



# **Current status of severe weather forecast in Swaziland**

# Current products and service

## Swaziland Meteorological Service

### 1. Public Weather Service

- Nowcasting, short to medium range daily weather forecast.
- Severe weather forecast;
- Thunderstorms/lightning,
- wind storms,
- heavy rain,
- dense fog etc.
- FDI, and more
- Heat and cold waves
- Forest and veld fires
- etc

# Current products and service

## 2. Aviation Services,

- Metars,
- Tafs,
- Aerodrome warnings...etc

## 3. Advisory services;

- long range/ seasonal forecast
- 10 bulletins,
- dry spells,
- drought issues,
- Climate Change
- El nino etc.

# Current products and service

## Severe weather warning products

- Tropical cyclones warning, will show the distance from SD, then issue alert/advisory, warning accordingly
- TV severe weather presentation ie heavy rains and possible fires (windy)
- Print media say half to a page of graphical maps showing area of possible impact ie heavy rains
- Regular radio updates – direct telephone interviews with stations
- Social networks eg: facebook, etc

# Products dissemination

Dissemet server; Meteofactory which is unique system which is able too deliver customized forecasts and warnings to end users, fax, email, sms, NMS webpage. Call-ins are allowed.

## **Users:**

General members of the public, Aviation industry, Media, Govt, Companies( Forest, Railway, Hotels, Water Services, Electricity, Sugar Cane, Tertiary Institutions, Construction, etc)

**Used** for planning and decision making, research etc

**Weaknesses;** model resolution over a small area like SD, unable to resolve local effects, inhomorgeneity of the country's terrain, Lack of standardized forecast verification process in the region.

**Gaps;** Lack of standardized early warning system in the region.

Heavily reliance on independent media for disseminating warnings and alerts, eg print media.

## New products

**Flash flood guidance system(SARFFGS):** We are in the process of implementing the FFGS as one of our forecasting tools. This tool will help to consider other aspects such soil moisture, satellites precipitation, flash floods guidance and forecasted precipitation. Thus giving accurate warnings to those areas that maybe affected by flash flooding. The has recently sent one of their forecasters for training in San Diego. The officer will pioneer the establishment of the FFGS in the country.

The only challenges with this product can be:

- the internet accessibility. Sometimes it's not easy to access this product
- Username and password challenge: not easily accessible
- Data collection: transport, observers, few gauges
- Interaction with other countries.

THANK YOU