

South African Weather Service

Description of Public Weather and Warning Services

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18 November 2013

Outline

- Forecasting Descriptions and Processes
- Severe Weather Warning System
- Severe Weather of 28-13 August 2013
- Challenges with Disaster Management
- Challenges with Media
- Feedback from Disaster Management
- Feedback from the Public

The authoritative voice for weather and climate warnings in South Africa



Forecasting-Description and Functions

Broadly, Forecasting activities are stratified into:

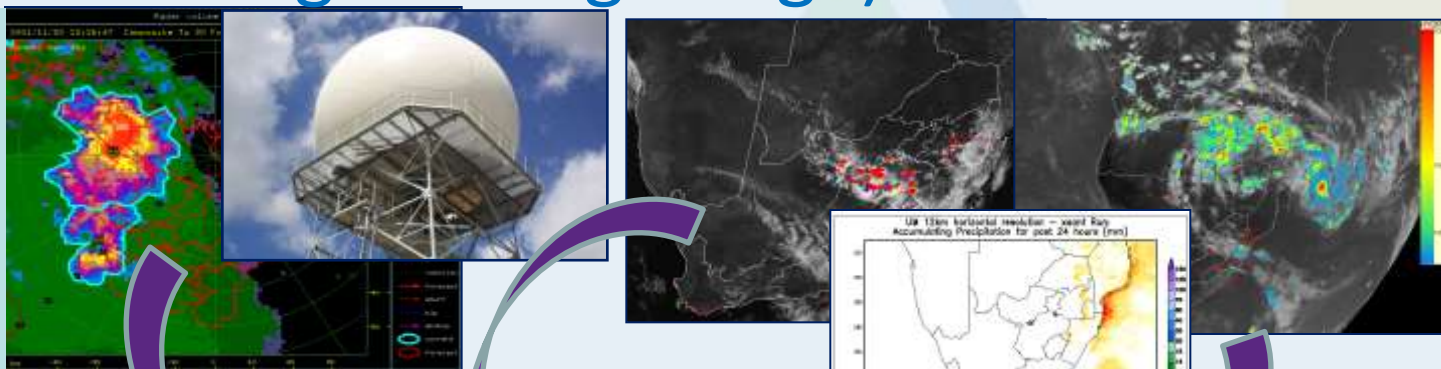
- **Aviation**
- **Marine**
- **and General** activities
- **General Forecasting: Primary Function is the provision of 24hrs Weather Forecast for **PUBLIC GOOD** as well as for **COMMERCIAL** Purposes as per SAWS Act (8 of 2001).**

Forecasting process for:- (Nowcasting, medium range + Long Range)

**NEAR
REAL-TIME
INPUTS**

**FORECASTER :
Risk assessment
and product
creation**

**OUTPUTS
Products/
services to
clients**



FORECASTER

**COMMERCIAL
CLIENTS**



AVIATION



PUBLIC



INDUSTRY

**African
Service
Organisation**



**Assorted Media:
RADIO, TV, PRINT,
Social Media...**

**Disaster
Management**

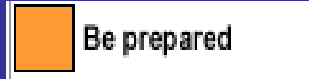
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22_Nov_2013

Enhancement of the Early Warning Service

- Based on international best practices (WMO & international Weather Services as benchmark)
- SAWS Collaborated with NDMC to improve warning dissemination
- SAWS enhanced the SWWS to include only those that can lead to disastrous events
- This lead to streamlining of Watches and Warnings to only six severe weather related hazards
- They are disseminated via the SMS, Radios, TV, emails, twitter etc.

The Core of the Severe Weather Warning System will be:

Severe Weather Watches / Warnings



Be prepared



Take action

1-3 days in advance,
Could be the consequences of Intense large weather systems

1. Disruptive Snowfalls
2. Heavy Rain
3. Flooding
 - Heavy Rain leading to Flash flooding (non T/S)
 - Localised Flooding (non T/S)
4. Severe Thunderstorms
 - Hail, gusts, tornadoes, local flooding
5. Sea State (High swell > 6 m)
6. Strong winds (Gale force)

Colour code for alert categories and generalized explanation (The colours refer to the severity of the danger and its possible impact)

	Severe Weather Alert Levels			
	GREEN	YELLOW	AMBER	RED
Alert Category	No alert	Advisory	Watch	Warning
Awareness level for disaster management and public	None expected	Be aware	Be prepared	Take action
Risk	No adverse weather is expected	A risk that widespread adverse weather conditions may occur	Moderate risk that adverse weather conditions will occur	Very high risk, about to happen, or already happening
Impact		A risk of some damage to infrastructure and local disruption, dangerous to people and small communities	Moderate risk of some damage to infrastructure and local disruption, dangerous to people and small communities	High risk of some damage to infrastructure and local disruption, dangerous to people and small communities
Advice		Be alert and follow the latest weather forecasts.	Be vigilant and follow the latest weather forecasts.	Be extra vigilant of dangerous conditions and follow the advice given by authorities.

