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# RU MONOCEROTIS

Photoelectric observations of RU Mon made by Prof. Bok and myself in Nov. 1964 - Jan. 1965 at Mount Stromlo and Siding Spring Observatories revealed very significant deviations of the times of minima from the existing ephemerides, amounting to eight hours. The motion of the line of apsides is faster than it was previously supposed, i.e. $45^{\circ}$ per period of revolution. U/P = 29000.

The proposed formulae for minima are as follows:

Primary min. = hel. JD $2429641.567 + 3^{d}.5846391\ (E-3554) - 0^{d}.429 \cos\alpha + 0^{d}.060 \sin 2\alpha + 0^{d}.010 \cos 3\alpha + 0^{d}.003 \sin 4\alpha$

Secondary min. = hel. JD $2429639.775 + 3^{d}.5846391\ (E-3554) + 0^{d}.429 \cos\alpha + 0^{d}.060 \sin 2\alpha - 0^{d}.010 \cos 3\alpha + 0^{d}.003 \sin 4\alpha$

where $\alpha = 0^{\circ}.01245\ (E-406.)$

For the next two years we can use the approximate formulae:

Primary Min. = hel. JD $2438732.098 + 3^{d}.5847111\ (E-6090)$

Secondary min. = hel. JD $2438730.606 + 3^{d}.5845259\ (E-6090)$

The durations of minima are respectively $D_1 = 4^{h}.9$, $D_2 = 10^{h}.1$(!), their depths: $A_1 = 0^{m}.73$, $A_2 = 0^{m}.59$.

The next 5-7 years will be critical for exact determination of the motion of the line of apsides and of the suspected variations of the orbital eccentricity ( between 0.36 and 0.39 ).

Photometric, especially photoelectric observations are strongly needed. The star "e" ( AN 235, 226, 1929) should be avoided as a comparison star.

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