

**ANNUAL REPORT OF THE UNION OBSERVATORY,  
JOHANNESBURG**

**1949**

*(Union Astronomer, Dr. W.H. van den Bos)*

Some glass disks for large reflectors are being cast at present, and it is hoped to take advantage of this fact in order to acquire a disk for a 74-inch reflector.

With the 26-inch refractor, 952 micrometer measures of double stars were obtained and the interferometer was used on ten nights. Finsen has constructed a new interferometer.

Plates taken with the Franklin-Adams telescope were

Minor planets	267 plates
Comets	82 "
Variable stars	57 "
Miscellaneous	52 "
Total	458 plates

Comets 1949 a and d were discovered by Johnson.

With the 9-inch refractor, 110 occultations have been observed. Counts of sunspots were made on 332 days with a 3-inch refractor. During the year 883 visitors were admitted on 42 nights.

Two Taylor-Hobson-Cooke lenses of 3.6 inch aperture and 20 inches focal length were acquired.

The first two quartz-crystal clocks were installed and all time signals emitted from the Observatory are now controlled by a quartz clock. Synchronous motors have been substituted for the mechanical drives of the 26½-inch and Franklin-Adams telescopes.

Circular No. 107 has been printed and distributed. Two papers, containing discussions of South African earthquakes and of the Witwatersrand earth tremors, were read by Finsen at the geophysical conference held at the Witwatersrand University.

The Astronomer Royal and astronomers Henize and King from Bloemfontein visited the Observatory.

Miss S.S. Bosman retired on pension in September, after 30 years service on the staff. Miss B.M.A. Bee was appointed Librarian in April and resigned in October. Mr. G.W. Webster was appointed Assistant Physicist in December.