

Malawi 10-day Weather and Agrometeorological Bulletin

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



Period: 21 – 31 October 2024 Season: 2024/2025 Issue No.03

Release date: 07 November 2024

HIGHLIGHTS

- Sporadic rainfall activities over central areas, hot and dry conditions elsewhere...
- Land preparation in progress over most parts of the country...
- Isolated rainfall activities anticipated during the first dekad of November 2024...

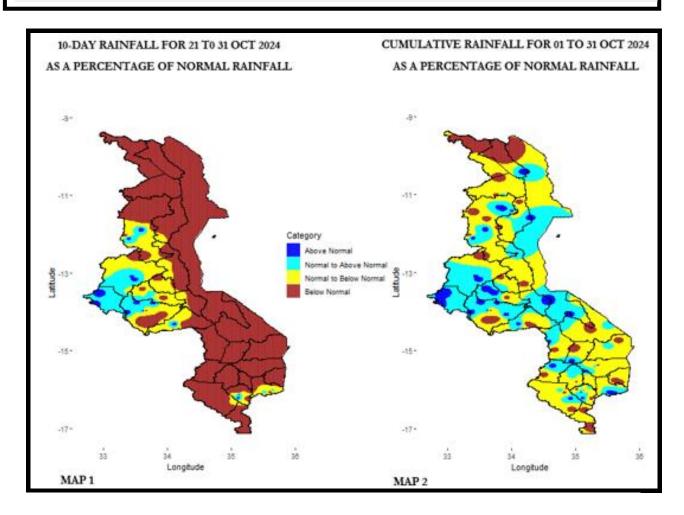


Figure 1: Observed dekadal and cumulative seasonal rainfall as percentage of normal for Malawi

1.0 WEATHER SUMMARY

During the period 21 to 31 October 2024, warm easterly airmass resulted in generally hot and dry conditions over most areas of the country with isolated rainfall activities mainly over central areas.

1.1 RAINFALL SITUATION

During the last dekad of October 2024, generally hot and dry conditions prevailed over the country with sporadic rainfall activities over central areas of the country which were heavy at times.

Stations that recorded some rainfall during the reporting period included Mbawa Research station in Mzimba which recorded 123.2mm in 2 rainy days, Mulanje Boma recorded 69.5mm in 2 rainy days, Kasiya Agriculture in Lilongwe recorded 66.9mm in 2 rainy days, Masambanjati Agriculture in Thyolo recorded 65.6mm in 2 rainy days, Kamuzu International Airport Meteorological station recorded 53.3mm in 2 rainy days, Thiwi Agriculture in Mchinji recorded 46.6mm in 2 rainy days, Mchinji Boma recorded 46.1mm in 1 rainy day and Lujeri Tea estate in Mulanje recorded 46.0mm in 2 rainy days.

Spatial distribution of the actual recorded rainfall amounts is shown in figure 2 below.

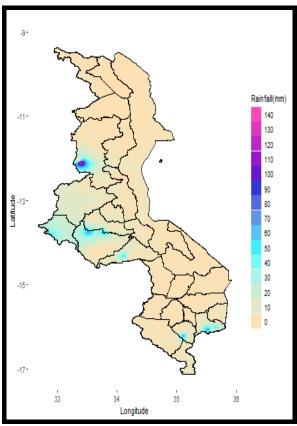


Figure 2: Observed dekadal rainfall for Malawi, 21-31 October 2024

The overall rainy days distribution from 21 to 31 October 2024 is shown in figure 3 below. Majority of northern and southern areas did not record any rainfall while some central areas recorded some rains. Majority of stations which experienced some rains was done in 2 rainy days as captured in figure 3 below.

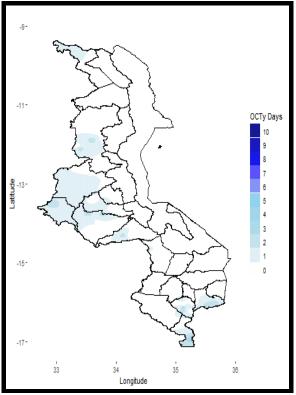


Figure 3: dekadal rainy days for Malawi, 21-31 October 2024

1.2 AIR TEMPERATURE

Malawi experienced hot to locally very hot conditions during the period 21 to 31 October 2024. Daily average maximum temperatures had ranged from 30.3°C at Mzuzu Meteorological station in Mzimba to 37.4°C at Chileka International Airport Meteorological station in Blantyre. Daily average minimum temperatures had ranged from 15.5°C at Mzuzu Meteorological station to 25.2°C at Salima Meteorological station.

1.3 RELATIVE HUMIDITY

During the period 21 to 31 October 2024, air over Malawi was generally dry. Daily average Relative Humidity values recorded from various weather stations had ranged from 42% at Chileka International Airport Meteorological station to 57% at Makoka Meteorological station in Zomba.

