

ANNUAL REPORT OF THE UNION OBSERVATORY

1935

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26½-inch Grubb Visual Refractor. - The number of visual micrometrical measures of double stars made during the year was 1906. With the eyepiece interferometer 23 measures of suitable double stars were obtained; 60 photographic plates of double stars were taken.

Franklin-Adams Star Camera.- During the year 1555 plates were taken with this instrument.

The distribution of the plates was as follows:-

| | |
|------------------------------------|------------|
| Minor planet regions and star maps | 468 plates |
| Variable star regions | 975 " |
| Comet regions | 112 " |

Two new comets were discovered during the year with this instrument.

Comet 1935a was found by Mr. E.L. Johnson when photographing map regions in 52° South Declination. The comet was observed here from January 7 to February 24, when it passed out of reach into high northerly declinations.

Comet 1935b was found by Mr. C. Jackson when photographing minor planet zones and was observed from June 3 to July 19. This comet has an unusually large perihelion distance and was at first thought to be a minor planet.

Comet 1929 II was unsuccessfully searched for on many occasions between May and September.

Comet 1935d (van Biesbroeck) was observed from July 3 to October 29. This comet was discovered by van Biesbroeck on August 21 and, after an ephemeris had been computed, a number of images were found on earlier Franklin-Adams plates.

109 new minor planets were discovered during the year, and elliptic orbits have been computed for 8 new minor planets. 748 approximate positions and 142 accurately measured positions of minor planets were forwarded to the Astronomisches Rechen-Institut.

Occultations of stars by the Moon. - The programme of the last few years has been maintained without alteration. 148 occultations were observed during the year. The results of the year's occultations are as follows : -

| | s | " |
|---------------|-----|-----|
| 1935.11 | 5.2 | 2.8 |
| .37 | 7.5 | 4.1 |
| .63 | 6.9 | 5.8 |
| .80 | 5.1 | 2.8 |
| mean for year | .55 | 6.6 |
| | | 5.6 |

These results are, as in former reports, from disappearances at the dark limb only. 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.

Union Observatory Circulars. - Circulars Nos. 95 and 94 were distributed during the year. Nineteen Southern Star Maps were issued with these circulars. Of the 556 maps required to cover the sky south of -19° , 526 maps have already been issued, leaving only 30 maps to complete the series.

Miscellaneous. - Dr. H. van Gent of the Leiden Observatory has continued his photographic observations of variable stars throughout the year and has also taken some plates of double stars with the 26½-inch refractor.

Dr. van den Bos was on leave from May 18 to December 21. He attended the I.A.U. meeting at Paris in July and visited the observatories at Leiden, Paris, Meudon, Potsdam, Neubabelsberg, Bergedorf, Harvard, Yerkes, Mount Wilson, Lick, Tokio and Lembang.

The number of visitors to the observatory during the year was 1681.