

National Water and Sanitation Summit

18-19 February 2022

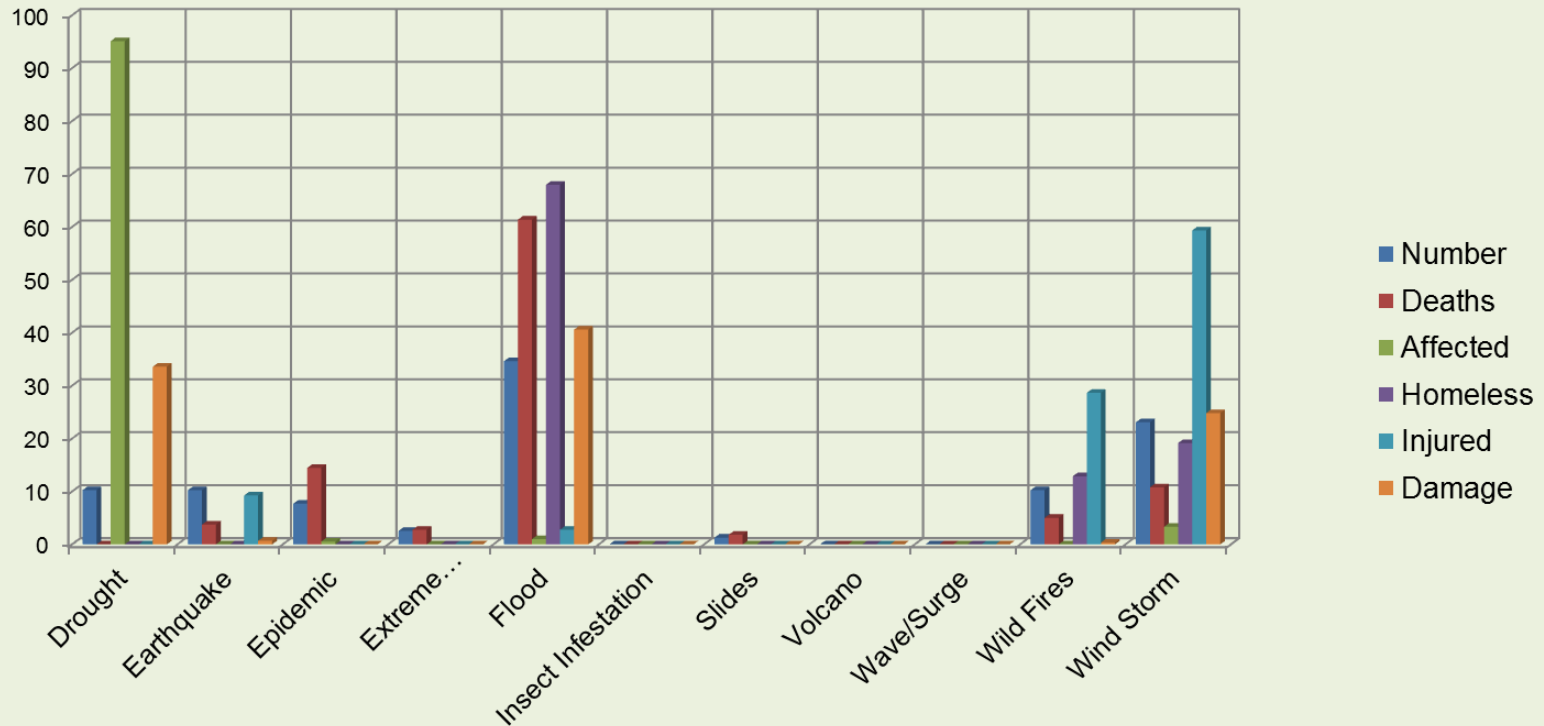
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Layout

1. Importance of Met Services and Hydrologists to Disaster and Need for Cooperation between DWS and SAWS (Hydrologists)
2. Districts model and Importance thereof
3. Rainfall systems
4. Tropical Cyclone

IMPACT OF DISASTERS ON SOUTH AFRICA: 1920-2008 (Source: CRED)



90% of Natural Disasters in South Africa are weather related

Most important disasters for South Africa are droughts, floods, wild fires, windstorms

Importance of Met Services and Hydrologists to Disaster

- Globally Most Met Services are situated inside the Weather Services (Met Services)
- There is a need for strong local collaboration between SAWS and DWS, especially with hydrologists
- There is a need to enhance the observation infrastructure because they are source of scientific data
- We use the data to forecast and inform the decisions makers
- It is very important to enhance the current observation infrastructure
- Our observation also fit into local and Global Models for better and accurate predictions

Districts model and Importance thereof

- It is very important for our services to cascade down to districts and municipal levels
- They are the most vulnerable of them all
- Our meteorological and hydrological information need to reach them so as to make informed decisions
- The observation infrastructure also need to be erected in their vicinity for accurate forecast

Recent significant rainfall producing systems

KwaZulu-Natal
July 2016
Cut-off low
pressure



Recent significant rainfall producing systems

City of Tshwane
5 February 2022



2022/03/02

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What happened on the ground?

