

COMMISSION 27 OF THE I. A. U.  
INFORMATION BULLETIN ON VARIABLE STARS  
NUMBER 871

Konkoly Observatory  
Budapest  
1974 February 28

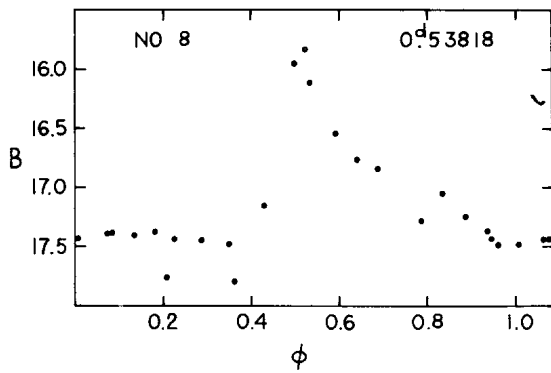
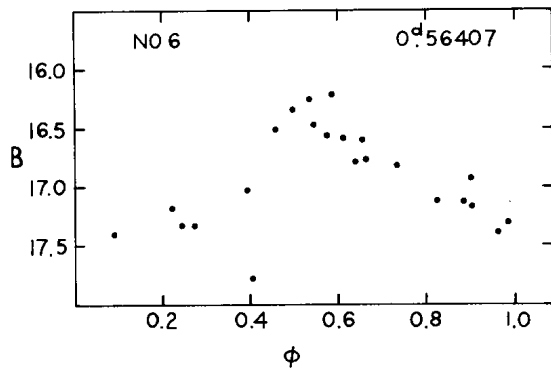
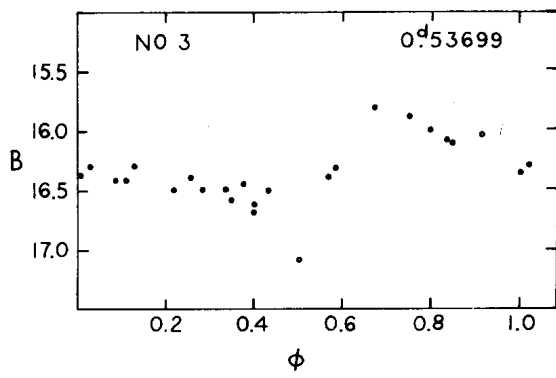
OBSERVATIONS AND PRELIMINARY PERIODS FOR  
VARIABLE STARS IN NGC 1261

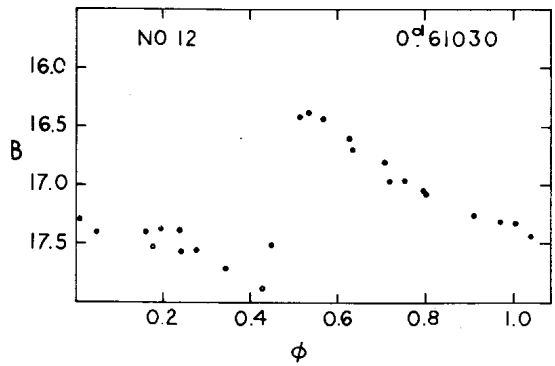
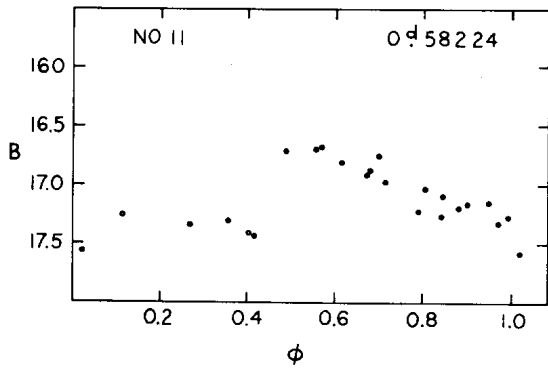
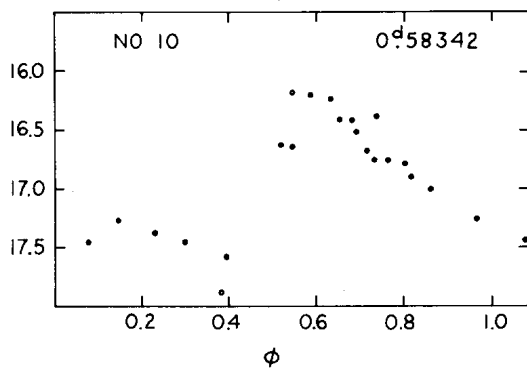
Two series of B(103a0 + GG 385) plates of the globular cluster NGC 1261 were taken in December 1971 and November 1972 with the 24-inch (60 cm) telescope of the University of Toronto at Las Campanas, Chile. In addition, the authors were lent two plates of the same cluster taken with the same telescope in September 1971 by W. Harris of the University of Toronto. The plates were measured with the Becker iris photometer of the University of Western Ontario and the magnitudes determined using the photoelectric sequence of Alcaïno and Contreras (Astr. Astroph., 11,14,1971) are listed in Table I.

