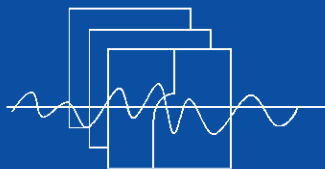


## Loaded: Roman Rock weather data



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*SADCO is sponsored by ...*

Department of Environmental Affairs  
& Tourism  
SA Navy  
CSIR  
NRF (SA Universities)  
Namibian Ministry for Fisheries & Marine  
Resources

Roman Rock is a small rocky outcrop off Simon's Town on the western side of False Bay (Fig. 1). The Rock is largely used to provide a base for the lighthouse that assists vessels entering or leaving Simon's Town naval dockyard or plying the western side of False Bay.

IMT (Institute for Maritime Technology) has been operating an automatic weather station (AWS) on the Rock since April 2002, with power from the lighthouse.

Carl Wainman and Sanette Gildenhuys (IMT) have kindly provided SADCO with the data collected by the AWS on Roman Rock up to 2006, and the data has been loaded. The parameters recorded by the instrument are:

- ☐ Wind speed
- ☐ Wind direction
- ☐ Air temperature
- ☐ Atmospheric pressure
- ☐ Relative humidity

An example of the data for November 2005 is shown in Fig. 2.

In the Newsletter of February this year reference was made to some of the data sets available in the vicinity of False Bay. Since then, a huge set of AWS data was received from the South African Weather Service (specifically Tracey Gill) (see June Newsletter) and loaded. In the False Bay area, Strand was one of these stations.

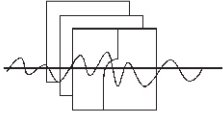
Other sites where weather data has been (is being) collected are (not available to SADCO yet):

- ☐ Hout Bay
- ☐ Simon's Town
- ☐ Cape Point
- ☐ Steenbras

A full list of weather station data presently held by SADCO is given in Table I.

The data in False Bay but also around the coast represents an extensive data set that is now available to SADO users. The various data providers (SAWS, MCM, DEAT, CSIR and IMT) are thanked for their support.





*Table 1: Automatic weather station (AWS) deployments in SADC*

<b>Station</b>	<b>Data Provider</b>	<b>Start</b>	<b>End</b>
Pelican Point	MCM	20-Sep-89	13-Oct-89
Alexander Bay	SAWS	31-Dec-95	31-Dec-03
Port Nolloth	MCM	04-Dec-01	03-Dec-02
Kleinzee	MCM	19-Nov-93	20-Jan-94
Hondeklip Bay	MCM	13-Jul-94	22-Mar-94
Koingnaas	SAWS	31-Dec-95	31-Dec-05
Garies-Groenrivier	SAWS	31-May-99	31-Dec-05
Lambert's Bay Nortier	SAWS	31-Dec-95	31-Dec-05
Cape Columbine	MCM	24-Mar-94	01-Jan-98
Stompneus	MCM	25-Nov-83	06-Mar-84
Porterville	SAWS	31-Dec-95	31-Dec-05
Geelbek	SAWS	31-Dec-97	31-Dec-05
Malmesbury	SAWS	31-Dec-95	31-Dec-05
Nuwedam	MCM	14-Aug-85	19-Feb-86
Olifantsbos	MCM	03-Oct-85	12-Mar-92
Roman Rock	SAN/IMT	31-Dec-02	31-May-06
Cape Town Airport	SAWS	31-Dec-95	31-Dec-05
Seal Island	CSIR	13-Jan-87	14-Apr-88
Strand	SAWS	30-Apr-96	31-Dec-05
Paarl	SAWS	31-Dec-95	31-Dec-05
Worcester	SAWS	31-Oct-98	31-Dec-05
Hermanus	SAWS	31-Aug-96	31-Dec-05
Danger Point	MCM	01-Jan-97	04-Dec-02
Tygerhoek	SAWS	31-Dec-95	31-Dec-05
Struisbaai	SAWS	31-May-96	31-Dec-05
Stilbaai	SAWS	31-Dec-95	31-Dec-05
George	SAWS	31-Dec-95	31-Dec-05
Knysna	SAWS	30-Jun-96	31-Dec-05
Plettenberg Bay	SAWS	31-Dec-95	31-Dec-05
Tsitsikamma	SAWS	31-Dec-95	31-Dec-05
Patensie	SAWS	31-Dec-95	31-Dec-05
St Francis Bay	MCM	13-Aug-94	29-Oct-94
Uitenhage	SAWS	31-Dec-02	31-Dec-05
Port Elizabeth Wo	SAWS	31-Dec-95	31-Dec-05
Port Alfred - Airport	SAWS	22-Nov-01	31-Dec-05
East London	SAWS	31-Jan-97	31-Dec-05
Port Edward	SAWS	31-Dec-95	31-Dec-05
Margate	SAWS	31-Dec-95	31-Dec-05
Durban	SAWS	31-Dec-95	31-Dec-05
Mt Edgecombe	SAWS	31-Dec-95	31-Dec-05
Virginia	SAWS	31-Dec-95	31-Dec-05
Mtunzini	SAWS	31-Dec-95	31-Dec-04
Richards Bay Airport	SAWS	31-May-02	31-Dec-05
Charter's Creek	SAWS	31-Dec-97	31-Dec-05
Mbazwana Airfield	SAWS	31-Jul-97	31-Dec-05

