



**Recognised World
Meteorological Organization
(WMO)
Regional Training Centre:
RTC: Pretoria**

PURPOSE OF THIS PRESENTATION

- **To give a background of meteorological training in the South African Weather Service**
- **To give a background of the current courses SAWS are involved in through the Regional Training Centre**

History of the Training centre in SAWS

- Involved from 1972 with the University of Pretoria to train meteorologists.
- Being training Meteorological Technicians (Weather Observer) since early 1950's in one way or another
- Registered by TETA SETA since 2007
- Recognized Centre of Excellence (CoE) in satellite training since 2010
- Recognized as a World Meteorological Organization (WMO) Regional Training Centre (RTC) since May 2011.

Current Training Activities

- Meteorological Technician: The Weather Observers are trained in the RTC – accredited by SETA TETA.
- Meteorologist training at University of Pretoria: BSc Meteorology – assist on the moment with the Dynamical courses.
- Bridging course: (1 year training of ordinary BSc in undergraduate meteorological courses)
Handled with the BSc group
- 4th Year (BSc Hons) course. Concentrating on Dynamical and Physical Meteorology. SAWS is fully involved in the training of certain areas like dynamical and numerical meteorology in collaboration with UP

Current Training Activities

- SAWS has relationship with the other Universities to train Climatologists and upper air scientists.
- Post graduate Certificate in Forecasting (by the RTC) with Continuous Education at the University of Pretoria
- Training and evaluation of aviation personnel in the aviation competencies stipulated by the WMO.
- All training activities are open to foreigners if entry requirements are met.
- Have the largest Meteorological collection in Africa in the library

Dedicated short course Activities

- Yearly workshops:
 - workshop on the aviation competencies
 - workshop of MSG interpretation
 - SWFDP workshop
 - new: Marine Satellite interpretation workshop
- Aviation competencies – Moodle site.
 - offer to neighbouring countries to register aviation forecasters and Meteorological Technicians for the course.
- All courses are open to foreigners but the members must apply early and there are entry requirements to be met.

Future

- The South African Weather Service is also looking at the training of air quality scientists.
- Climate adaptation and mitigation is becoming critical - so more agro-meteorologists and hydro-meteorologists needs to be trained for the future.
- Other sciences like climate and health applications needs to be investigated

Distance learning

Infrastructure:

- All training computers are linked to Internet and Skype
- Molalatladi (a computer laboratory) have a conference telephone line
- There are a limit to the Internet speed especially in the afternoon
- Have a video conferencing system for our regional offices

Current Activities

- Trained material developed on Moodle – This is also available for the region
- Setting up a web page for aviation meteorological training - linking to a Moodle site
- Satrep online for Southern Africa - this is a monthly weather discussion for the region using computers. (open to the whole world)

TQMS

- The South African Weather Service is Total Quality Management 9001/2008 compliant
- We have regular internal system and compliance audits.
- Results are verified by TETA SETA
- Most lecturers are trained auditors

Key Strategies

- The first priority is to increase the scientific capacity and knowledge of SAWS and the Region. This is done through formal and distance learning
- To foster collaborative relationship and planning of actions with other Training Institutions and RTC's
- To give impetus to the Aviation industry: For example the South African Air Force training
- In the process of developing a new strategy taken into account the new responsibilities, the future role of RTC's and GFCS.

MOU's or linkages with Other Universities

- **Climatology:**
 - University of Witwatersrand
 - University of Zululand
 - University of Cape Town
 - University of Fort Hare
- **Hydrology and Ozone studies:**
 - University of KwaZulu Natal
- **Agro meteorology**
 - University of Free State
- **Oceanography**
 - University of Cape Town

International Contacts

- Is an accredited CoE in satellite training
 - Opening on 6 December 2010 with Meteosat Second Generation (MSG) course
 - Yearly MSG course
 - Part of the ASMET development (African Satellite Meteorological Education and Training – development of computer aided learning material). The current module link to safe skies for Africa project and aviation competencies – Clear air Turbulence.
 - Part of the African Monitoring for the Environment for sustainable Development (AMESD) training initiative.
- Linked to the Severe Weather Demonstration project (SWFDP) training
- COMET (part of UCAR and NWS) for web based meteorological training
- WMO
- EUMETSAT (part of the conceptual models project for the Southern Hemisphere)
- MASA

International MOU's on training issues

- United Kingdom Meteorological Office
(had a joint aviation competency workshop in 2012)
- Bureau of Meteorology (Australia)
(part of the distance learning courses and initiatives)
- Republic of Iran