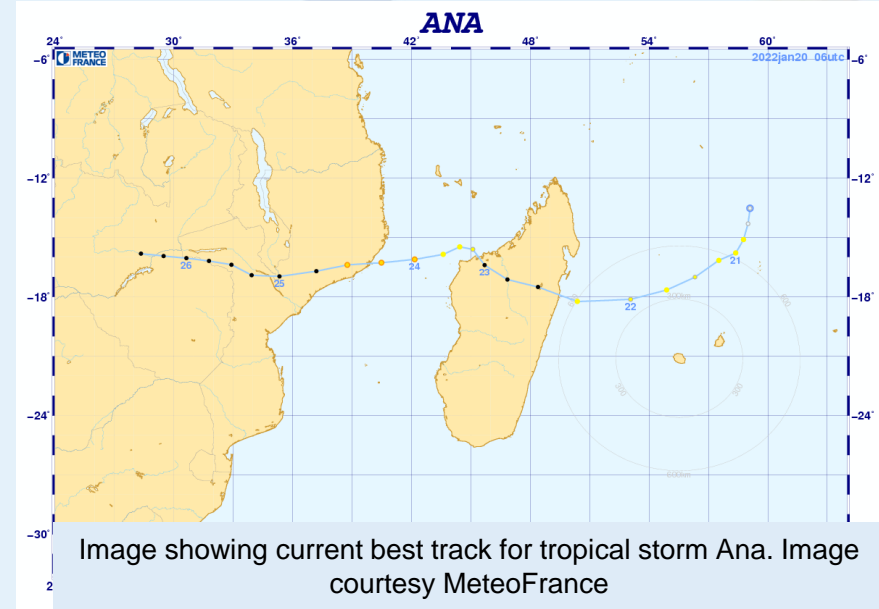


Limpopo Province

Tropical Cyclones – Current Season

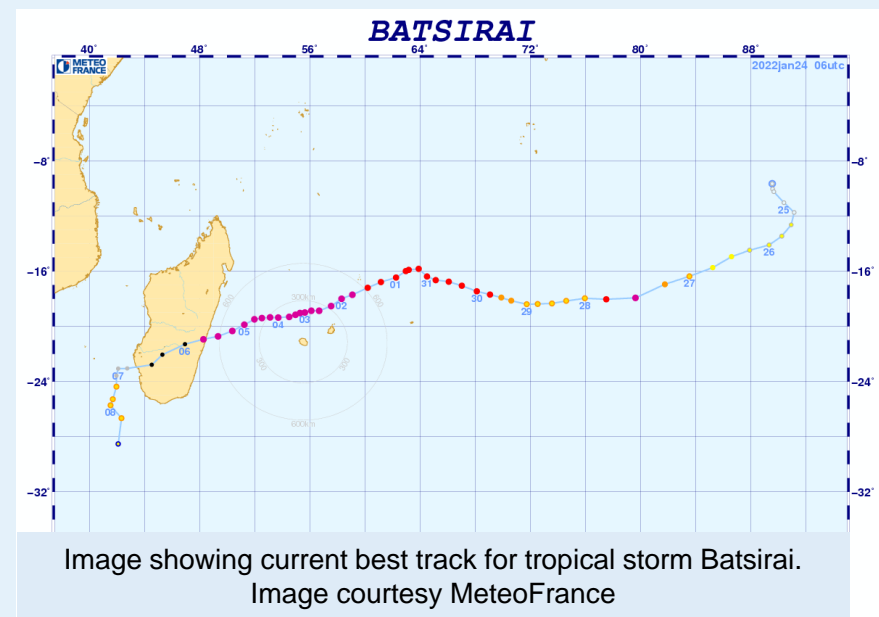
Ana

- Late start with Ana from only 20 January 2022
- Affected Madagascar, Mozambique, Malawi
- Highest intensity only “Moderate tropical storm”, but still caused devastation to countries

