amateur astronomers could observe them.

The variability in the visual part of the spectrum is less than in the ultraviolet due to the increased contribution of non-variable starlight made by the inner area of the galaxy surrounding the nucleus. Observers making photoelectric observations should use a blue filter normally used in the UBV photometry system, and these would then give satisfactory results, provided a sufficiently small diaphragm is used. (≤ 30Ti).

We have photographs of the fields surrounding the galaxies in which we are interested, and photoelectric visual magnitudes for nearby comparison stars. These will be supplied to AAVSO Headquarters for conversion into standard-format charts. All communications concerning this new program should be made directly to AAVSO Headquarters.

## THE PERIOD OF RZ CASSIOPEIAE

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In 1966 Leif J. Robinson published a paper in the Russian journal Variable Stars entitled "A Period Study of RZ Cassiopeiae" (1). In this paper he summarized approximately 500 visual and 35 photoelectric timings of minima made in the period between 1950 and 1965.

In Figure 1, taken from Robinson's paper, the combined observations are shown as the O-C values plotted against cycles after the initial epoch, which were obtained from the Parenago elements: J.D. = 2,417,355.4233 + 1.1952519 E.

The three different slopes on this plot indicate three different periods for this star.

In Figure 2 I have added six observations of minima made by me in the period from 1965 through 1971, as well as three observations made by John Bortle in 1971 and 1972. These observations support an extrapolation of the last slope indicated in Robinson's plot. Apparently then, RZ Cas has undergone no change in period since 1960.

Bulletin No. 112 of Commission 27 of the I.A.U. published on November 1, 1965 (2) shows a new set of light elements by Robinson to represent this latest slope:

Min. = J.D. 2,437,143.9886 + 1.1952472 E.

In Figure 3 I have shown a plot of the O-C values against the numbers of cycles after this epoch. Some of the points are taken from Bulletin 112 and the rest are mine and Bortle's. The residuals are running quite close to the Robinson light elements.

## REFERENCES

- Robinson, L. J., <u>Variable Stars</u>, 16, (1), 39.
   Robinson, L. J., <u>1965</u>, <u>Comm.</u> <u>27</u> <u>IAU Inf. Bul. Var. <u>Stars</u>, No. 112.
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