

Abstract. Here we present LaTeX files of Tables 5, 6 and 7 with measured and compiled spectrophotometric quantities and radial velocities; Table 3 with *UBV* photometry is available only in ASCII format.

Key words: Stars: emission-line, Be – Stars: close – Stars: binaries: spectroscopic – Stars: fundamental parameters – Stars: individual: V832 Cyg

A&A manuscript no.
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Your thesaurus codes are:
08.05.2, 08.02.1, 08.02.4, 08.06.3, 08.09.2, V832 Cyg

Properties and nature of Be stars ^{*} ^{**}

21. The long-term and the orbital variations of V832 Cyg = 59 Cyg

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the date of receipt and acceptance should be inserted later

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** Also based on observations from Castanet-Tolosan, Hvar, Ondřejov, Pic-du-Midi, Rožen, San Pedro Mártir, Toronto and Xing-Long Observatories and on photoelectric photometry by AAVSO members

Table 5. Spectrophotometric data of H α profile of V832 Cyg compiled from the published profiles and measured by us

HJD-2400000	I_V	I_R	$(I_V + I_R)/2$	I_V/I_R	EW (\AA)	Observer
42249.8708	3.697	3.697	3.697	–	–	Barker (?)
42333.8002	2.455	2.455	2.455	–	–	”
42383.6397	2.274	2.182	2.227	1.042	–	”
42509.8851	2.576	2.242	2.409	1.149	–	”
42552.4576	1.660	1.660	1.660	1.000	–	Poeckert & Marlborough(?)
42565.7895	2.576	2.030	2.303	1.269	–	Barker (?)
42586.7197	2.576	2.273	2.424	1.133	–	”
42643.9007	1.820	1.820	1.820	–	8.91	Lacy (?)
42691.8199	2.182	2.333	2.258	0.935	–	Barker (?)
43009.5:	1.050	1.100	1.080	0.955	0.36	Fontaine et al. (?)
43091.5:	1.090	1.090	1.090	–	0.44	Slettebak & Reynolds (?)
43319.5:	1.050	1.050	1.050	–	0.27	”
43726.8528	1.420	1.310	1.370	1.084	2.85	Poeckert (?)
44351.8446	1.544	1.736	1.640	0.889	10.6	Barker (?)
44445.7564	1.576	1.551	1.563	1.017	9.7	”
44470.6820	1.602	1.384	1.493	1.157	6.8	”
44472.6605	1.602	1.410	1.506	1.136	7.3	”
44474.5549	1.493	1.538	1.515	0.971	6.4	”
44475.6508	1.480	1.448	1.464	1.022	6.5	”
44477.5459	1.544	1.487	1.515	1.039	7.7	”
44498.5563	1.608	1.608	1.608	1.000	6.7	”
44500.5966	1.480	1.301	1.391	1.138	7.1	”
44501.5188	1.551	1.384	1.467	1.120	7.2	”
44502.5549	1.480	1.448	1.464	1.022	7.2	”
44504.5160	1.512	1.512	1.512	1.000	7.3	”
44506.5152	1.493	1.429	1.461	1.045	6.9	”
44531.5792	1.576	1.423	1.499	1.108	7.7	”
44566.4506	1.640	1.640	1.640	1.000	8.3	”
44569.5199	1.679	1.352	1.515	1.242	8.1	”
44570.4851	1.672	1.320	1.496	1.267	8.00	”
44775.5425	1.870	1.390	1.630	1.345	5.50	Andrillat (?)
44806.4628	1.383	1.382	1.382	1.001	3.291	Tarasov & Skherbakov (?)
44832.5949	1.459	1.414	1.436	1.033	4.198	”
44833.5174	1.533	1.573	1.553	0.975	4.923	”
44834.4473	1.501	1.592	1.547	0.944	4.871	”
45126.6987	1.480	1.380	1.430	1.070	5.02	Chalabaev & Maillard (?)
45606.7457	1.330	1.560	1.450	0.853	4.64	Ballereau et al. (?)
45611.7496	1.320	1.530	1.430	0.863	4.73	”
45618.7694	1.330	1.550	1.440	0.858	4.84	”
45620.8243	1.280	1.490	1.390	0.859	4.19	”
45621.6943	1.350	1.510	1.430	0.894	5.07	”
46570.4793	–	–	–	0.952	–	Tarasov & Tuominen (?)
46571.5293	1.610	1.670	1.645	0.964	–	”
46573.4494	–	–	–	0.957	–	”
46588.4002	–	–	–	1.019	–	”
46589.4002	–	–	–	1.013	–	”
46606.4410	–	–	–	1.012	–	”
46607.3111	–	–	–	1.018	–	”
46614.3614	1.700	1.590	1.645	1.070	–	”
46616.3814	–	–	–	1.059	–	”
46618.4515	1.620	1.590	1.605	1.013	–	”
46628.3519	–	–	–	0.936	–	”
46630.3020	1.660	1.720	1.690	0.965	–	”
46631.3220	–	–	–	0.964	–	”
46633.3421	1.630	1.620	1.625	1.009	–	”
46634.2821	–	–	–	1.018	–	”
46635.3022	1.640	1.620	1.630	1.018	–	”
46636.3222	1.640	1.630	1.635	1.007	–	”
47806.5:	1.770	1.830	1.800	0.967	–	Slettebak et al. (?)