1.4 WIND SPEEDS

During the period under review, most parts of Malawi experienced light to moderate wind speeds. Daily average wind speeds measured at a height of two metres above the ground level across the country had ranged from 5.2km per hour at Nkhata Bay Meteorological station to 14.7km per hour at Chitipa Meteorological station.

1.5 SUNSHINE HOURS

Generally medium to long hours of bright sunshine were observed over Malawi during the period 21 to 31 October 2024. Daily average values had ranged from 7.2 hours at Byumbwe to 9.8 hours at Karonga Meteorological station and

consequently the amount of Solar Radiation had ranged from 8.6 to 12.7 cal/cm²/day.

2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review, the main on-farm activity over Malawi has been land preparation in readiness for effective planting rains (refer figure 4 below).



Figure 4: A properly tilled field in Kunthemhwe Extension Planning Area, Chileka, Blantyre

Furthermore, farmers are also reportedly acquiring various farm inputs in major outlets across the country. Stocking of various farm inputs is underway across the country under the Affordable Inputs Program (AIP), an initiative by the Malawi Government which was recently launched.

3. PROSPECTS FOR 2024/2025 SEASON

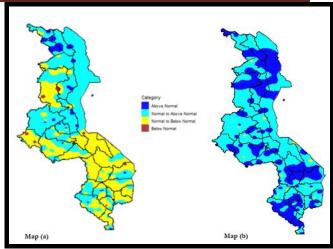
The 2024-2025 rainfall season is expected to be influenced by weak La Nina conditions that have been established over eastern-central equatorial Pacific Ocean. Global models project that these conditions are likely to persist for a considerable part of the season.

The rainfall forecast for the 2024/2025 season is that:

"During October to December 2024, Rainfall amounts across most areas of the country are anticipated to be normal to below-normal, except for specific areas in central and northern Lakeshore districts, where they may experience normal to above-normal precipitation.

During January to March 2025, expect normal to above-normal total rainfall amounts over most areas with possibility of outright above normal rainfall in January 2025."

Illustration of the forecast is given in figure 5 below with map (a) and map (b) showing sub-seasons October November December (OND) and January February March (JFM), respectively.



Season: 2024/2025

Figure 5: Forecast categories for OND and JFM

At national level, there are higher chances of normal to above normal cumulative rainfall amounts over most parts of the country.

For the month of November 2024, normal to below normal rainfall amounts are anticipated over majority of areas of the country. Refer figure 6 below map (a).

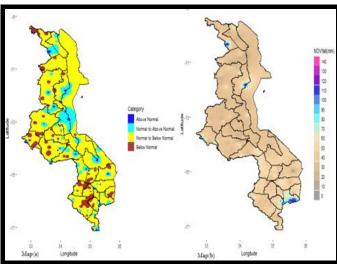


Figure 6: November 2024 rainfall forecast (a) categories and (b) values

In terms of temperature, generally normal conditions are anticipated during this month of November over most areas of the country as shown in map (a) in figure 7 below. This generally entails temperatures of around 36 Degree Celsius for lower Shire River Valley areas while temperatures of 30 to 32 Degree Celsius elsewhere as captured in map (b) in figure 7 below.

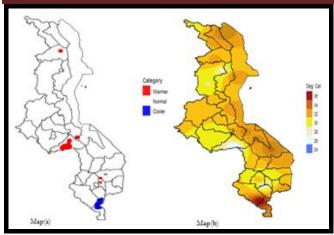


Figure 7: October 2024 temperature forecast

4. OUTLOOK FOR 01 - 10 NOVEMBER 2024

Rainfall activities are anticipated during the period 01-10 November 2024. Dekadal rainfall amounts are expected to be within the normal to below normal category of the historical dekadal amounts for southern areas of the country with isolates normal to above normal particularly over parts of Shire Highlands. Below normal scenarios are anticipated over majority of central and northern areas of the country with hot to locally very hot temperatures. This is represented by the map in Figure 8.

These conditions provide opportunity for farmers to continue with their land preparation initiatives as well as buying farm inputs. Farmers are advised to buy inputs from authorized agro dealers across the country

Furthermore, livestock farmers are advised to provide water to their stock at regular times to avoid stress to their stock.

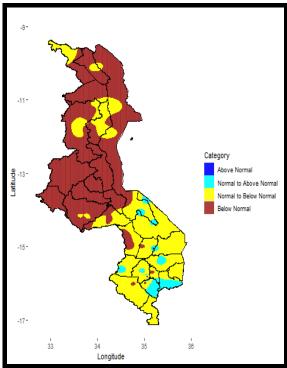


Figure 8: Dekadal rainfall outlook for Malawi for 1-10 November 2024