New Warning Web Page

- SAWS also launched the new Warning Web page on the SAWS Website on the 1st May 2013.
- The Warning Page update immediately as the warning is issued by Forecasting office.
- Display Local Municipalities under threat with relevant colour and icon

South African Weather Service

Home WC EC KZN MP LP GP NW FS NC

South African Weather Service still the authoritative supplier of Weather Forecasts and Information for South Africa

Main Menu

- Overview
- Warnings
- Maps
- Forecasting
- Climate
- Corporate
- Products
- FAQs
- Contacts

Search Town Name

Set MyTown

Major Towns Today Forecast

Town	Weather	Temp
PE		16°C

Overview Rain (M) Min Max Fog (M) Firn UV (M)

TODAY

Warnings

External Links

- Automatic Rain Station
- Aviation
- RSMC
- SAAGIS
- WMO

News and Events

- South African Weather Service: Modified system on severe weather warnings, watches and special advisories... [Read more](#)
- The South African Weather Service continues to excel and yes, we are a state owned entity... [Read more](#)

Who's Online

SAWS New Website (www.weathersa.co.za)

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Major Towns Today Forecast

Town	Weather	Temp
PE		16°C
BFN		11°C

SOUTH AFRICA TOMORROW WARNING MAP
Friday 03 May 2013

Weather Hazard

- No alert
- Advisory - Be aware
- Watch - Be prepared
- Warning - Take action

Symbols

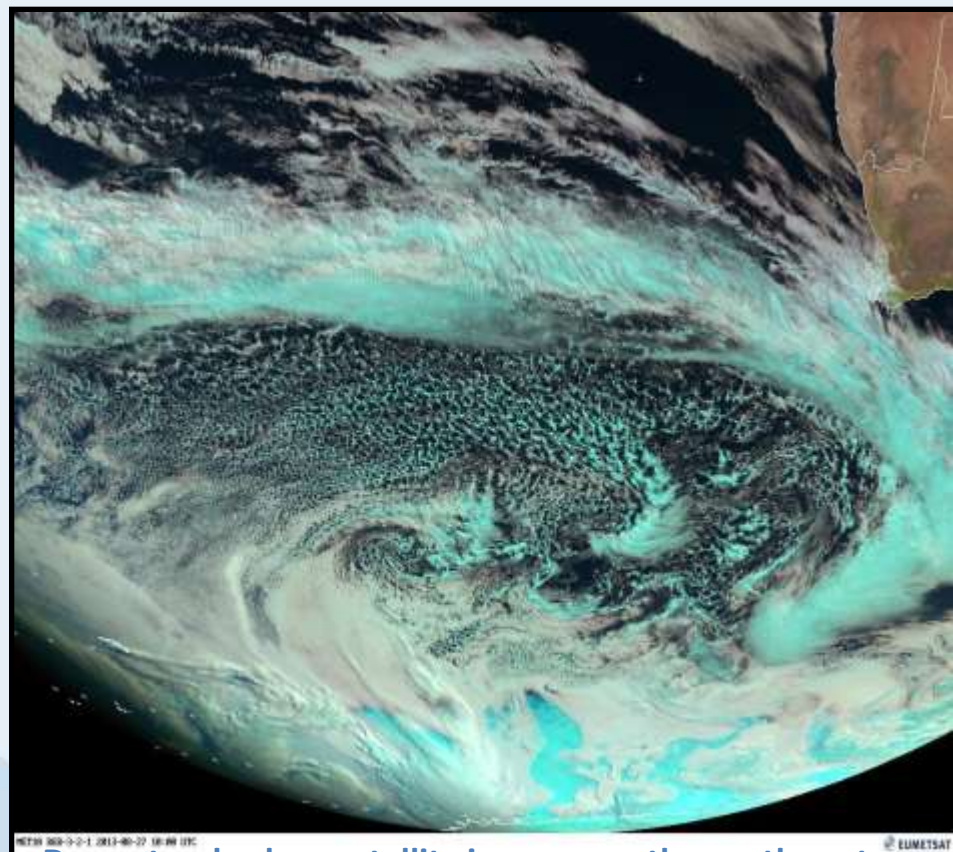
- Thunderstorm
- Heavy rain
- Strong winds
- Sea state
- Flooding
- Snow
- Vegetation

