

New Eclipsing Binaries in the OGLE-II Database (Part 1). The Carina Galactic Disk Fields

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#	Name	Other	Coord (J2000)	Type	Max	Min	System	Period	Epoch (JD)	type	Sp	Comment	L.Curve	Find.Chart	Data
1		OGLEII CAR-SC01 2765, 2MASS J11052668-6148368	11 05 26.68, -61 48 36.8	EW	16.44	16.85	I	0.579465	2450537.781	min		Comm. 1	CAR_SC1_2765.jpg		CAR_SC1_2765.txt
2		OGLEII CAR-SC01 5494, 2MASS J11051146-6144570	11 05 11.46, -61 44 57.1	EA	16.28	17.00	I	2.0198	2450555.575	min		Comm. 2	CAR_SC1_5494.jpg		CAR_SC1_5494.txt
3		OGLEII CAR-SC01 46493, 2MASS J11055923-6150589	11 05 59.24, -61 50 58.9	EA	16.03	16.41	I	2.23281	2450551.628	min		Comm. 3	CAR_SC1_46493.jpg		CAR_SC1_46493.txt
4		OGLEII CAR-SC01 69423, 2MASS J11055898-6122543	11 05 58.99, -61 22 54.3	EW	15.72	16.23	I	0.348868	2451583.772	min		Comm. 4	CAR_SC1_69423.jpg		CAR_SC1_69423.txt
5		OGLEII CAR-SC01 90562, 2MASS J11055545-6058470	11 05 55.46, -60 58 47.0	EB/RS	14.76	14.92	I	1.121577	2450492.900	min		Comm. 5	CAR_SC1_90562.jpg		CAR_SC1_90562.txt
6		OGLEII CAR-SC01 124846, 2MASS J11062757-6113440	11 06 27.58, -61 13 44.0	EB	15.86	16.63	I	0.488307	2451631.684	min		Comm. 6	CAR_SC1_124846.jpg		CAR_SC1_124846.txt
7		OGLEII CAR-SC01 127687, 2MASS J11062902-6110388	11 06 29.03, -61 10 38.9	EA	16.14	16.73	I	2.62475	2450551.628	min		Comm. 7	CAR_SC1_127687.jpg		CAR_SC1_127687.txt
8		OGLEII CAR-SC01 158766, 2MASS J11064481-6127250	11 06 44.81, -61 27 25.1	EA	15.77	15.96	I	8.3072	2450566.603	min		Comm. 8	CAR_SC1_158766.jpg		CAR_SC1_158766.txt
9		OGLEII CAR-SC02 17, 2MASS J11071601-6152001	11 07 16.02, -61 52 00.1	EW	13.78	14.36	I	0.387298	2450571.6252	min		Comm. 9	CAR_SC2_17.jpg		CAR_SC2_17.txt
10		OGLEII CAR-SC02 62822, 2MASS J11073187-6126381	11 07 31.87, -61 26 38.1	EW	16.12	16.53	I	0.72240	2451296.491	min		Comm. 10	CAR_SC2_62822.jpg		CAR_SC2_62822.txt
11		OGLEII CAR-SC02 75768, 2MASS J11074687-6108154	11 07 46.88, -61 08 15.5	EA	15.98	16.52	I	0.94476	2451709.513	min		Comm. 11	CAR_SC2_75768.jpg		CAR_SC2_75768.txt
12		OGLEII CAR-SC02 80302, 2MASS J11075716-6103519	11 07 57.17, -61 03 52.0	EW	16.31	17.00	I	0.304516	2450476.842	min		Comm. 12	CAR_SC2_80302.jpg		CAR_SC2_80302.txt
13		OGLEII CAR-SC02 95772, 2MASS J11075903-6134032	11 07 59.04, -61 34 03.2	EA	16.20	16.99	I	3.311	2450534.703	min		Comm. 13	CAR_SC2_95772.jpg		CAR_SC2_95772.txt
14		OGLEII CAR-SC02 134876, 2MASS J11083117-6134182	11 08 31.18, -61 34 18.2	EA	14.10	14.62	I	1.49638	2451397.495	min		Comm. 14	CAR_SC2_134876.jpg		CAR_SC2_134876.txt
15		OGLEII CAR-SC02 138173, 2MASS J11085136-6131453	11 08 51.36, -61 31 45.4	EA	16.36	16.66	I	1.65666	2450919.659	min		Comm. 15	CAR_SC2_138173.jpg		CAR_SC2_138173.txt
16		OGLEII CAR-SC03 11336, 2MASS J11091328-6107288	11 09 13.28, -61 07 28.9	EW	15.03	15.40	I	0.459273	2451245.708	min		Comm. 16	CAR_SC3_11336.jpg		CAR_SC3_11336.txt
17		OGLEII CAR-SC03 59276, 2MASS J11094761-6101166	11 09 47.62, -61 01 16.6	EA	14.74	15.17	I	0.86777	2451332.533	min		Comm. 17	CAR_SC3_59276.jpg		CAR_SC3_59276.txt
18		OGLEII CAR-SC03 80858, 2MASS J11094631-6030115	11 09 46.31, -60 30 11.6	EB	15.66	16.37	I	0.652117	2450488.866	min		Comm. 18	CAR_SC3_80858.jpg		CAR_SC3_80858.txt
19		OGLEII CAR-SC03 80896, 2MASS J11092812-6027468	11 09 28.12, -60 27 46.9	EW	16.05	16.65	I	0.314624	2451332.533	min		Comm. 19	CAR_SC3_80896.jpg		CAR_SC3_80896.txt
20		OGLEII CAR-SC03 123980, 2MASS J11103631-6119565	11 10 36.32, -61 19 56.6	EA	16.44	17.12	I	2.466	2450566.562	min		Comm. 20	CAR_SC3_123980.jpg		CAR_SC3_123980.txt