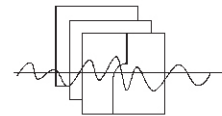


Fig 1. Chart of False Bay with the automatic weather station (AWS) data around the Bay

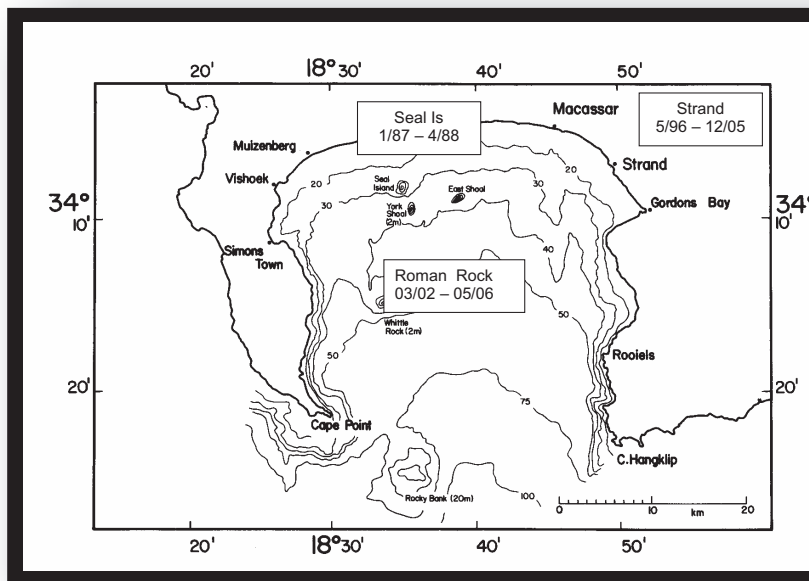
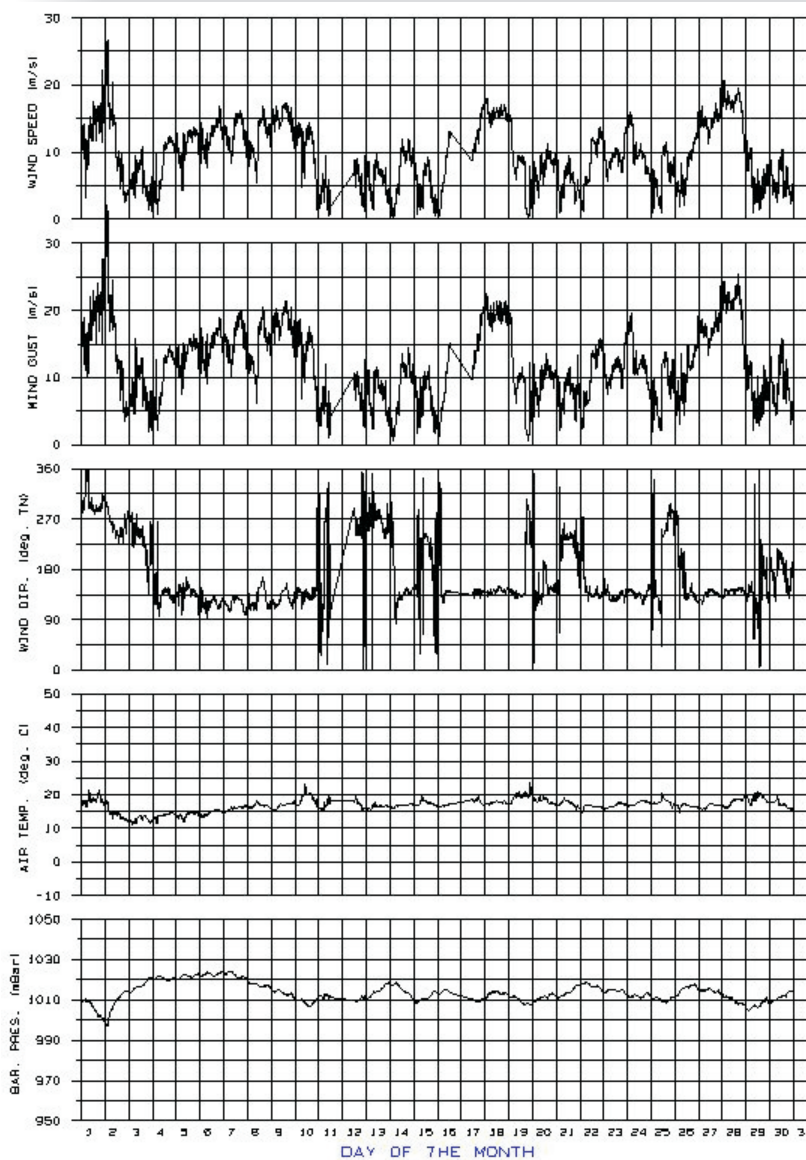
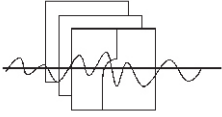


