

Government of Malawi  
Ministry of Natural Resources and  
Climate Change

# Malawi 10-day Weather and Agrometeorological Bulletin

“In support of National Early Warning Systems and Food Security”



Be wise be weather-wise  
Department of Climate Change and  
Meteorological Services

Period: 21 – 31 March 2023

Season: 2022/2023

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## HIGHLIGHTS

- Wet conditions experienced over northern and central areas, relatively dry conditions elsewhere...
- Maize maturing to drying over central and northern areas...
- Wet conditions to persist over northern half during 01 – 10 April 2023...

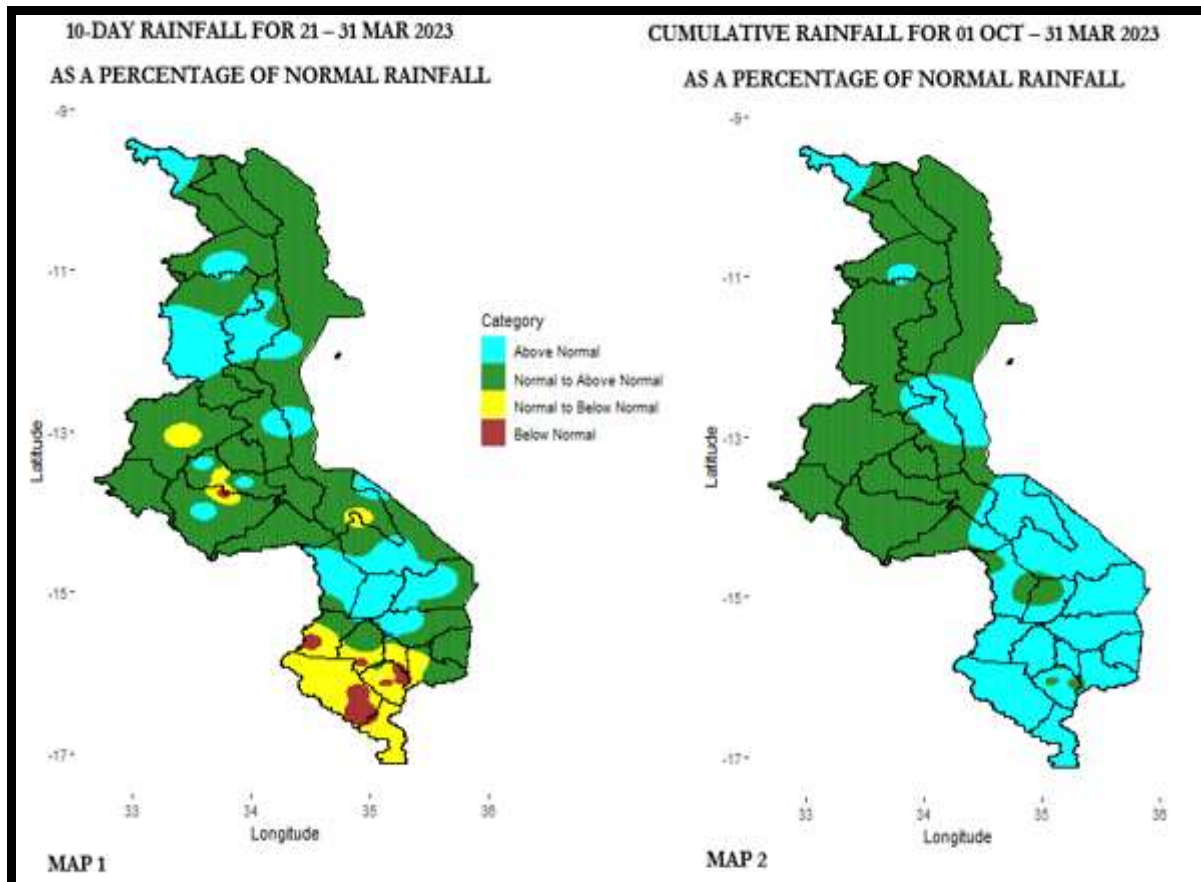


Figure 1: Observed dekadal and cumulative seasonal rainfall as percentage of normal for Malawi

## 1.0 WEATHER SUMMARY

During the period 21 to 31 March 2023, a rain belt was active over central and northern Malawi. This resulted in widespread rainfall activities over the aforementioned regions which were very heavy at times, with generally warm temperature conditions experienced across the country.

## 1.1 RAINFALL SITUATION

During the period under review, rainfall activities were experienced over northern, central and some southern areas of the country. The experienced activities resulted in generally normal to above normal rainfall amounts with cases of above normal rainfall amounts over central and northern areas while Shire valley region registered normal to below normal rainfall amounts as shown in map 1 under figure 1.