SAWS-SW
22

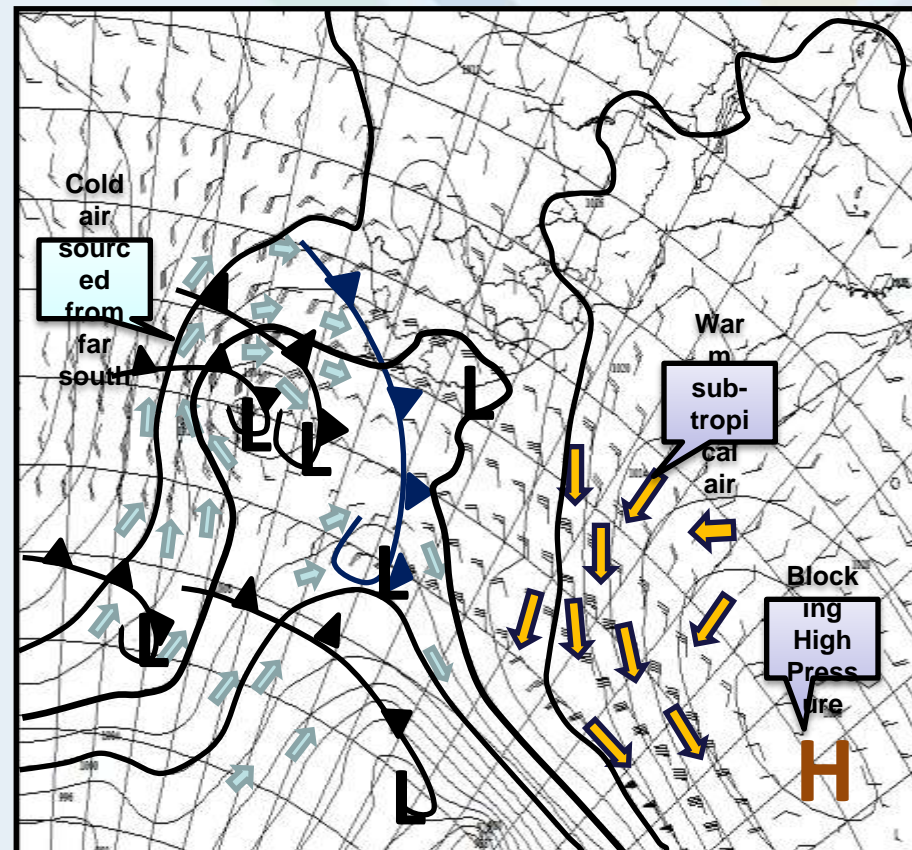
Severe weather: 28-31 August 2013-by Carlton Fills(Forecaster)

Current situation and developments in next 24 hours

(Information sent to SW Cape Disaster Management-27Aug2013,



Day natural colour satellite image over the southwestern Atlantic Ocean showing the approaching frontal systems at 10h00Z (12h00SAST) on Wednesday 27 August 2013 [courtesy: EUMETSAT].



Synoptic situation for tomorrow (Wednesday) 28 August 2013) at 14h00 SAST according to ECMWF-model projection initialized 00h00Z today (Tuesday).

Severe weather alerts

Warnings

- 1 Extremely **high fire danger conditions** are expected for the Central Karoo tomorrow (Wednesday.)
- 2 A gale force NW'ly winds (65-74km/h) is expected between Cape Columbine and Cape Agulhas tomorrow (Wednesday).
- 3 **Heavy rain** is expected in places in over the Cape Metropole, Overberg and the southwestern parts of the Cape Winelands District tomorrow(Wednesday).
- 4 **Localised urban flooding** is expected in places over the Cape Metropole, Overberg and the southwestern parts of the Cape Winelands District tomorrow (Wednesday).

Special Weather Advisories:

A series of intense cold fronts are expected to affect the Western Cape Province and the western parts of the Northern Cape Province on Wednesday 28th and Thursday 29th August.