Comments:

1. MinII = 16.83. J - K = 0.940 (2MASS).
2. MinII = 16.85. J - K = 0.509 (2MASS). The K magnitude in the 2MASS catalogue is an upper limit or has a very poor quality.
3. MinII = 16.36. J - K = 0.831 (2MASS). Eccentric system; secondary eclipse at phase 0.45.
4. MinII = 16.12. J - K = 0.469 (2MASS).
5. MinII = 14.88. J - K = 0.414 (2MASS).

6. MinII = 16.19. J - K = 0.690 (2MASS). Shows O'Connell effect.
7. MinII = 16.71. J - K = 0.912 (2MASS).
8. MinII = 15.87. J - K = 0.498 (2MASS).
9. MinII = 14.28. J - K = 0.543 (2MASS).
10. MinII = 16.47. J - K = 0.575 (2MASS).
11. MinII = 16.09. J - K = 0.470 (2MASS).
12. MinII = 16.90. J - K = 0.772 (2MASS).
13. MinII = 16.51. J - K = 0.916 (2MASS).
14. MinII = 14.23. J - K = 0.462 (2MASS).
15. MinII = 16.45. J - K = 0.729 (2MASS). The K magnitude in the 2MASS catalogue is an upper limit or has a very poor quality.
16. MinII = 15.39. J - K = 0.768 (2MASS).
17. MinII = 15.00. J - K = 0.395 (2MASS).
18. MinII = 15.91. J - K = 0.662 (2MASS).
19. MinII = 16.50. J - K = 0.656 (2MASS).
20. MinII = 16.90. J - K = 1.054 (2MASS).

Remarks:

The publicly available data of the OGLE-II database (<http://ogledb.astrouw.edu.pl/~ogle/photdb/>) was searched for unrecorded eclipsing binaries. Only the lightcurves of objects with the following parameters were investigated:

number of good points, $N_{\text{good}} \geq 300$;
percentage of good points, $P_{\text{good}} \geq 80$;
standard deviation of I magnitude, $I_{\text{sig}} \geq 0.04$;
median I magnitude, $I_{\text{med}} \leq 17$;
median error of I magnitude, $I_{\text{mederr}} < 0.015$.

Part I covers the OGLE-II (Szymański 2005, Udalski et al. 1997) Carina Galactic Disk Fields (CAR_SC1, CAR_SC2, CAR_SC3), from which the specified search returned 20 objects. All stars were checked against the Strasbourg CDS VizieR service and the International Variable Star Index for pre-existence in variability catalogues.

Amplitudes and periods were derived using the Period04 code (Lenz & Breger 2005). Astrometric positions were taken from the 2MASS catalogue (Skrutskie et al. 2006); near-infrared color indices from the 2MASS catalogue are presented in the Comments.

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