Stations that recorded at least 100.0mm of rainfall during this period included Chintheche Agriculture in Nkhata Bay recorded 327.0mm in 7 rainy days, Nkhotakota Meteorological station recorded 264.8mm in 9 rainy days, Zomba Agriculture recorded 252.9mm in 5 rainy days, Baka Research station in Karonga 195.2mm in 10 rainy days, Njolomole in Ntcheu recorded 166.8mm in 5 rainy days, Mzuzu Meteorological station recorded 166.3mm in 10 rainy days, Dwangwa in Nkhotakota recorded 162.5mm in 9 rainy days, Chitipa Meteorological station recorded 159.1mm in 6 rainy days, Nkhata Bay Meteorological station recorded 155.6mm in 10 rainy days, Karonga Meteorological station in 136.7mm in 9 rainy days, Ntaja Meteorological station 131.3mm in 6 rainy days, Lujeri Tea estate in Mulanje recorded 122.4mm in 6 rainy days, Mulanje Boma recorded 121.2mm in 9 rainy days and Nkhanda in Ntcheu recorded 109.7mm in 5 rainy days.

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

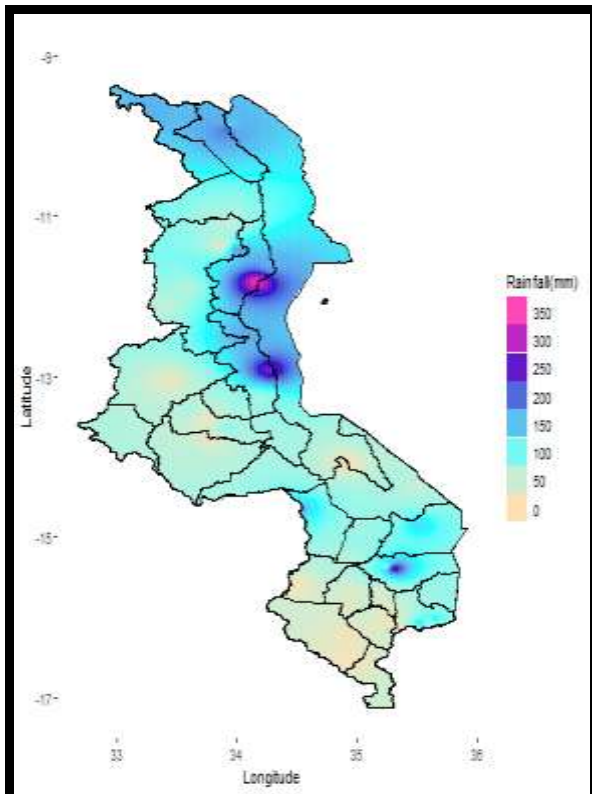


Figure 2: Observed dekadal rainfall for Malawi, 21-31 March 2023

The overall rainy days distribution from 21 to 31 March 2023 is shown in figure 3 below. As high as 10 rainy days were registered in some northern areas of the country with less rainy days over southern areas of the country as shown in figure 3 below.

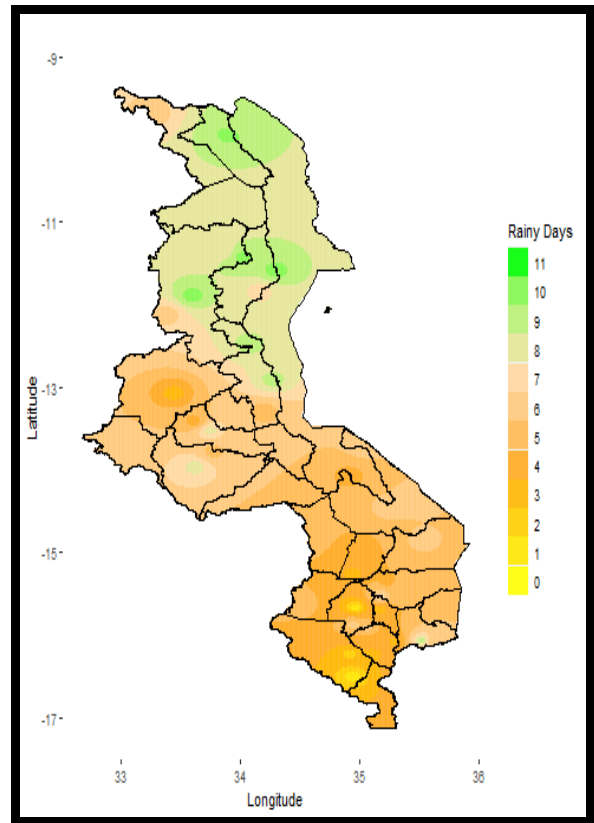


Figure 3: dekadal rainy days for Malawi, 21-31 March 2023

Since the start of October 2022 to 31 March 2023, normal to above normal cumulative rainfall amounts have been experienced over majority of areas of the country with outright above normal rainfall amounts over southern Malawi and in parts of lakeshore areas as shown in Map 2 in figure 1 above.

## 1.2 AIR TEMPERATURE

Malawi experienced warm to hot conditions during the period 21 to 31 March 2023. Mean daily maximum temperatures ranged from 22.4°C at Mzuzu Meteorological station to 32.9°C at Ngabu Meteorological station in Chikwawa. Mean daily minimum temperatures had ranged from 15.9°C at Dedza Meteorological station to 23.1°C at Ngabu Meteorological station.

