.2195	9.545	1.520	.917
9545.2367	9.291	1.355	.841	9559.2952	9.567	1.522	.907
9545.2912	9.260	1.356	.836	9560.2280	9.701	1.546	.947
9546.2404	9.376	1.416	.885	9560.3322	9.682	1.563	.926
9546.3047	9.386	1.433	.874	9561.3083	9.517	1.478	.886
9546.3794	9.406	1.458	.879	9563.3111	9.391	1.419	.869
9547.2296	9.663	1.573	.936	9564.2363	9.498	1.485	.902
9547.2857	9.696	1.578	.955	9617.0962	9.627	1.486	.885
9548.3153	9.714	1.541	.920	9620.2112	9.785	1.542	.939
9548.3546	9.693	1.527	.932	9621.1813	9.551	1.461	.873
9549.2296	9.294	1.362	.837	9623.1762	9.500	1.444	.886
9549.3012	9.290	1.367	.839	9625.1939	9.651	1.545	.912
9549.3496	9.310	1.364	.858	9626.2175	9.438	1.423	.877
9550.3007	9.474	1.494	.883	9631.1572	9.406	1.478	.858
9551.2960	9.592	1.510	.907	9632.2027	9.620	1.530	.928
9552.2953	9.566	1.514	.909	9633.1754	9.634	1.497	.931
9553.2908	9.607	1.509	.907	9634.1830	9.591	1.518	.925
9554.3017	9.270	1.351	.831				

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