- 1 **Strong winds** are expected over the Central Karoo District tomorrow (Wednesday).
- 2 **Significant rain** is expected in areas over the Cape metropole, Overberg and the southern parts of the Cape Winelands Districts which may lead to localized areas of Urban flooding.
- 3 **Snowfalls** are expected over the high-ground of the of the Western Cape Province and the southern high-ground of the Northern Cape Province on Thursday.
- 4 The public and small stock farmers are advised that **very cold conditions** are expected over the high-ground of the Western Cape Province and the southern high-ground of the Northern Cape Province from Thursday persisting till Saturday.
- 5 **Very rough seas with waves greater than 5m** are expected on occasion between Cape Columbine and Plettenberg bay from Thursday evening into Saturday.

Heavy rain hit Cape Town (and the south-western parts of the country)- 28/08/2013.
Pictures were taken from different handles on Twitter, @ TrafficSA and @SAWDOS1.



De Tijger Office Park



Parow near railway station, 28 Aug 2013 PM



SAWS-SWFDP_PRES_18-22_Nov_2013

Challenges in working with Disaster management

- Still a challenge for alerts to reach people in Rural areas
- No integration at some districts and Municipalities with NDMC
- No Active Disaster Management Plan or no Disaster Management Plan at all at some municipalities
- No proper update on the resignations and new employments
- This results in alerts messages not reaching the intended recipients

Challenges with Media

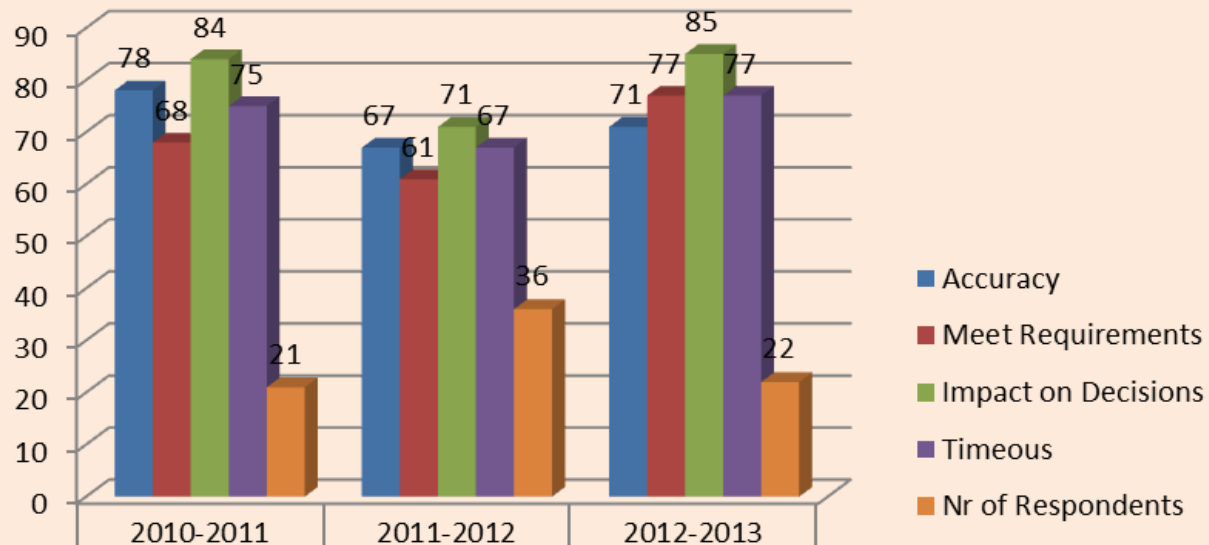
- Wrong graphical interpretations or misrepresentations of Severe Weather Alerts, especially on Televisions.
- This is due to non-meteorologists weather presenters.
- Media mostly reactive, i.e. They only become active post weather disaster but not prior to the severe events
- Things are improving as CA is now handling all media related issues, including arranging interviews

Feedback from Disaster Management

- A disaster Management Survey is conducted annually
- Focus more on
 - Rate of accuracy of SWWS
 - The service meeting their requirements
 - Impact on their decision making
 - Timeous
 - Overall satisfaction