Table 7. Radial velocities of H α and He I 6678 lines of V832 Cyg measured on the spectra obtained at the Dominion Astrophysical Observatory, Rožen and Ondřejov Observatories. Radial velocities RV_1 to RV_3 are RVs of the H α emission wings measured at the bottom parts of the profile, RVs of the emission wings of the He I 6678 emission and RVs of the absorption wings of the He I 6678 profile, respectively, in km s $^{-1}$

HJD-2400000	RV_1	RV_2	RV_3	Observatory
48902.4271	8.3	–	–	Rožen
49631.6430	-1.8	25.0	25.0	DAO
49631.8218	-4.5	29.8	-7.8	"
49631.8289	-3.2	36.2	22.6	"
49631.8361	-4.4	26.8	38.9	"
49631.8432	-3.7	10.0	5.2	"
49631.8503	-4.7	14.1	6.6	"
49631.8575	-4.5	28.4	4.4	"
49631.8646	-3.6	30.7	6.3	"
49631.8717	-3.1	29.1	5.6	"
49631.8789	-2.3	27.0	11.9	"
49631.8860	-3.1	21.5	7.3	"
49632.6547	-4.8	4.8	11.7	"
49632.6613	-4.8	15.4	4.3	"
49632.6672	-6.1	17.3	16.6	"
49632.6732	-4.8	30.8	-23.9	"
49632.8979	-6.2	3.3	-5.8	"
49632.9039	-4.7	6.3	-11.3	"
49632.9099	-3.9	10.7	-13.6	"
49632.9159	-4.2	18.9	5.2	"
49632.9219	-5.4	25.6	9.4	"
49632.9279	-5.4	26.7	13.3	"
49632.9340	-4.1	28.1	19.3	"
49634.7817	-7.0	2.8	-24.4	"
51393.0138	-31.4	-25.3	-18.2	"
51393.9313	-29.6	-32.5	-29.3	"
51394.8924	-32.7	-28.6	-43.6	"
51388.4178	-16.5	-34.8	-34.5	Ondřejov
51395.5504	-25.7	-21.7	-37.7	"
51399.4940	-21.1	-14.7	-20.0	"

Table 6. Spectrophotometric data of H α and He I 6678 line profiles measured on the spectra obtained at the Dominion Astrophysical Observatory, Rožen, Ondřejov and Castanet-Tolosan Observatories

