

# Stellenbosch University Solar Resource and Weather Station

## STERG Facilities

A solar resource measurement and weather station is installed at Stellenbosch University, located at 33°55' S, 18°51' E and elevation: 119 m (Fig. 1). The system comprises a set of high quality radiometry and meteorological instruments complete with a website that allows free public downloads at <http://weather.sun.ac.za/>.

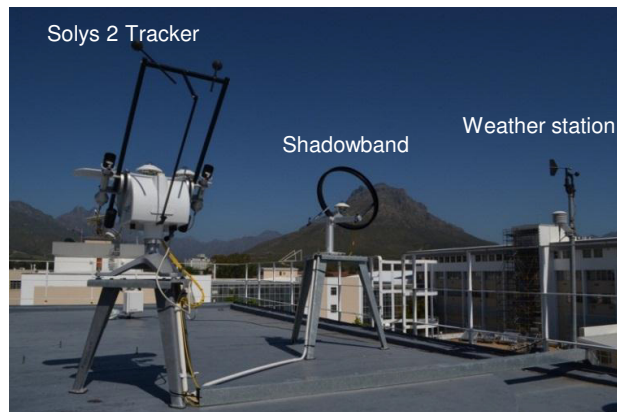


Fig. 1 The collective solar resource and weather station system.

### The installation includes a Kipp and Zonen (K&Z) Model Solys 2 dual-axis sun tracker which houses:

- two K&Z CHP1 pyrhemeters for direct normal irradiance (DNI) measurements
- a shaded K&Z CMP11 pyranometer for diffuse horizontal irradiance (DHI) measurements
- an un-shaded K&Z CMP11 pyranometer for global horizontal irradiance (GHI) measurements
- a UVS-AB-T radiometer for UVA (315-400nm) and UVB (280-315nm) measurements

A K&Z CM 121 shadow ring with CMP6 Pyranometer is installed for comparable DHI measurements.

### The weather station houses:

- a Campbell Scientific CS215 probe with 41303-5A radiation shield for temperature and relative humidity measurements,
- RM Young wind sentry, model 03001 for wind speed and direction measurements, and
- RM Young sensor, model 61205V for barometric pressure measurements

There are also additional measurements at SU, for more information please contact us.

Also see [www.sauran.net](http://www.sauran.net) for more information on the Southern African University Radiometric Network.