## 1.3 RELATIVE HUMIDITY

During the period 21 to 31 March 2023, air over Malawi was generally moist. Mean daily Relative Humidity values recorded from various weather stations had ranged from 72% at Ngabu Meteorological station to 88% at Bvumbwe Meteorological station in Thyolo.

## 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 1.3 km per hour at Bolero Meteorological station in Rumphi district to 13.3 km per hour at Chileka International Airport in Blantyre.

**1.5 SUNSHINE HOURS**

Generally medium to long hours of bright sunshine were observed over Malawi during the second dekad of March 2023. Mean daily values had ranged from 6.2 hours per day at Bvumbwe Meteorological station to 8.4 hours per day at Ngabu Meteorological station and consequently the amount of Solar Radiation had ranged from 8.6 to 11.7 cal/cm<sup>2</sup>/day.

**2. AGROMETEOROLOGICAL ASSESSMENT**

During the period under review, there was continued good spatial and temporal distribution of rainfall in most central and northern areas of the country with relatively dry conditions over southernmost areas of the country.

The rainfall experienced during the dekad under review particularly over central and northern areas supported maturity of maize as well as growth and development of rice. Moreover, the rains ensured continued availability of water for livestock as well as growth and development of pastures. The relatively dry conditions experienced over southern Malawi helped those affected by flooding in the previous dekad to set themselves on the path of recovery as some were reported working on their fields as well as housing. But also some farmers in the south took advantage of the dry conditions to start harvesting their maize fields.

The maize crop is reportedly at maturity to drying stage over majority of central and northern regions of the country while farmers whose fields were spared from destruction as a result of flooding due to heavy rains induced by Tropical Cyclone Freddy were harvesting.

Furthermore, in majority of soya beans and tobacco growing districts in the country, farmers are harvesting in readiness for the 2023/2024 agricultural marketing season as the Ministry of Agriculture has announced minimum farm gate prices for various agricultural commodities for the 2022/2023 season.

However, the country has had negative episodes during the season, among others; flooding over majority of the southern districts with reported cases of crop wash-aways, destruction of property and death of Human beings as well livestock. On the other extreme, prolonged dry spells were experienced in the months of January and February over some parts of Karonga district. These disasters have potential of negatively affecting the good crop stand thereby affecting production at national scale.

As the season is now tailing off, farmers have now shifted their attention to preparation for winter cropping including those affected by destruction as a result of heavy rains experienced during Tropical Cyclone Freddy.

**3. PROSPECTS FOR WINTER SEASON**

A normal winter season is anticipated over the country. The season is characterized by generally warm conditions with cold to very cold episodes accompanied by drizzle or rain locally known as *Chiperoni* conditions.

**4. OUTLOOK FOR 01-10 APRIL 2023**

Wet conditions are anticipated over Malawi during the first dekad of April 2023. The anticipated dekadal rainfall amounts are expected to be within the normal to above normal categories of the historical dekadal amount for majority of areas over northern half of the country (Represented by blue colour in Figure 4) with normal to below normal ranges over southern half of the country. (Yellow colour in Figure 4).

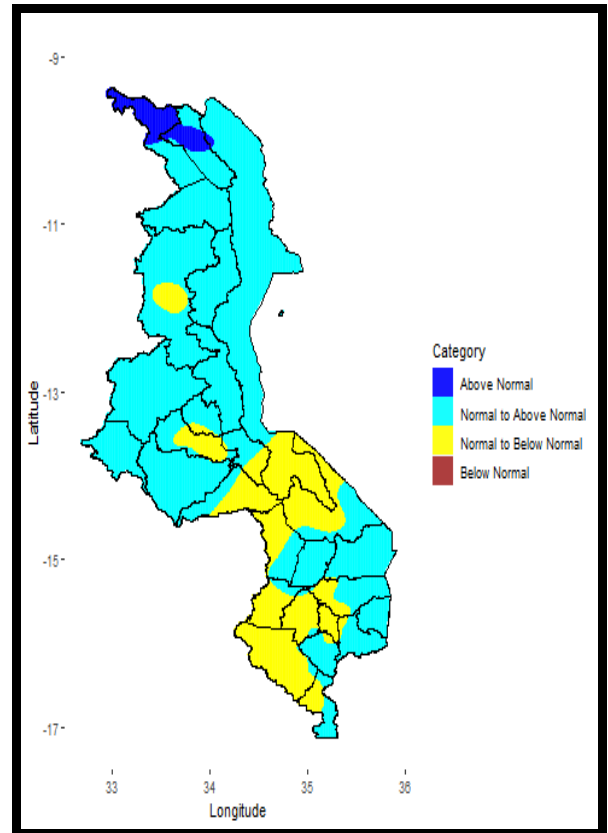


Figure 4: Dekadal rainfall outlook for Malawi for 01-10 April 2023 as percentage of normal rainfall

Farmers are advised to continuously follow weather forecasts and advisories during the growing season for proper planning and utilization of the weather and climate information and services in their various agricultural activities.