DM Survey Summary 2010-11 to 2012-3

S1 - Trend over Past Three Years Q2-Q5

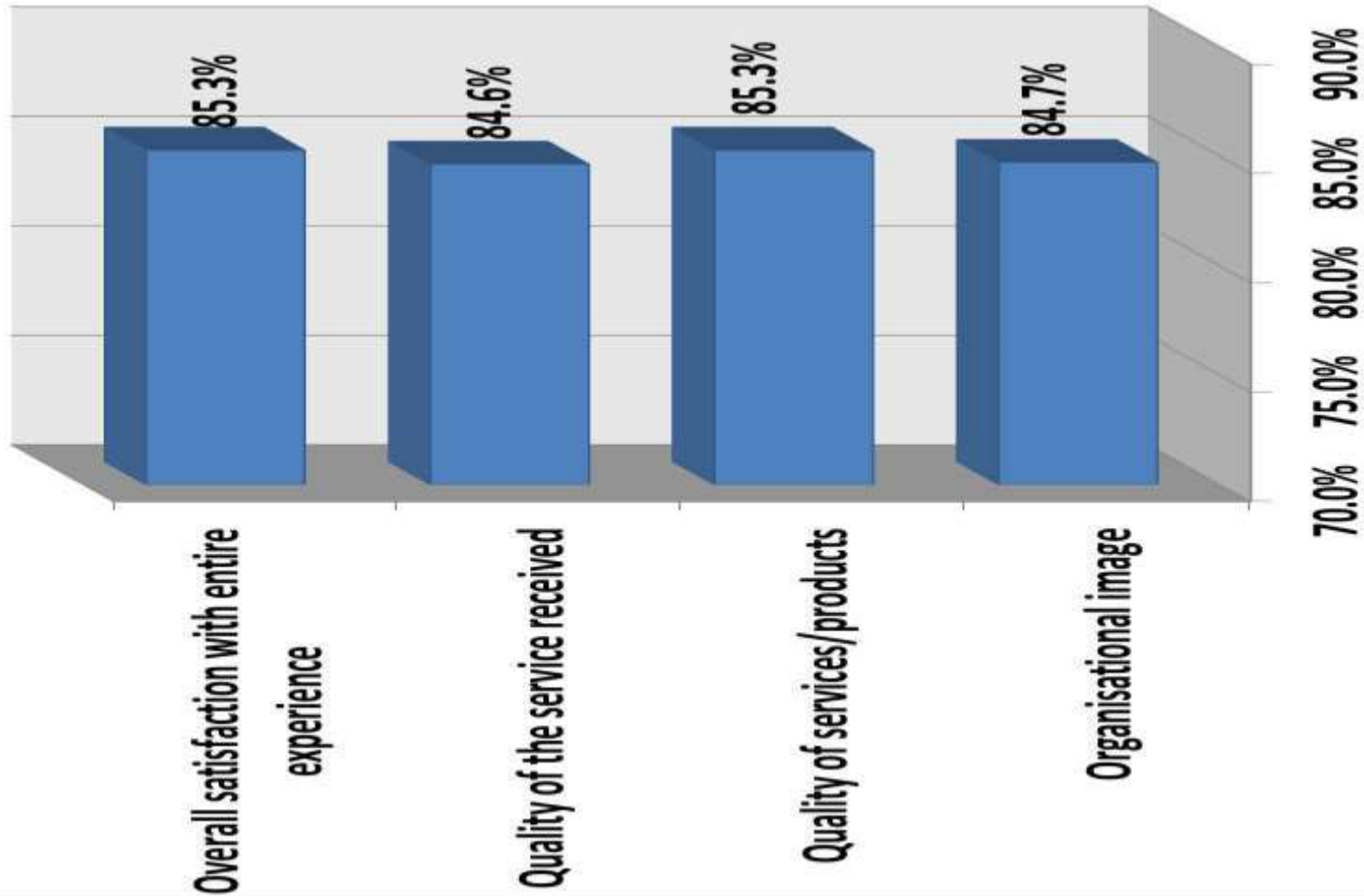


	2010-2011	2011-2012	2012-2013
Accuracy	78	67	71
Meet Requirements	68	61	77
Impact on Decisions	84	71	85
Timeous	75	67	77
Nr of Respondents	21	36	22

Feedback from the Public

- CA conduct a stakeholder Perception survey annually to rate the level of public satisfaction with our Services.
- Survey for 2013 was conducted on 250 different stakeholders and 50 learners
- Focus mainly on
 - Service Quality
 - Product quality
 - Image

Performance score on overall components of satisfactions





Thank you