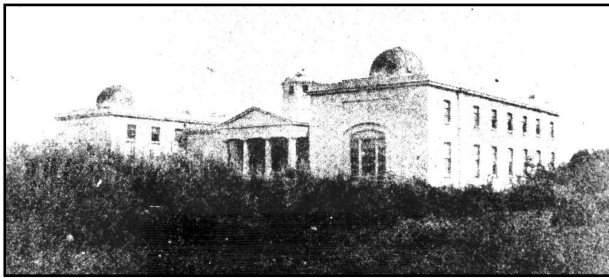


## THE SOUTH AFRICAN ASTRONOMICAL OBSERVATORY

The South African Astronomical Observatory was formed in 1972 to continue the work of the Royal Observatory, Cape of Good Hope, and the Republic Observatory, Johannesburg. This heritage makes it the oldest scientific institution in Africa.

## THE ROYAL OBSERVATORY

The Royal Observatory, was founded during the reign of King George IV in 1820 for the improvement of navigation at sea by getting improved positions for the stars and to provide a time service for ships visiting Table Bay.

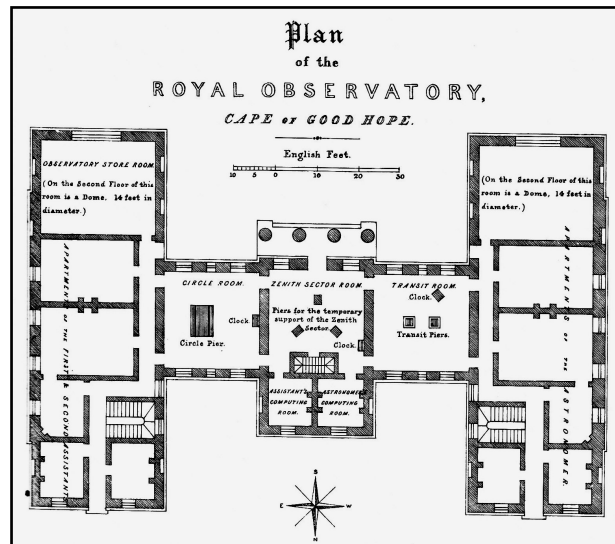


## MAIN BUILDING

The Main Building of the Observatory was finished in 1828. The photograph (above), by Charles Piazza Smyth, is the oldest of any observatory in the world and is also one of the first photographs taken in South Africa, dating from about 1842. The domes were removed in the 1880s.



(Left) How the Main Building used to open up to allow the telescopes to view the sky along the meridian or North-South line.



(Above) Plan of the Observatory made around 1842. The west wing (right) was the residence of Her Majesty's Astronomer and the east wing was that of his two assistants. The two main instruments for measuring star positions were in the rooms to the left and right of the centre.



The entrance hall of the Main Building, now part of the SAAO Library.

## THE OLDEST DOME



The oldest dome on site (1848), runs on cannon-ball bearings. It is used to house a photoheliograph (Sun camera) dating from 1878.

## GILL REVERSIBLE TRANSIT CIRCLE



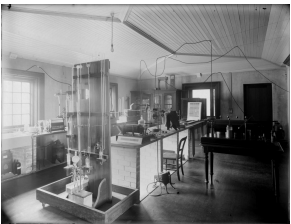
The Reversible Transit Circle (1905) designed by Sir David Gill, 5<sup>th</sup> HM Astronomer, was the most accurate instrument of the time for star positions and was copied by several other observatories.



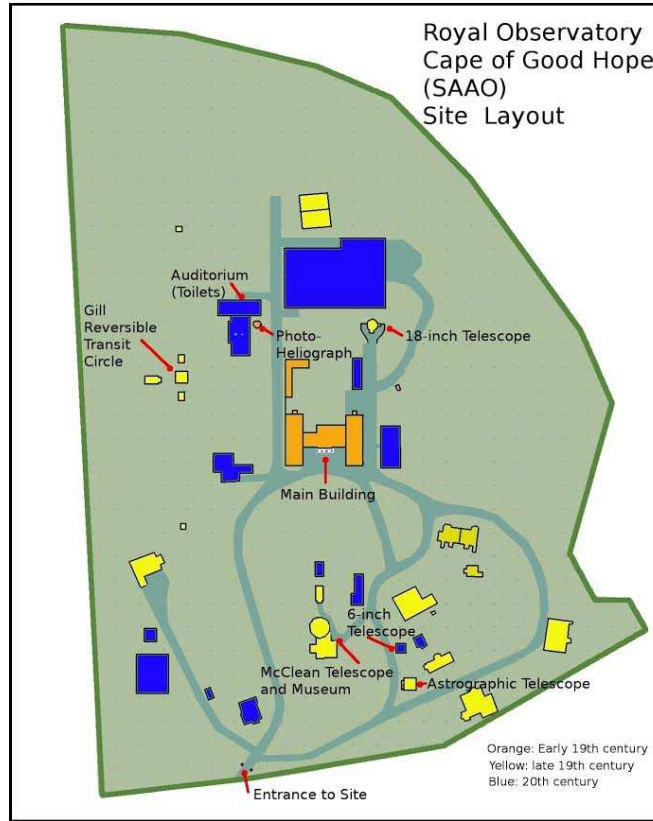
### THE MCCLEAN BUILDING

The McClean Observatory of 1896 (above) is named after its donor, Frank McClean, a wealthy amateur astronomer. The building was designed by the famous architect, Herbert Baker. This telescope was used at first for spectroscopy and later for determining the distances of stars.

Its 24-inch (61cm) telescope was once the largest refractor in the Southern hemisphere. Its accessories included the latest in Victorian technology, such as a hydraulically-operated rising floor. The building also contains a darkroom and a laboratory.



The astrophysical laboratory of the McClean building as it looked about 1900 (above, left) and as it looks today (above, right), in use as the SAAO Museum. Originally it was set up for spectroscopy of terrestrial materials in order to compare them with celestial ones.



### VISITING

The Observatory can usually be visited on the 2<sup>nd</sup> and 4<sup>th</sup> Saturday of every month at 8pm.

Please phone 021 447 0025 for enquiries or email [enquiries@saa0.ac.za](mailto:enquiries@saa0.ac.za). Website: [www.saa0.ac.za](http://www.saa0.ac.za)

The modern observatory in Sutherland offers tours and night-time visits. Please phone 023 571 2435 for details.



## THE ROYAL OBSERVATORY, CAPE OF GOOD HOPE



## HEADQUARTERS OF THE SOUTH AFRICAN ASTRONOMICAL OBSERVATORY