

# The SAAO and its Museum



The South African Astronomical Observatory (SAAO) is part of the National Research Foundation, which falls under the national Department of Science and Technology. When founded in 1972 it combined two older observatories, the **Royal Observatory** in Cape Town and the **Republic Observatory** in Johannesburg (previously known as the Union Observatory). Even before the formation of the SAAO, the need had been felt for a new observatory away from city lights. Various sites had been investigated by the Royal and Republic Observatories and Sutherland, on the boundary of the summer and winter rainfall regions, was chosen so that both the summer and winter skies could be studied.

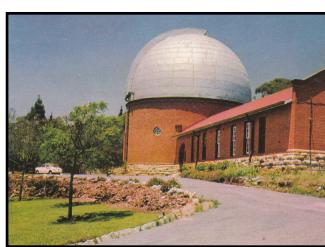
Left: The modern telescopes of the SAAO are located in Sutherland, Northern Cape. The Southern Africa Large Telescope (SALT) is in the foreground.

## Royal Observatory



The Royal Observatory, Cape of Good Hope, existed from 1820 to 1972. Its most famous director was **Sir David Gill**, who was a pioneer of photographic astronomy. Because of its connection with the Royal Navy, its work was largely concerned with finding the positions and brightnesses of stars for navigational purposes. It worked closely with the Royal Greenwich Observatory in England. Today it is the headquarters of the SAAO and of SALT. Behind the H-shaped Main Building completed in 1828 is the Technical Building (1987) where new instruments are built.

## Republic Observatory



The Republic Observatory, Johannesburg, was founded as the Government Meteorological Observatory of the Transvaal in 1903 with **Robert TA Innes** as first director. It was officially opened in 1905. It became the Union Observatory in 1911 and the Republic Observatory in 1961.

The work of the Observatory mostly concerned double stars and minor planets. Its most famous discovery was of the nearest known star, Proxima Centauri, by Innes in 1915.



From 1954 onwards the Republic Observatory operated an observing station at Broederstroom near Hartebeestpoort Dam, away from the city lights of Johannesburg (Now owned by Tswane University of Technology [TUT]).

## The Museum



The **SAAO Astronomical Museum** was set up to preserve some of the instruments and equipment used since 1820 at the Royal and Republic Observatories in the 19<sup>th</sup> century laboratory attached to the McClean telescope dome. Noteworthy items are the portable transit instrument of 1820 used by Fearon Fallows, the first of His Majesty's Astronomers, a metal telescope mirror made by Sir William Herschel in 1810, a signal pistol used at the Observatory for communicating time information to ships in the docks, the lenses used for the first astronomical photography by David Gill, a transit telescope borrowed from the Imperial Russian Observatory in 1906 and a photoelectric photometer used by Alan WJ Cousins to measure with unprecedented accuracy the brightnesses of stars. The McClean darkroom has been kept much as it was when last used in the early 1980s. A photographic exhibition from the Observatory's 175<sup>th</sup> anniversary is also on display.