

---

# ABSTRACTS

---

## Meteors

---

- 0 Can we observe meteor streams coming from below the horizon? /p.3/

The author studies the deflection of meteor streams due to the gravitational effect. The angle of deflection depends on the velocity of the meteors relative to the Earth and the altitude of the radiant. The smaller the relative velocity is and the smaller the altitude is, the greater the deflection is. Because of the variation of the altitude of the radiant, the measure of deflection varies, too. This must be taken into account at reduction of photographic observations. At reduction of visual observations the effect must be taken into account in the case of Scorpiids, Alpha Capricornids, Taurids and Geminids. In the case of other streams the effect is smaller than the observing error. The table on p.5. gives for some important streams the date of maximum, the relative velocity, the minimal and maximal deflection and their difference. So, sometimes it can occur, that the "real" radiant is below the horizon, but the "apparent" one is above it.

- 0 Meteor observations in August 1983. /p.12/

This month 103 observers sent to the Hungarian Meteor and Fireball Observing Network /MMTEH/ visual observations of a total number of 4612 meteors. The list of the observed fireballs can be seen on pp. 14-15. There were also photographic, and telescopic work carried out. 4 observers collected micrometeorites and there was an attempt in cooperation with radioamateurs in England and in Netherland to observe meteors by radio on 144 MHz frequency.

---

## Variable Stars

---

- 0 Two low-amplitude mira variables: X Ophiuchi and SS Virginis /p.27/

The Hungarian amateurs made 469 observations on X Oph between 1974 and 1982. Most of these data are shown on the full light curve as ten day means /p.28/. The small dots mean 3-5 observations, medium ones mean 3-5 observations, large ones mean more than 6 observations. The average variation happened between 7.3 and 8.5 magnitude, that suggests that X Oph is an SRa type variable star, rather than a mira one in respect of light variations.

The observed maxima are listed on page 28. the average light curve is on page 29.

We also present the average light curve of SS Virgins, based on 277 light estimates.

---