The South African Coastal Temperature Network (SACTN)

The aim of the South African Coastal Temperature Network (SACTN) is to design, coordinate, develop and implement a publicly accessible database of all long-term *in situ* seawater temperature records available in the coastal region along the South African nearshore. This database receives data from diverse sources, including the South African Environmental Observation Network (SAEON), the Department of Environmental Affairs (DEA), the Department of Agriculture, Forestry and Fisheries (DAFF), the South African Weather Service (SAWS), the KwaZulu-Natal Sharks Board (KZNSB), Ezemvelo KZN Wildlife (EKZNW) and the University of the Western Cape (UWC).

Objectives are to:

- Plan the technical and scientific framework underpinning the SACTN.
- Manage the timeous and continuous collection of new data from donor organisations, and appending it to the SACTN database.
- Undertake data error corrections and provide statistical summaries.
- Manage the meta-data associated with the diverse data records.
- Coordinate the technical and computing infrastructure necessary for data assimilation, processing and dissemination.
- Purchase new Underwater Temperature Recorders (UTRs) and install them in areas where gaps exist in the current SACTN record.
- Provide a platform to support ongoing scientific enquiry into the spatial and long-term temporal variation of the marine thermal environment in the South African nearshore.
- Provide the best record of nearshore seawater temperatures to coastal, shallow water marine scientists to support their research activities.
- Advise National Government re consequences for climate change, marine resource management.

Currently the SACTN comprises 127 temperature records along an approximately 2,700 km of coastline, and more recorders are being installed annually.