

SADC-CLIMATE SERVICES CENTRE

TROPICAL CYCLONE ADVISORY

ISSUE NUMBER: 01 RELEASE DATE: 18/11/2024 VALIDITY: 22/11/2024 RAINFALL SEASON: 2024/25

<u>Headline:</u> Tropical Cyclone Bheki is projected to make landfall over Mauritius and southern parts of Madagascar as it moves south-west wards.

SUMMARY

Analysis of model outputs from the following sources: European Centre for Medium Range Weather Forecasting (ECMWF), Joint Typhoon Warning Centre (JTWC), Regional Specialized Meteorological Centre (RSMC) La Reunion, and the WRF-GFS (myDewetra), show that **Tropical Cyclone BHEKI** has developed over the **Southwestern Indian Ocean basin and has recorded maximum sustained surface winds around 175 km/h (41 knots) and minimum sea-level pressure is estimated to be near 963 hPa**. The tropical system is currently expected to directly affect **Mauritius and Madagascar**.

WARNING ZONE

The tropical cyclone forecast shows that **Tropical Cyclone BHEKI** (Figure 1) will make direct impact over parts of **Mauritius and some parts of Madagascar** are likely to receive extreme rainfall associated with this system. Other parts of the region expected to receive heavy rainfall are most of northern Angola, most of DRC, parts of northern Zambia, western and northern Tanzania, coastal south of South Africa and northern Mozambique.

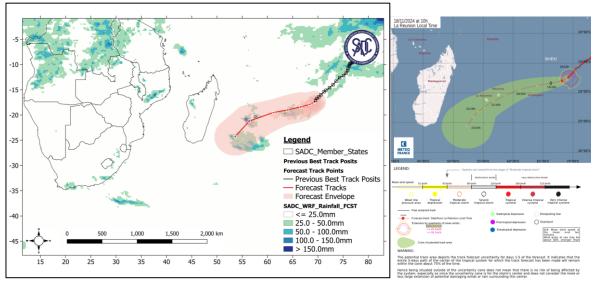


Figure 1: Heavy rainfall expected over the SADC region due to Tropical Cyclone (BHEKI) and other weather systems during the period of 18 – 22 November 2024 (*Source: WRF-GFS (myDewetra) and JTWC (tracks)*) and RSMC-La Reunion projected tropical cyclone track (right)

SADC Secretariat, Climate Services Centre Private Bag 0095 Gaborone Botswana, <u>Tel.</u> +267 3951863 <u>Fax</u> +267 3972848 <u>Email: csc1@sadc.in</u>t, <u>Website</u>: csc.sadc.int

RECOMMENDED ACTION

National Meteorological and Hydrological Services are requested to closely monitor these events and update relevant institutions such as Disaster Risk Management Agencies at Member States level to support anticipatory action, preparedness and response measures to protect lives and property.

Users are strongly encouraged to consult the National Meteorological and Hydrological Services (NMHSs) in Member States for interpretation of this advisory and local warnings and alerts.

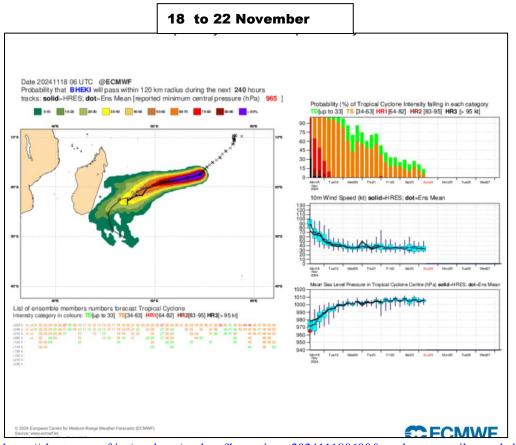
NEXT ADVICE

The next advisory will be issued as and when there is an evolution of tropical systems over the **Southwestern Indian Ocean basin** (*which extends from the equator to 40S and from the African coastlines to 90E*), that are likely to have a direct impact on SADC Member States.

For more information contact:

SADC Climate Services Centre (SADC-CSC) SADC Secretariat Private Bag 0095, Gaborone, Botswana Email: <u>csc1@sadc.int</u> Website: <u>csc.sadc.int</u> Xhttps://x.com/sadccsc

Appendix: ECMWF projected tropical cyclone track and ENS mean graphs



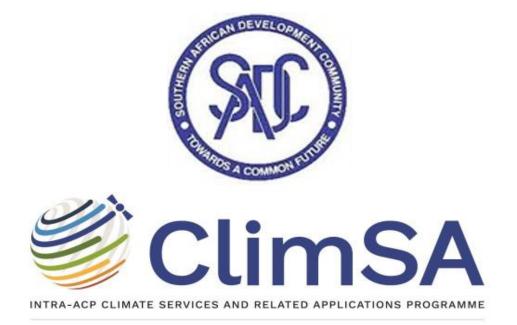
https://charts.ecmwf.int/products/cyclone?base_time=202411180600&product=tc_strike_probability&unique_id =03S_BHEKI_2024

SADC Secretariat, Climate Services Centre Private Bag 0095 Gaborone Botswana, <u>Tel.</u> +267 3951863 <u>Fax</u> +267 3972848 <u>Email: csc1@sadc.int</u>, <u>Website</u>: csc.sadc.int

NOTE:

This bulletin used forecast data obtained from RSMC La Reunion, JTWC, ECMWF and myDewetra platform.

Users are therefore, urged to consult the local National Meteorological and Hydrological Services (NMHSs) for local conditions and detailed interpretation of the contents of this bulletin.





An initiative of the Organisation of African, Caribbean and Pacific States funded by the European Union





SADC Secretariat, Climate Services Centre Private Bag 0095 Gaborone Botswana, <u>Tel.</u> +267 3951863 <u>Fax</u> +267 3972848 <u>Email: csc1@sadc.in</u>t, <u>Website</u>: csc.sadc.int