

ANNUAL REPORT OF THE UNION OBSERVATORY

1938

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26½-inch Visual Refractor. - 2625 visual micrometrical measures of double stars were made during the year; the conditions for observing were very unfavourable during the winter months.

Occultations of Stars by the Moon. - The regular programme of observations of occultations of stars by the Moon was continued unchanged; 86 occultations were observed during the year.

The results of the year's observations are given below; the second column indicates the time by which the Moon has arrived too early at any longitude, and the third column the amount by which the Moon is ahead of its tabular longitude:

		s	"
	1958.09	4.4	2.5
	.52	6.0	3.5
	.58	4.5	2.5
	.82	5.5	2.0
Mean for year	1958.45	4.9	2.8

These results are, as in former reports, deduced from disappearances at the dark limb only. In obtaining the means, each occultation is given a weight equivalent to $\cos(\chi-\rho)$, and no occultation is included for which the value of $\cos(\chi-\rho)$ is less than 0.5.

Franklin-Adams Star Camera. - During the year 791 plates were taken with this instrument.

The distribution of the plates was as follows:-

Variable Star Regions	488 plates
Minor Planet Regions	261 "
Comet Regions	42 "

Comet 1927 vi Gale was searched for during the early part of the year. After its recovery at Harvard on May 1, observations were made here from June 4 to July 29. Comet 1925ii Schwassmann-Wachmann was searched for in March but not found.

16 new minor planets were discovered during the year and elliptic orbits were computed for 5 minor planets. One of the new minor planets 1938 KB, was identified as 855 Newcombia, which had not been observed since 1916.

274 approximate positions and 41 accurately measured positions of minor planets were forwarded to the Astronomisches Rechen-Institut.

Union Observatory Circulars. - Circulars Nos. 98, 99 and 100 have been published and distributed during the year.

Miscellaneous. - The twin 16-inch photographic refractor, made by Sir Howard Grubb, Parsons & Co. for the Leiden Rockefeller Foundation, was sent out from England and erected in October. Dr. A. de Sitter of the Leiden Observatory has been at the Union Observatory throughout the year.

The Union Astronomer attended the meetings of the International Astronomical Union at Stockholm and the meeting of the British Association at Cambridge.

The number of visitors to the observatory during the year was 1492.