

COMMISSION 27 OF THE I. A. U.
 INFORMATION BULLETIN ON VARIABLE STARS
 NUMBER 636

Konkoly Observatory
 Budapest
 1972 February 29

REMARK ON THE PERIOD OF RW CORONAE BOREALIS

From the photoelectric observations published by E.F. Milone and A.J. Wesselink (IBVS 611, 1972) I have determined the following two minima

Minimum	Julian Date	O-C	E
primary	2440748.8251 ± 0 ^d .0006	-0 ^d .0039	28011
secondary	2440749.1920 ± 0.0010	-0.0002	28011.5

The O-C values are computed with the linear ephemerides

$$\text{Min. I. hel.} = \text{JD } 2420401.3193 + 0^d.7264114 \text{ E}$$

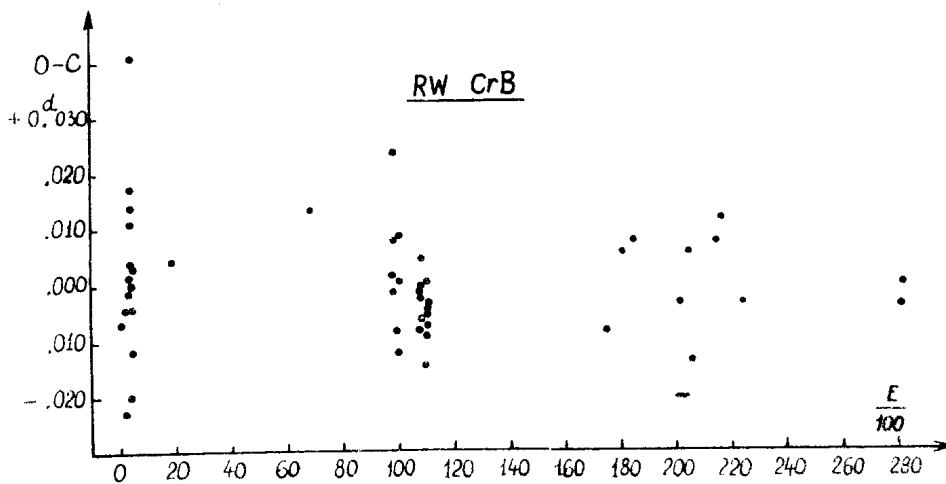
Hence we have

$$T_2 - T_1 - P/2 = +0^d.0037 \pm 0^d.0010$$

From Lause's visual observations (AN 254,373, 1935) it may be possible to obtain

$$T_2 - T_1 - P/2 < 0$$

but this value is not significantly different from its accuracy. The differences O-C for all observed minima that I had at my disposal are shown in figure 1. It is very easy to see that we can speak neither about a period variation nor about an apsidal motion now.



For an accurate determination of the orbital eccentricity and for the study of an eventual apsidal motion we need new photoelectric observations for both primary and secondary minima. The next months of this year could be suitable for a new set of such observations.

Astronomical Observatory
Cluj

IOAN TODORAN

ON THE VARIABILITY OF NGC 404

The magnitudes of NGC 404 were estimated on 15 plates (1906-1912) taken with the Steinheil lens ($f/6.7 = 96$ mm) and 5 plates (1948-1962) taken with the Zeiss astrograph ($f/4 = 400$ mm). All the plates taken with given instrument have roughly the same exposures. The magnitudes of the comparison stars were adopted according to E.H. Geyer (IBVS 614, 1972). On all the plates the object has non-stellar image. The results are given in the following Table.

Date	mpg	Date	mpg	Date	mpg
1906 Dec. 9	11. ^m 9	1908 Dec.15	12. ^m 1	1912 Oct.13	11. ^m 6
1907 Nov.21	12.0	1908 Dec.16	11.9	1948 Sep.25	11.8
1908 Sep.25	12.1	1909 Aug.19	12.1	1951 Sep. 5	11.8
1908 Oct.20	12.1	1909 Aug.22	12.2	1951 Sep.27	11.8
1908 Oct.22	11.9	1909 Oct.18	11.6	1962 Oct.25	12.0
1908 Oct.23	12.0	1910 Sep. 6	11.6	1962 Oct.25	11.9
1908 Nov.17	12.0	1911 Aug. 4	12.1		

It is clear that the brightness of NGC 404 shows no variability on our plates. The variability discovered by E.H. Geyer is perhaps the result of the photographic effects caused by specific distribution of surface brightness of NGC 404 and differences of the instruments, exposures, plates etc.

The precise photoelectric photometry is extremely desirable.

February 20, 1972

B.V. KUKARKIN and N.E. KUROCHKIN
Sternberg State Astronomical Institute,
Moscow, 117234.