

Malawi 10-day Weather and Agrometeorological Bulletin

"In support of National Early Warning Systems and Food Security"



Period: 21 – 31 March 2025

Season: 2024/2025 Release date: 09 April 2025

HIGHLIGHTS

- Wet conditions over the northernmost districts and northern lakeshore areas...
- Maize harvesting in progress mainly over the south...
- Reduction in rainfall activities over more areas...

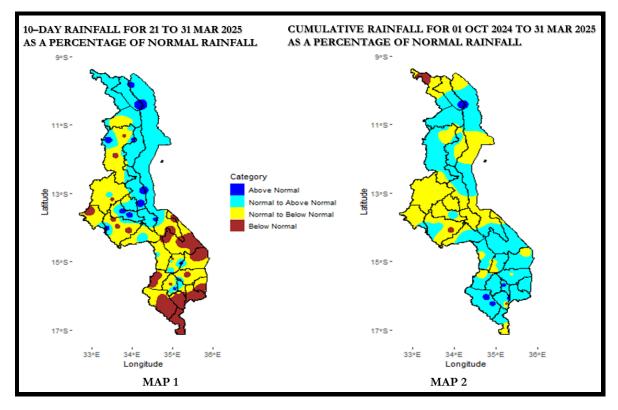


Figure 1: Observed dekadal and cumulative seasonal rainfall as percentage of normal for Malawi

1.0 WEATHER SUMMARY

During the period 21 to 31 March 2025, a broad equatorial trough was active mainly over northern half of the country resulting in localized heavy rains and thunderstorms particularly over northern lakeshore and extreme northern areas of the country with relatively dry conditions elsewhere.

1.1 RAINFALL SITUATION

Extreme northern and northern lakeshore areas experienced moderate to scattered rainfall activities which were locally heavy at times. The recorded amounts were within the normal to above normal over lakeshore and northern districts of Karonga and Chitipa, while majority of central and southern areas experienced normal to below normal amounts of historical dekadal amounts as captured in Map 1 in figure 1 above. As of 31st March 2025, the cumulative rainfall amounts since the onset of rainfall monitoring season indicate a normal to above normal condition for majority of southern areas of the country while normal to below normal to act a first of the country while normal to below normal for central areas. (Map 2 from Figure 1).

The following stations recorded cumulative dekadal rainfall amounts exceeding 100mm; Nkhotakota Meteorological station recorded 201 mm in 8 rainy days, Vinthukutu Agriculture in Karonga recorded 193.5 mm in 7 rainy days, Chintheche Agriculture in NkhataBay recorded 190.2 mm in 7 rainy days, Baka Research Station in Karonga recorded 163.7 mm in 8 rainy days, Salima Meteorological station recorded 157.3 mm in 4 rainy days, NkhataBay Meteorological station recorded 149.9 mm in 11 rainy days, Karonga Meteorological station recorded 143.3 mm in 10 rainy days, Mzuzu Meteorological station recorded 143.3 mm in 10 rainy days, Dowa Agriculture recorded 127.0 mm in 6 rainy days, Dwangwa Sugar Company in Nkhotakota recorded 125.0 mm in 7 rainy days, Chikangawa forest in Mzimba recorded 112.2 mm in 7 rainy days and Ntchisi Boma recorded 106.1 mm in 7 rainy days. More details in figure 2 below.

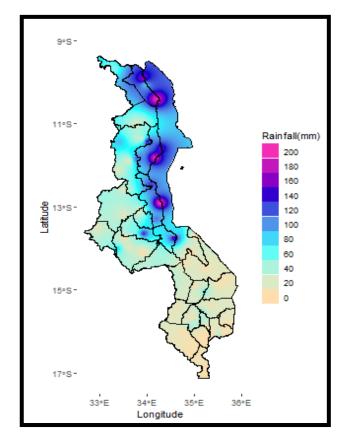


Figure 2: Observed dekadal rainfall for Malawi, 21-31 March 2025

Higher number of rainy days were registered over Karonga and northern lakeshores areas, the highest number of 11 rainy days was registered at Nkhata Bay Meteorological station . Karonga meteorological station registered 10 rainy days. More details as illustrated in figure 3 below.

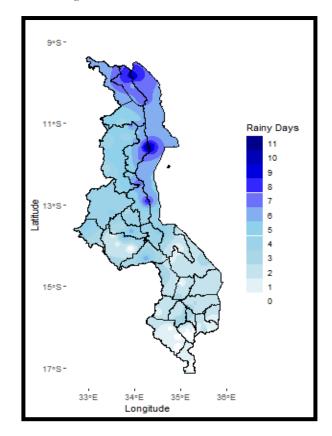


Figure 3: Dekadal rainy days for Malani, 21-31 March 2025

1.2 AIR TEMPERATURE

Malawi experienced hot temperatures during the last dekad of March 2025 with the average maximum temperature ranging from 25.7°C at Bvumbwe Meteorological station to 33.8°C at Ngabu Meteorological station in Chikwawa. Interms of minimum temperatures, the observed average ranged from 16.0°C at Dedza Meteorological station to 23.6°C at Ngabu and MonkeyBay Meteorological stations.

