

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

NUMBER 585

Konkoly Observatory
Budapest
1971 October 18

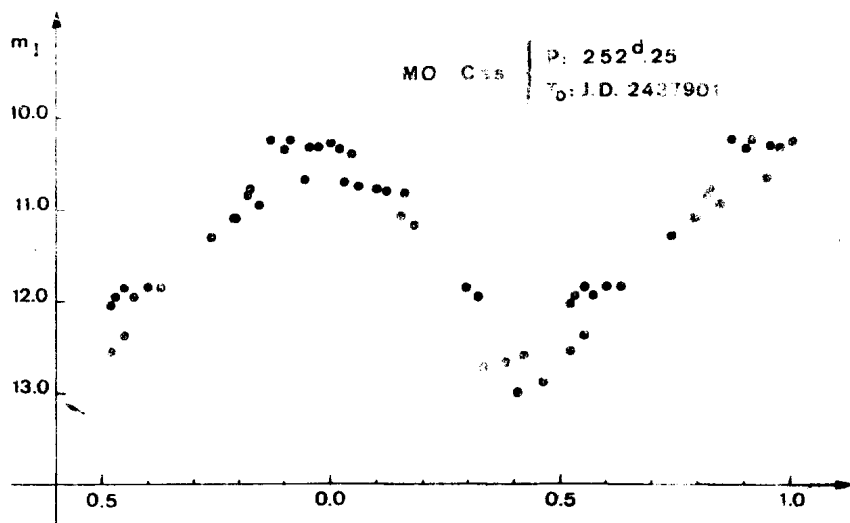
ELEMENTS AND CURVES OF THE TWO INFRARED
VARIABLES MO AND MP CASSIOPEIAE

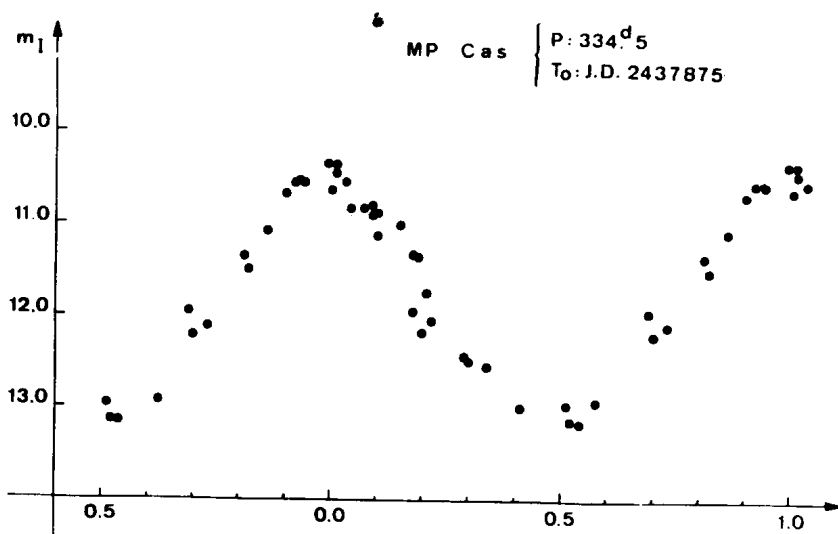
The variable stars MO and MP Cas have been discovered by Rosino (1953) as infrared stars of variable brightness within the nebulosity surrounding the peculiar nebula NGC 7635. In the recent General Catalogue of Variable Stars of Kukarkin et al. (1970) they are both classified as irregulars type I_n .

In the course of a research on the field of NGC 7635 which is carried out at the Astrophysical Observatory of Asiago, we have had the possibility of examining a series of infrared photographs (IN + RG5) taken from 1962 to 1971. Both MO and MP Cas are Mira variables. Their mean infrared light curves are reproduced in Figs. 1 and 2. The following elements have been derived:

MO Cas: $T_0 = 243\ 7901$; $P = 252^d.25$; Infrared amplitude 2.75
between 10.25 and 13.0.

MP Cas: $T_0 = 243\ 7875$; $P = 334^d.5$; Infrared amplitude 2.80
between 10.35 and 13.15.





The light curves are typical of the Mira Variables, with a very moderate dispersion. Rough estimates of objective-prism spectra taken near maximum show that they are not earlier than M4-M5. Both stars are invisible in the blue, even at maximum.

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References: L.ROSINO, 1953, Bologna Pubbl. Vol. VI. No.3.