Fig 2. Example of AWS data time series at Roman Rock for November 2005. Data gaps (e.g. on 11<sup>th</sup> and 17<sup>th</sup>) were caused by power interruptions.





# Status update on AfrOBIS

**Overall status 31 Sept 2006** (more recent activities are expanded in the text below)

**Data loaded:**

▪ Number of records	328 208
▪ Number of data sets	12
▪ Number of species	15 370
▪ Number of organisations contributing	6

**Plans to obtain more complete coverage of regional species:**

- First seaweed data in AfrOBIS being loaded from Herbarium, Cape Town. This set contains 80% of estimated 1000 species off southern Africa.

**Largest remaining activity:**

- Loading data received from MCM

**Presentations and promotion**

- 13 presentations given at 8 workshops/symposia
- >100 individual e-mails to data providers in Africa, describing OBIS.
- 9 Articles in newsletters
- Helped train 20 data managers from Africa (through ODINAfrica).

## 1. Project duration

The USA-funded activities of AfrOBIS are drawing to a close, when the seed funding to establish AfrOBIS and load data comes to an end at the end of 2006. Activities will continue after this data on other funding.

## 2. Quality control

AfrOBIS relies on data providers to ensure the quality of the submitted data. All data submitted to AfrOBIS is further checked for correctness of date and time, and possible overland location of the observation. ETOPO2\* is used for this purpose, and data failing this check is removed from the set and the data provider informed. A plot is also made of the new data set so that a final, visual inspection can be performed.

## 3. Data handling

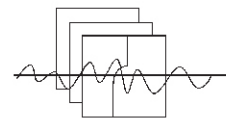
The basic strategy remains to get all possible data located and loaded into AfrOBIS before 31 December 2006.

The data scouting has increased quite dramatically compared to the previous quarters. This is largely a cumulative outcome of efforts during the past year.

The number of records scouted in this quarter **exceeds 1.6 million**, which constitutes a phenomenal increase in the verified available amount of data.