HJD-2400000	I_V	I_R	$(I_V + I_R)/2$	I_V/I_R	EW (Å)	I_V	I_R	$(I_V + I_R)/2$	I_V/I_R	Observatory
48902.4275	1.822	1.680	1.750	1.086	10.870	–	–	–	–	Rožen
48818.4359	–	–	1.807	–	11.263	–	–	–	–	Pic-du-Midi
49236.3539	–	–	1.721	–	10.441	–	–	–	–	”
49922.4522	1.854	1.923	1.888	0.964	13.082	–	–	–	–	”
50293.5353	1.677	1.701	1.689	0.986	10.286	–	–	–	–	”
51344.5735	–	–	1.865	–	11.905	–	–	–	–	Castanet-Tolosan
51346.4856	1.853	1.794	1.824	1.033	12.036	–	–	–	–	”
51642.6257	–	–	1.864	–	12.173	–	–	–	–	”
51732.4726	1.804	1.853	1.829	0.974	12.221	–	–	–	–	”
51738.5598	–	–	1.901	–	12.481	–	–	–	–	”
51742.3749	–	–	1.927	–	12.683	1.028	0.995	1.012	1.033	”
51743.4050	–	–	1.939	–	12.831	1.029	0.998	1.013	1.031	”
52065.5271	1.893	1.979	1.936	0.956	12.693	0.999	1.038	1.018	0.962	”
52079.6087	1.952	1.866	1.909	1.046	12.273	–	–	–	–	”
52085.5710	–	–	1.966	–	12.077	1.027	0.986	1.007	1.042	”
52093.4684	1.877	1.979	1.928	0.948	12.657	0.993	1.019	1.006	0.974	”
52121.5114	1.868	1.966	1.917	0.950	12.538	0.984	1.018	1.001	0.967	”
52247.2371	–	–	1.914	–	12.423	–	–	–	–	”
52255.2367	–	–	1.966	–	13.150	1.029	0.986	1.007	1.044	”
49631.6430	1.906	1.802	1.854	1.058	10.583	1.050	0.989	1.020	1.062	DAO
49631.8218	1.910	1.812	1.861	1.054	10.768	1.048	0.991	1.020	1.057	”
49631.8289	1.904	1.812	1.859	1.051	10.763	1.046	0.992	1.019	1.054	”
49631.8361	1.905	1.813	1.859	1.051	10.725	1.048	0.988	1.018	1.061	”
49631.8432	1.898	1.806	1.852	1.051	10.654	1.044	0.994	1.019	1.050	”
49631.8503	1.895	1.802	1.849	1.052	10.516	1.051	0.988	1.019	1.064	”
49631.8575	1.899	1.805	1.852	1.052	10.656	1.055	0.997	1.026	1.058	”
49631.8646	1.896	1.806	1.851	1.050	10.599	1.048	0.995	1.022	1.053	”
49631.8717	1.899	1.806	1.853	1.051	10.650	1.044	0.992	1.018	1.052	”
49631.8789	1.904	1.810	1.857	1.052	10.681	1.047	0.994	1.021	1.053	”
49631.8860	1.910	1.807	1.859	1.057	10.661	1.045	0.994	1.019	1.051	”
49632.6547	1.879	1.773	1.826	1.060	10.464	1.047	0.993	1.020	1.054	”
49632.6613	1.882	1.776	1.829	1.060	10.469	1.051	0.997	1.024	1.054	”
49632.6672	1.885	1.777	1.831	1.061	10.479	1.051	0.992	1.021	1.059	”
49632.6732	1.894	1.775	1.835	1.067	10.551	1.049	0.992	1.021	1.057	”
49632.8979	1.904	1.787	1.844	1.065	10.595	1.050	0.995	1.022	1.055	”
49632.9039	1.898	1.777	1.838	1.068	10.573	1.052	0.995	1.023	1.057	”
49632.9099	1.900	1.779	1.840	1.068	10.537	1.049	0.992	1.021	1.057	”
49632.9159	1.905	1.778	1.842	1.071	10.585	1.053	0.989	1.021	1.065	”
49632.9219	1.909	1.784	1.847	1.070	10.655	1.053	0.991	1.022	1.063	”
49632.9279	1.900	1.775	1.838	1.070	10.548	1.053	0.994	1.023	1.059	”
49632.9340	1.905	1.769	1.837	1.077	10.548	1.048	0.992	1.020	1.057	”
49634.7817	1.905	1.745	1.825	1.092	10.413	1.046	0.999	1.022	1.047	”
51393.0138	1.775	1.880	1.828	0.944	9.514	1.006	1.076	1.041	0.935	”
51393.9313	1.793	1.874	1.834	0.957	9.787	1.001	1.076	1.039	0.930	”
51394.8924	1.796	1.839	1.818	0.977	9.555	1.002	1.075	1.039	0.932	”
51388.4178	1.738	1.801	1.770	0.965	10.588	0.995	1.025	1.010	0.971	Ondřejov
51395.5504	1.733	1.761	1.747	0.992	10.324	0.997	1.055	1.026	0.945	”
51399.4940	1.790	1.714	1.752	1.044	10.433	0.995	1.006	1.000	0.989	”