Combining these magnitudes with those published by Bartolini, Grilli and Morisi (IBVS 662,1972) preliminary periods were determined for seven of the variables. Light curves are shown in Figure 1. Because there were so few observations from which to determine the periods it is possible that the periods given here may later require adjustments.

The value  $\bar{P}_{ab}$  determined from the six ab-type variables is 0.569 days which would place the cluster in the Oosterhoff type I category and since the ratio  $n_c/n_{ab}$  as determined by Bartolini et al. seems to be small, NGC 1261 seems to be an AI type globular cluster using the classification of Castellani et al. (Aph.Space Sc.9,418,1970).

The authors plan to take additional plates of this cluster which they hope will verify these periods and allow the determination of periods for the other variables in the cluster. They would like to express their gratitude to Mr. Harris for the loan of his plates and to Dr. D. A. MacRae for allowing us to use the University of Toronto telescope at Las Campanas. We also wish to thank the National Research Council of Canada for its support of this program.





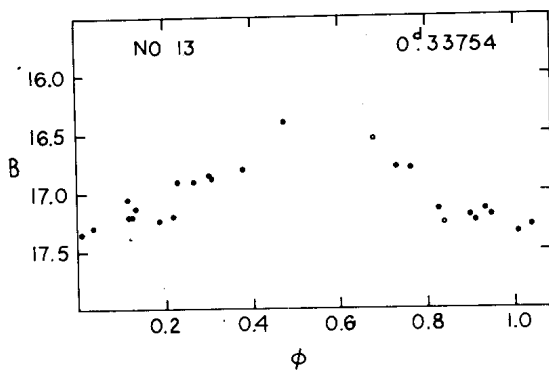


Table I

Hel. J.D.	1	2	3	4	5	6	7	8
2441000								
207.851	17.6	16.70	17.1 :	-	-	16.25	16.55	17.05
209.787	17.0	17.05	16.42	-	-	17.32	17.3	17.15
299.543	17.24	16.90	16.38	16.16	16.1	17.40	-	17.70
300.550	17.17	16.48	16.30	15.5	16.1	17.12	16.70	17.4
301.551	17.32	15.98	16.38	15.18	16.6	16.58	16.76	17.4
302.543	17.5 :	17.5 :	16.1	15.6	16.25	17.8 :	17.3 :	17.3 :
304.543	17.3	16.98	16.42	15.4	16.22	17.4	17.07	15.95
305.545	17.4	16.72	16.5	15.30	16.10	16.80	16.70	17.8
625.852	17.6 :	17.2 :	16.0 :	16.0 :	16.2 :	16.2	16.4 :	15.8 :
626.796	17.3	16.02	15.72	16.4	15.44	17.3	16.67	17.4
627.694	17.22	17.08	16.58	16.5	16.5 :	17.16	17.4	17.5
627.723	17.6	17.18	16.60	16.21	15.96	16.91	17.00	17.44

Hel. J.D.	9	10	11	12	13	14	15
2441000							
207.851	17.25	17.45	16.70	17.6	16.87	17.35	14.84
209.787	16.48	17.6	17.02	17.50	17.30	16.22	15.1
299.543	16.38	17.40	17.30	16.40	17.21	17.21	15.38
300.550	16.92	17.23	16.72	17.4	17.15	16.50	15.32
301.551	16.20	16.38	17.4	17.04	17.21	17.38	15.35
302.543	16.5	17.9 :	17.2 :	17.9 :	17.3 :	17.3 :	15.4
304.543	16.09	16.73	16.80	16.77	16.80	16.36	15.48
305.545	16.85	16.59	17.3	17.7	16.80	17.7	15.30
625.852	16.4 :	16.2 :	17.4 :	17.5 :	16.6 :	17.2 :	15.43
626.796	16.66	17.3	17.6	16.93	16.42	17.4	15.44
627.694	16.50	16.48	16.77	17.35	17.1	16.38	15.45
627.723	16.66	16.33	16.80	17.56	17.20	16.30	15.41

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