Table 1 is a summary of the data holdings that have been identified during the continuous scouting process, and the data submitted to and loaded into AfrOBIS. During the past 3 months,

- The number of demersal fish records that were supplied by **Laurent Drapeau** amounted to 98 083. These have been loaded.
- 113 748 records of demersal fish were received from **Rob Cooper** (MCM), and the loading process is under way.
- Line fish data has been obtained from **Chris Wilke**, and the data will cover the period 1985 – 2005. Marileen de Wet has extracted the data from the MCM data base, and the loading is planned for October/November.
- The data submitted by **Jan van der Westhuysen** (pelagic fish) amounted to about 13 000 records. This is being loaded.
- The **East London Museum** (Mary Bursey) will digitise and provide its data.
- Data digitisation and submission at **Iziko Museum**, Cape Town is continuing until the end of November.
- Data digitisation and submission is continuing at the **Bolus Herbarium**. The first sets (brown and green seaweeds) have been delivered and loaded (see Figs. 3 and 4). The digitising is now focussed on the red algae.
- 4519 records have been submitted by Madagascar, but location data is needed before



- loading.
- 7 672 records have been submitted by Malika Bel Hassen, and this has been loaded (see Fig. 5).

The status of data flow is indicated in Table 2.

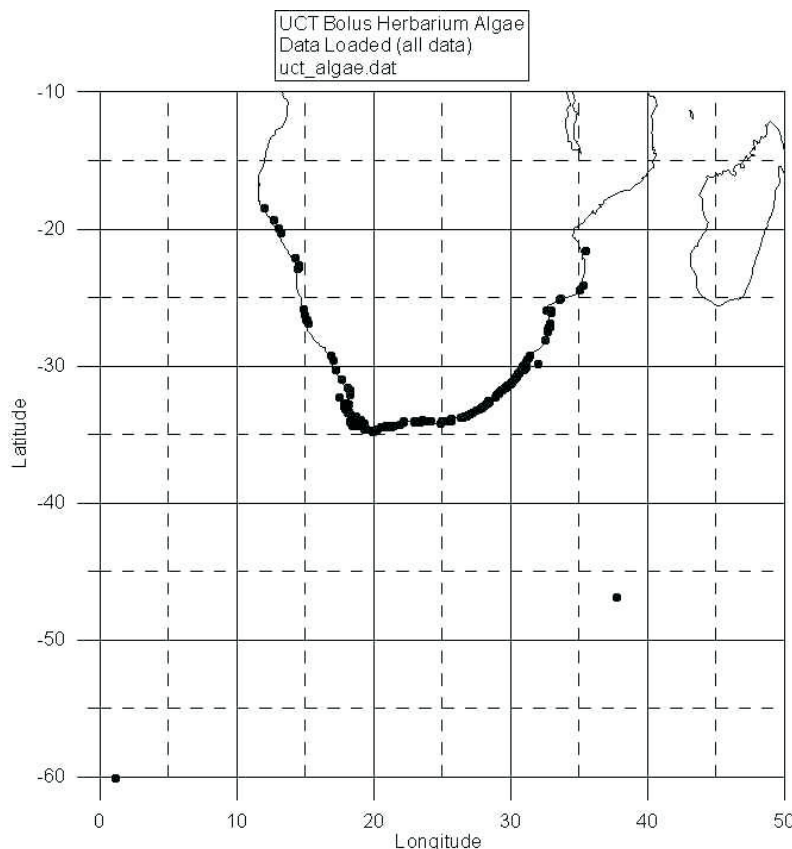
#### 4. Liaison visit

- A visit was made by Marten Grundlingh and Ursula von St Ange to India from 20 – 26 September. The running costs involved with this visit were kindly covered by the South African **Department of Science and Technology** under the auspices of the Indian-Brazil-South African trilateral partnership. The first port of call was the National Chemical Laboratory of the CSIR in Pune, the “home” of IndOBIS, the Indian counterpart of AfrOBIS. Here, Vishwas Chavan hosted our visit, and showed us the very modern facilities for handling data. There was ample opportunity to interact with the members of the IndOBIS team, and give presentations on the AfrOBIS activities. Possible opportunities for future interaction (in 2007 and beyond) were discussed.
- The visit to India was concluded with the attendance of a workshop on *Biogeographic*

*Information System for the Indian Ocean*, held at the National Institute for Oceanography Regional Centre in Kochi. This workshop focussed on introducing scientists to the need for management of biogeographic data, and (especially) to identify and encourage possible data providers. Within the Indian context there seems to be considerable amount of undigitised data. Between Vishwas and Dr Achuthankutty, Officer-in-charge of the regional centre, a group of about 30 people participated in a discussion session to address the issues of providing and digitising data in India. A task group was selected to implement the findings.

