

ROYAL ASTRONOMICAL SOCIETY OF NEW ZEALAND

VARIABLE STAR SECTION

CIRCULAR No. 196

RY MISCROSCOPII

Frank M. Bateson & A.F. Jones.

SUMMARY:- Twenty one maxima are tabulated for RY Mic covering the interval JD 2,436,100 to 2,440,210. Elements derived are:

EPOCH Max. 2,437,098 \pm 198.2^d
Mean Max. Mag. 9.90 (9.6 - 10.1); Min. <14.3^v

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DISCUSSION: Charts 213 & 214 for RY Mic were published (1). The sequence stars selected were identified on these charts by letters. V and B-V magnitudes for these stars were published in Circ. 187 (2).

RY Mic is a Mira type variable with a range of 10 - <13 ptg; period 190 days according to Hoffmeister (3), who gave an epoch (max) of 2,428,670. Table 1 lists observed maxima determined from visual observations during the interval JD 2,436,00 (1957 Sept. 18) to 2,440,210 (1968 Dec. 19). This table is in the usual form with the final column showing the O-C residuals resulting from the derived elements of:-

EPOCH (Max). JD 2,437,098 \pm 198.2^d

The average deviation from these elements is \pm 6.2 days. The range is Mean. Max 9.90^v (9.6 to 10.1); Min <14.5. Whilst the minimum brightness is below the limits of the instruments employed, the light curve suggests that it is normally between 14.5^v and 15.0^v with an occasional minimum about a magnitude brighter. Possible dates of four minima can be inferred from the light curve but since the final slope of the curve at minimum can only be a guess these dates are not listed.

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1972 December 29

18 POOLLES ROAD,
GREERTON.
TAURANGA
NEW ZEALAND.

REFERENCES:

- (1) 1970 BATESON, F.M., Jones, A.F. & Stranson, I. "Charts for Southern Variables--Series 6." Published by F.M. Bateson.
- (2) 1972. Circ. 187, VSS, RASNZ.
- (3) 1949 Hoffmeister, C. Erg. AN 12, 1.

V.S.S. CIRCULAR No. 196 (cont).

TABLE 1.

OBSERVED MAXIMA OF RY MICROSCOPII.

<u>J.D.</u>	<u>MAG.</u> v	<u>INT.</u> d	<u>Wt.</u>	<u>O-C.</u> d
2,436,116	9.8	...	1	+ 9
304	10.1	188	3	- 1
500	10.0	196	4	- 3
696	10.1	196	3	- 6
888	9.6	192	3	-12
2,437,098	10.0	210	5	+ 0
297	9.9	199	2	+ 1
507	10.1	210	4	+13
679	9.9	172	3	-14
879	9.9	200	5	-12
2,438,090	10.0	211	5	+ 1
273	10.1	183	4	-14
485	9.7	212	1	+ 0
679	9.8	194	3	- 5
877	9.9	198	4	- 5
2,439,082	9.7	205	4	+ 2
291	9.9	209	5	+13
480?	9.8?	189	1	+ 4
682	9.8	202	4	+ 7
875?	10.0	193	1	+ 2
2,440,078	9.9	203	3	+ 7

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