

COMMISSION 27 OF THE I. A. U.
 INFORMATION BULLETIN ON VARIABLE STARS

Number 3134

Konkoly Observatory
 Budapest
 21 January 1988
 HU ISSN 0374-0676

VARIABILITY OF THE CARBON STAR BD+51^o1329

In our observational program of IRC objects some poorly investigated C and S type stars are also included which are close to local IRC standards.

BD+51^o1329 ($\alpha=7^{\text{h}}31^{\text{m}}.5$, $\delta=51^{\circ}37'$) is a carbon star of spectral type C4,5, for which Bidelman has noted strong SiC₂ bands (Stephenson, 1973). In De- arborn survey of faint red stars BD+51^o1329 is designated as DO 31774 with a spectral type of R and magnitude 10^m.0 (Lee et al., 1947).

Observations were obtained at the Radioastrophysical observatory in Baldone using the 55-cm cassegrain telescope and a double-channel photon-counting photo- meter in Johnson system. The comparison stars are BD+51^o1327 and 51^o1328 with magnitudes, color indices and spectrum as follows:

BD	HD	V	V-R	R-I	Sp
+51 ^o 1327	59721	6.47	0.99	0.67	K0
+51 ^o 1328	59875	8.32	0.63	0.55	G5

Results of VRI observations are given in Table I. Some sporadic observations in filter B give an amplitude $\Delta B \approx 0.4^{\text{m}}$.

Alksne et al. (1983) noted that strong SiC₂ bands appeared mainly in ir- regular or semiregular variables. A diagram R-I versus V-R cannot give exactly the type of variability but the position of BD+51^o1329 indicates a possible type of Lb or SR.

Table I

JD2440000+	V	V-R	R-I
3951	10 ^m .16	-	1 ^m .34
4314	9.88	-	-
4316	9.86	-	1.32
5044	10.35	-	1.31
5061	10.24	-	-
5125	10.30	-	-
5382	10.40	-	-
5404	10.18	1.96	-
5745	10.36	-	-
5747	10.37	-	-

Table I (Cont.)

JD 2440000+	V	V-R	R-I
5780	10. ^m 18	1. ^m 97	1. ^m 33
5781	10.20	1.95	-
5825	10.27	1.99	-
5830	10.33	2.00	-
5976	10.25	1.97	-
6020	10.14	1.91	-
6022	10.13	1.96	-
6166	10.13	1.97	-
6468	10.28	2.06	-
6477	10.20	2.00	-
6503	10.25	2.02	-
6534	10.35	2.04	-

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