- As part of the IBSA partnership, the DST funding will also cover a visit to Brazil in November.
- It is foreseen that a combined proposal between the three countries will be constructed and submitted for international funding, focussed on improving the amount of digitised data in India (and the Asian subregion), Africa and South America. The possibility of hosting a symposium between these “southern” countries was also seen as a good way to mobilise the marine biogeographic fraternity.

Fig. 3. Plot of the positions of the seaweed data set received from the Bolus Herbarium, Cape Town



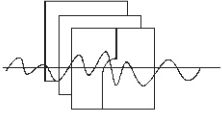
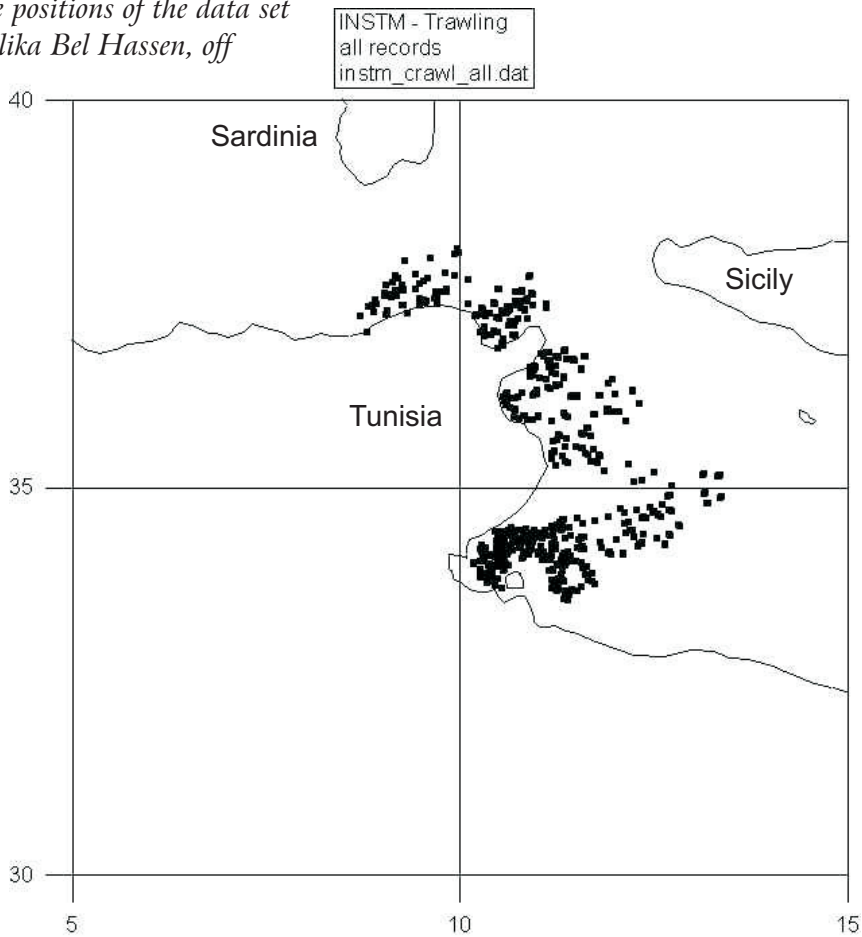


Fig. 4. Plot of the positions of the seaweed data extracted from iOBIS. The data referred to in Fig 1 is circled (excluding some deep-sea records).



