1986/87 apparition of Mars ⇨

Abstracts

The red planet was extensively observed by 14 observers from the beginning of its visibility till the end of of January. Most of the observers were inexperienced so only few of the finest details were recorded. Group observing and star parties held during the summer helped to compare the nearly simultaneous drawings of different observers. The drawings presented here show that even inexperienced observers can detect faint details on the surface if these details are big enough. Comparing the observations used in this summary the author concludes that Amazonis and Zephyra both were unusually bright while the Araxes and Memnonia were dusky features of the planet. The behaviour of the intensity of selected features and the polar caps will be the topics of the second part of this paper.

⬇ Period analyses of two Mira variables

» * R Cygni has a well covered light curve. We used 10-day averages for the Fourier analyse. The star varies with a period of $432^{d}.9$, its extremes are $6^{m}.25$ and $14^{m}.5$. Amplitude and shape of individual cycles varies. Note the similarity between light curves, periods and amplitudes of R Cygni and R Cassiopeiae. (For R Cas see Meteor 12/1986.)

» * X Ophiuchi has been catalogized as a Mira-type star for a long time, but some authors classifies it as an SRA variable, because of its small amplitude variations. Using 870 Hungarian estimates we have computed 244 ten-day averages. This data set was analyzed by Discrete Fourier Transformation method with a C-64 personal computer. We found a peak at 329.06 day, the range of the variation was $6^{m}.95$ (max.) and $9^{m}.6$ (min.). X Oph is a binary system with a 485.3 year long orbital period. The amplitude of the light-time effect is $0^{d}.11$, smaller than the error in the determination of maxima.