1.3 RELATIVE HUMIDITY

During the last dekad, air over Malawi was fairly moist and the daily average Relative Humidity values recorded from various weather stations across the country ranged from 66% at MonkeyBay Meteorological station to 82% at NkhataBay Meteorological station.

1.4 WIND SPEEDS

Daily average wind speed measured at a height of two metres above the ground ranged from 1.1km per hour at Ngabu Meteorological station in Chikwawa to 9.7km per hour at Chileka Meteorological station.

1.5 SUNSHINE HOURS

Generally medium to long hours of bright sunshine were observed over Malawi during the period 21 to 31 March 2025. The average daily values of sunshine hours had ranged from 6.7 hours per day Season: 2024/2025

at Mzuzu Meteorological station to 8.9 hours per day at Ngabu Meteorological station and consequently the amount of Solar Radiation had ranged from 8.6 to 13.6 cal/cm²/day.

2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review, northernmost districts and northern lakeshore areas experienced good temporal and spatial distribution of rainfall while in majority of central and southern areas relatively dry conditions prevailed.

The experienced rains provieded the much needed moisture for proper maturity of crops including maize and growth and development of other crops like rice over these areas. The relatively dry conditions over southern areas provided an opportunity for drying and harvesting of maize in the region. However, the relatively dry conditions experienced over central areas has affected cobbing to maturity of the maize crop mainly over parts of Lilongwe, Kasungu and Salima Agricultural Development Divisions as depicted in figure 4 below.



Figure 4: The maize field affected by prolonged dry spell at an advanced stage in Salima.

For livestock, majority of livestock over central and southern areas of the country were under alert Temperature Humidity Index as the country experienced generally warm to hot and fairly humid conditions. The rains experienced over Karonga, Chitipa and northern lakeshore areas during the reporting period ensured improved and continued pasture growth and water availability to various stocks.

Overall, there are concerns of reduced crop production for subsistence and cash crops at both local and national scales due to the erratic start of the 2024/2025 rainfall season as well as due to the impacts of the prolonged dry conditions that have been experienced over central areas of the country.

3. PROSPECTS FOR 2024/2025 SEASON

The 2024-2025 rainfall season is being influenced by weak La Nina conditions that have been established over eastern-central equatorial Pacific Ocean. Global models project that these

conditions are likely to persist for a considerable remaining part of the season.

The rainfall forecast for April 2025 season is showing that most areas of the country are expected to receive above-normal to normal amounts (see Figure.5a). Rainfall totals are expected to range from 150 to 250 mm in the northern and central areas and below 50 mm in the southern part of the country as shown in map (b) of Figure 5 below.

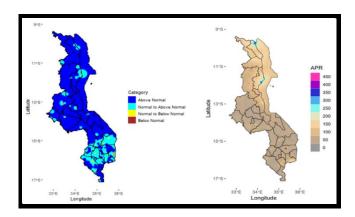


Figure 55: April 2025 rainfall forecast (a) categories and (b) amounts

In terms of temperature, April is expected to feature mostly normal temperatures across Malawi with isolated cases of cooler than normal conditions over spme central and southern areas as captured in figure 6 (a) below... The anticipated actual Maximum temperatures from 25°C to 32°C, as captured in figure 6(b) below.

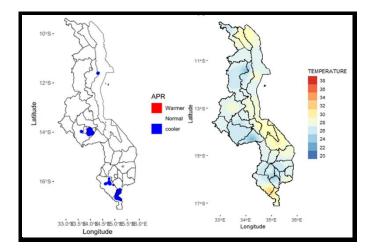


Figure 6: April 2025 temperature forecast (a) categories and (b) amounts

4. OUTLOOK FOR 01 – 10 APRIL 2025

During the first dekad of April a reduction in dekadal rainfall amounts is expected over more areas from southern and central regions while for the north it will be generally normal to below normal as shown in Figure 7 below.

Farmers mainly over the north are strongly advised to practice good farming techniques such as moisture conservation as well as water harvesting. Livestock farmers, are encouraged to take proactive measures in ensuring their stock is guarded against worms, parasites as the seasonal conditions may provide suitable environment for breeding of the same. Season: 2024/2025

On a positive note, the anticipated dry conditions over southern araes are expected to provide suitable conditions for harvesting and subsequent drying of harvested crops.

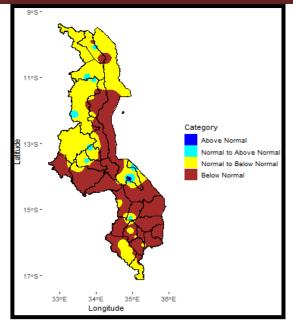


Figure 7 : Rainfall outlook for 01-10 April 2025