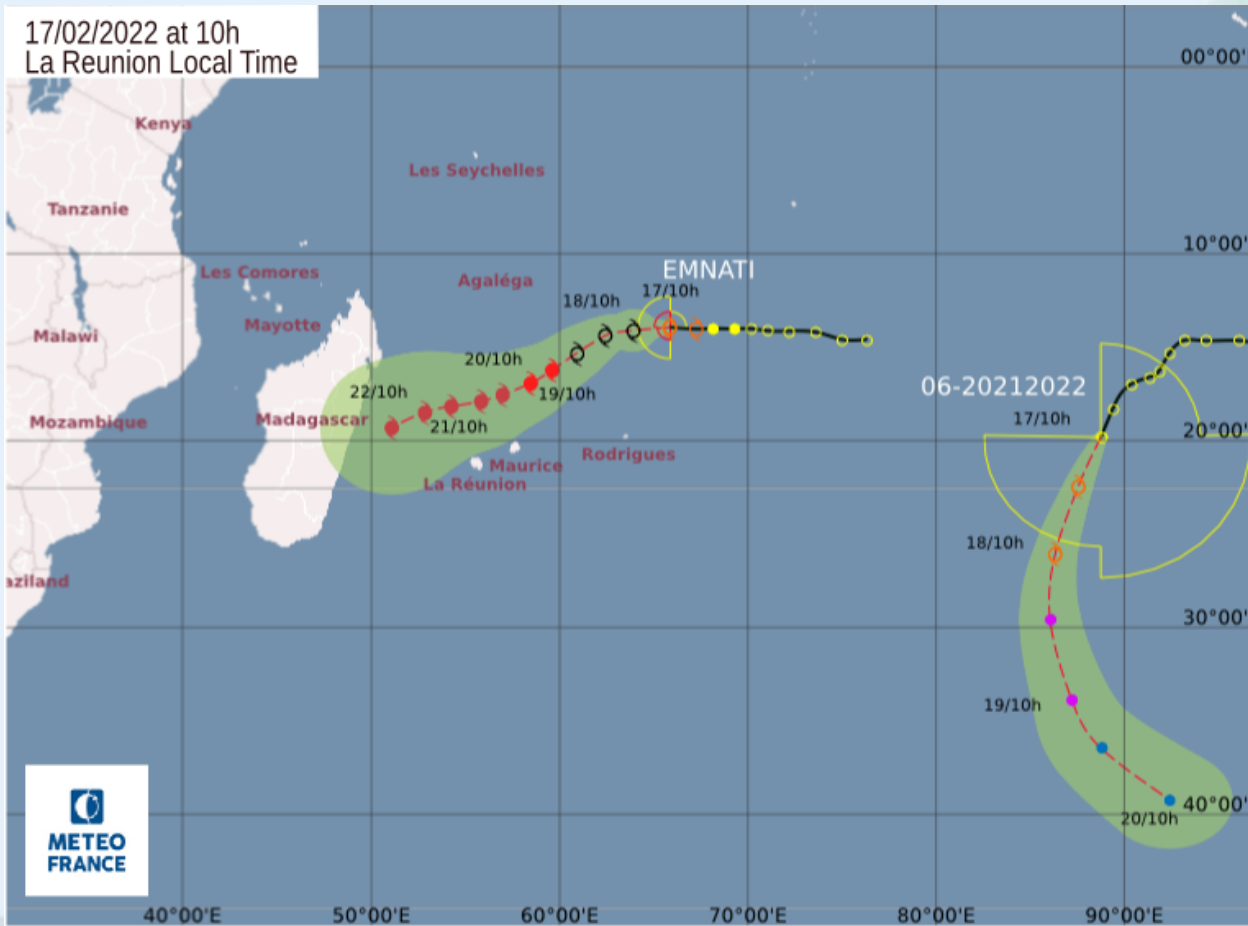


Batsirai

- Most intense so far of the season
- Affected Mauritius, Reunion and Madagascar, then rapidly heading southwards



Tropical Cyclones – Current Situation



Current activity in the South-West Indian Ocean Basin:
Emnati heading towards central Madagascar and is expected to make landfall as ‘Intense tropical cyclone’

Latest forecast track of tropical low Emnati. Image courtesy MeteoFrance

Tropical Cyclones – Current Situation

Names for the current season

NAMES	Provided by
Ana	Mozambique
Batsirai	Zimbabwe
Cliff	Madagascar
Dumako	Eswatini
Emnati	Comores
Fezile	Afrique du sud
Gombe	Tanzanie
Halima	Malawi
Issa	Kenya
Jasmine	Maurice
Karim	Seychelles
Letlama	Lesotho
Maipelo	Botswana
Njazi	Malawi
Oscar	France
Pamela	Tanzanie
Quentin	Kenya
Rajab	Comores
Savana	Mozambique
Themba	Swaziland
Uyapo	Botswana
Viviane	Maurice
Walter	Afrique du sud
Xangy	Madagascar
Yemurai	Zimbabwe
Zanele	Lesotho

Five named systems so far. Cyclone season is not finished yet, so could still see more systems developing in the coming weeks. Here are their names



Thank you