Fig. 5. Plot of the positions of the data set received from Malika Bel Hassen, off Tunisia



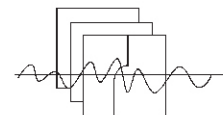


Table 2: Status of data submission to AfrOBIS, 30 September 2006

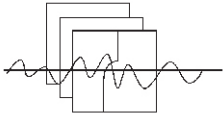
Source	Type	Contact person	Records	Digitised	Years	Records submitted	Records loaded
SAIAB	Fish	Coetzer	56 390	Yes	1858 - 2005	56 390	56 390
Natal Museum	Molluscs	Herbert	63 610	Partially	1894 - 2005	63 610	27 345
Iziko Museum, Cape Town	Fish	Robertson	16 007	Yes	1829 - 2005	16 007	15 048
	Molluscs	Robertson	22 371	Partially		4 755	4 755
	Mammals	Ohland	1 399	Yes	1880– 1998	1 399	1 184
	Invertebrates	Robertson	Est 4 000	Partially		Nil	
	Cephalopods	Robertson	4 452	Partially		Nil	
	Sharks	Compagno	14 761	Yes	1817 - 2003	14 761	14 761
	Crustaceans	Robertson	19 111	Partially	1898 -	5 644	5 101
	Cnidaria	Robertson	Est 4 000	Partially		Nil	
Marine and Coastal Management (MCM)	Copepods	Verheije	91 705	Yes	1988 - 2000	91 705	91 705
	Seals	Kirkland	2 440	Yes	1874 - 2001	2 442	2 440
	Pelagic fish	vdWesth'n	13 000	Yes	1984 - 2005	13 000	Not yet
	Demersal fish	Cooper	113 748	Yes	1983 - 2006	113 748	Not yet
	Line fish	Wilke	Est 1 500 000	Yes	1985 -	91 200	Not yet
	Demersal fish	Drapeau	98 083	Yes	1985 - 2001	98 083	98 083
E London Museum	Molluscs	Bursej	16 000	No		Nil	
Bolus Herbarium,	Seaweeds	Bolton	27 000	Underway	1870 -	3 769	3 769
Madagascar	Fish	Bemiasa	893	Partially	2001	893	
	Mammals		936	Partially	2001	936	
	Invertebrates		310	Partially	2001	310	
	Corals		2380	Partially	2001	2380	
Tunisia	General	Bel Hassen	7672	Yes	1999-2005	7672	7 672
<b>TOTAL</b>			<b>2 126 268</b>			<b>588 704</b>	<b>328 208</b>

#### Acronyms

DST	Department of Science and Technology
ETOPO2	Data base of 2-minute bottom depths
IBSA	Indian-Brazil-South African Partnership
MCM	Marine and Coastal Management (branch of DEAT)
NCL	National Chemical laboratory (of the Indian CSIR)
SAIAB	South African Institute for Aquatic Biodiversity



Ursula von St Ange (left), Dr Swapna Prahbu and Marten Grundlingh at the conference in Kochi (photo: S. Prabhu)



## Progress with SADC0 activities for 2006/7

With approximately 6 months of the financial year past, it is appropriate that a brief review of SADC0's progress on the planned development activities for 2006/7 is provided. It seems that most activities are on track. The largest single Task is the loading of the WOD data, and the preparation thereof.

Those tasks that are regular (reporting, management, Newsletters, requests, etc) are not listed as part of the "development activities" below.

Task	Progress
Finalise MoU	The Memorandum of Understanding has been signed by all organisations, and is presently in Pretoria for the last signatures
Marine load programme	Some of the checks have been constructed, but we are waiting to obtain insight into the methods used by NODC/WDC (USA) for finalisation
Marine database cleanup	The cleanup of the database can only be started once the checks have been finalised (see "marine load programme")
Loading data from the World Ocean Database (WOD2005)	The data was received in September. The work will now be scheduled to start after the marine load programme is finalised.
Load XBT data from UCT	Data has been received, the loading is underway (awaiting more metadata)
Load CTD data from Japan	Data loaded
Load CTD data NATMIRC	Data loaded
Load CTD data from AWI	Data received, but loading has not started yet
Load CTD data from UCT	Data requested
Load CTD data from MCM	Data requested, but still being verified within MCM
Load AWS data from MCM	Data requested
Load AWS data from SAWS	Data loaded
Load AWS data from Roman Rock (IMT)	Data loaded
Argo float data	Data requested
Load chemical data CSIR Dbn	Data loaded.
Load ADCP data from ACEP	Data loaded
Biogeographic data from CSIR Dbn	Data needs further verification, and will probably not be loaded in this year