## ANNUAL REPORT OF THE UNION OBSERVATORY

## 1936

## Director Mr. H.E. Wood, M.Sc. (Union Astronomer)

**26**½-inch Grubb Visual Refractor. - The number of visual micrometrical measures of double stars made during the year was 4000.

With the eyepiece interferometer 36 measures of suitable double stars were obtained; 27 photographic plates of double stars were taken.

The novae in Aquila and Sagittarius were scrutinised for duplicity; Nova 618.1936 Aquilae was found to be double, distance 0".18, position angle 140° (1936.75)

**Occultations of Stars by the Moon.**-The regular programme of observations of occultations of stars by the Moon has been continued, and 180 occultations were observed during the year.

The results of the year's observations are as follows:-

		S	"
1936.15	6.4	3.5	
.41	6.5	3.6	
.67	5.6	3.1	
.87	5.4	2.9	
.55	6.0	3.3	
	.41 .67	.41 6.5 .67 5.6 .87 5.4	1936.15 6.4 3.5   .41 6.5 3.6   .67 5.6 3.1   .87 5.4 2.9

These results are, as in former reports, deduced from disappearances at the dark limb only. The second column indicated 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. 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 1185 plates were taken with this instrument. The distribution of the plates was as follows:-

Minor planet regions and star maps	397
Variable star regions	697

Comet regions 91

Comet 1936c was found by Mr. C. Jackson when photographing minor planet zones, and was observed here from September 15 to October 19. This comet has been found to have a period of about eight years. Comet 1936a (Peltier) was observed from August 3 to October 19. Comet d'Arrest, 1923 II, was unsuccessfully searched for in August and September.

87 new minor planets were discovered during the year, and elliptic orbits were computed for 9 new minor planets. 768 approximate positions and 86 accurately measured positions of minor planets were forwarded to the Astronomisches Rechen-Institut. A long series, from 1936 March 6 to August 1, of short-exposure photographs of Ceres near meridian passage was made and the measurements published in *A.N.*, No. 6251.

*Union Observatory Circulars.* - Circular No. 95, with 11 Southern Star Maps, was distributed during the year, and Circular No. 96 is in the press.

*Miscellaneous.*\_- Mr. W.N. Worssell retired on superannuation on 1936 November 5 after 27 years' service at the observatory.

Dr. H. van Gent of the Leiden Observatory has continued his photographic observations of variable stars throughout the year.

The number of visitors to the observatory during the year was 1884.