Table 6.

| m.e. weight | \[ L_{\nu} \pm 0.38 \] | \[ PD \pm 0.65 \] | \[ Y_{\nu} \pm 0.74 \] | \[ W \pm 0.87 \] | \[ Ch \pm 1.28 \] | \[ PDP \pm 1.31 \] | \[ H_{vis} \pm 1.34 \] |

From the internal agreement between the plates I found for an average final Leiden magnitude the mean error \[ \pm 0.026 \].

Literature:


The period of XX Virginis, by P. Th. Oosterhoff.

In B.A.N. No. 285 the star XX Vrg was found to be a variable closely resembling the RR Lyrae type variables, although its period has the exceptionally large value of nearly r35 days. This period was derived from more than 300 observations made with the Mount Wilson 10 inch refractor, also it represents the epochs of maximum given in H.B. No. 847 in a satisfactory way. The fraction of the Julian Day of these Harvard and Mount Wilson observations is comprised between '5 and '0, due to the small difference in terrestrial longitude between the stations of observation. It therefore seemed worth while to obtain a check on the period by means of observations made at a quite different longitude.

Mr. A. DE SITTER has been so kind to observe this variable with the FRANKLIN-ADAMS II refractor (focal length 226 cm) at Johannesburg. His observations cover the main part of the ascending branch of the lightcurve. The plates were measured by the writer in a Schilt microphotometer. The following comparison star was added to those which have been used in my first note on this variable:

\[ \Delta \alpha \cos \delta \quad \Delta \delta \quad m_{pg} \]

(relative to the variable)

\[ + 19'9 - 12'3 \quad 11'39 \]

The resulting mean error of a single measure is

\[ \Delta \alpha \cos \delta \quad \Delta \delta \quad m_{pg} \]

(mean phase)

\[ \pm 19'9 - 12'3 \quad 11'39 \]

\( m_{pg} \)

\[ 9067 \quad 11'38 \]

\[ 9074 \quad 12'00 \]

\[ 9252 \quad 11'35 \]

\[ 9446 \quad 11'40 \]

\[ 9558 \quad 11'33 \]

\[ 9652 \quad 11'44 \]

\[ 9760 \quad 11'47 \]
This large value is partly due to under-exposure of the photographic images and also to the fact that the plates are heavily fogged. The individual magnitudes are given in the table. The phases were computed in the same way as those of B.A.N. No. 285.

In the last two columns the phases and magnitudes have been combined into groups of three. The observed ascending branch coincides very closely with the observations of my first note, the deviation from the ephemeris being smaller than 0.01 period. Although the confirmation of these elements would have had more weight if observations at different longitudes would have been made at nearly the same epoch, there seems to be no doubt left about the correctness of this interesting period.