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RR LYRAE VARIABLES IN M 92

New observations of M 92 were made at the Main Astronomical Observatory of the Academy of Sciences of the Ukrainian SSR during 1964 - 1965. The procedure of determining magnitudes was described in (1). On the basis of the examination of all the 311 plates available the elements of variables No. 1, 2, 3, 4, 5 and 8 were revised and those for No. 7, 9, 10 and 11 were deduced. Data for variables in M 92 are given in the following table where

$$\xi = \frac{T_{\max} - T_{\min}}{P} \quad \text{and} \quad \zeta = m_{1/2P} - 1/2 (M+m)$$

Var	Max JD hel 243.....	Period	M	m	ξ	ζ	Remarks
1	7403.659 8170.327	0 ^d .7027144 .7028410	14 ^m .40	15 ^m .86	0.185	0 ^m .42	1
2	7427.366	.6438833	.48	.76	.155	.44	2
3	.120	.6374495	.33	.80	.165	.65	
4	.210	.6289248	.34	.62	.140	.48	
5	.664 871.39 ^d	.6197346 .6196854	.40	.77	.150	.63	3
7	.517	.5149114	.45	.70	.200	.07	4
8	427.185	.6732563	.54	.70	.110	.46	5
9	871.181	.6083514	.53	.77	.100	.46	
10	427.191	.3772912	.76	.64	.370	.06	6
11	.096	.3084614	15.08	.63	.350	.05	7

Remarks

1. A change of the period occurred at about J.D. 2438170.
- 2,5,7. Blashko effect. M is the mean of maximum and minimum amplitudes.
3. A change of the period occurred at about J.D. 2437871.
4. The brightness values $M=14^m.01$ and $m=14^m.52$ were observed. This star seems to be an ordinary cluster variable blended by a star of 14.88 mag.
6. Two small changes of the period were found at about J.D. 2438170 and 2438230.

Reference

- (1) Inf. Bull. Var. Stars
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