



REPUBLIC OF MALAWI

Ministry of Natural Resources, Energy and Mining  
Department of Climate Change and Meteorological Services

# 10-day Weather and Agrometeorological Bulletin

*In support of national early warning systems and food security*



Be wise be weather-wise

Period: 01 – 10 November 2016

Season: 2016/2017

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## HIGHLIGHTS

- **Pre-season rainfall was maintained in Southern and Central Malawi...**
- **Land preparation and mobilization of farm inputs were still main activities...**
- **Good rainfall prospects mainly over southern Malawi by mid-November 2016...**

## 1.0 WEATHER SUMMARY

During the first ten days of November 2016, an interaction between easterly and westerly winds had created local instability over southern and central Malawi. As a result a few areas in southern and central Malawi had recorded pre-season rainfall that is locally known as Chidzimalupsya.

### 1.1 RAINFALL SITUATION

During the first ten days of November 2016, a few areas in southern and central Malawi continued to receive good rainfall amounts. For instance in southern Malawi significant rainfall was recorded as follows: Chikweo Agric had registered 28mm, Lujeri Tea Estate 41mm, Nchalo had 37mm, Nsanje Agric 20mm, Chiradzulu Agric reported 16mm, Chizunga Factory and Phalula Agric recorded 15mm, Naminhiwa Agric received 14mm, Mpemba, Thuchila and Zomba Agric stations had 10mm while reports from central Malawi indicate that some areas had received good rainfall including 21mm that was recorded at Dzonzi Forest. Sporadic rainfall is likely to persist over Malawi until major rain bearing systems get established, usually between mid -November and December.

### 1.3 AIR TEMPERATURE

During the first ten days of November 2016, Malawi had experienced warm to very temperatures. Warm temperatures were reported over northern highlands and very hot temperatures were confined to lakeshore areas and in Shire Valley. Mean maximum temperatures had ranged from 26°C to 38°C while mean minimum temperatures had ranged from 16°C at Mzuzu Airport to 24°C at Mangochi. The highest maximum temperature was recorded at Mangochi (40°C). while the lowest temperature was 12.6°C recorded at Mzuzu Airport. For more details see Table 1.

### 1.4 WIND SPEEDS

During the period 01 to 10 November 2016 mean wind speeds measured at a height of two metres above the ground level across Malawi had ranged from 2.9Km per hour at Nkhata Bay Met to 16.2km per hour at Chitipa Met. More details are in Table 1.

### 1.5 RELATIVE HUMIDITY

During the first ten days of November 2016, relatively dry air had prevailed over Malawi. Daily average relative humidity

values had ranged from 40% at Ngabu and Ntaja to 57% at Monkey Bay. Details are on the Table 1.

### 1.6 SUNSHINE HOURS

During the period 01 to 10 November 2016 durations of bright sunshine hours across Malawi had ranged from 9.0 to 10.8 hours per day. The longest duration of sunshine hours was recorded at Monkey Bay in Mangochi. Details are on the Table 1

## 2. AGROMETEOROLOGICAL ASSESSMENT

During the first ten days of November 2016 some area in southern and central Malawi had received significant rainfall amounts. These rains had prompted a few farmers to start planting crops. Otherwise the main agricultural activities included land preparation in readiness for the start of the main rainfall season and mobilization of farm inputs. The pre-season rainfall experienced so far has encouraged farmers to speed up land preparation.

## 3. PROSPECTS FOR 2016/17 RAINFALL SEASON

The rainfall forecast for the 2016/2017 season in Malawi is that during the period October to December 2016, the greater part of southern half of Malawi is likely to receive normal to above normal rainfall amounts while the northern half is expected to receive normal to below normal amounts. During the period January to March 2017 the greater part of Malawi is expected to experience normal to above normal rainfall amounts. In view of this forecast farmers are advised to finish land preparations on time to ensure timely planting, plant drought tolerant food crops such as cassava, sweet potatoes, sorghum and millet, in the early days of the rainy season, plant early maturing crop varieties and apply adequate manure to improve soil moisture retention

## 4. OUTLOOK FOR 11– 20 NOVEMBER 2016

Models show brighter rainfall prospects particularly over southern and some parts of central Malawi from mid-November 2016.

**TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 01 TO 10 NOVEMBER 2016**

ADD/ STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED Km/hour	RH %	SUN SHINE HOURS	Eo mm per day	Et mm per day	RAD- TION calcm- <sup>2</sup> p/day
<b>KARONGA ADD</b>										
Chitipa	31.0	19.6	33.0	17.8	16.2	46	9.3	8.9	7.3	10.5
Karonga	35.1	23.4	38.0	22.1	8.3	45	9.3	8.9	7.2	10.5
<b>MZUZU ADD</b>										
Bolero	32.3	20.9	34.9	18.0	6.5	43	8.8	8.0	6.4	10.2
Mzimba	31.0	18.5	32.9	16.3	6.1	43	10.0	7.9	6.3	11.0
Mzuzu	26.5	15.6	31.0	12.6	6.1	49	10.2	7.3	5.7	11.1
Nkhata Bay	35.9	19.8	37.5	19.0	2.9	47	10.0	8.2	6.5	11.0
<b>KASUNGU ADD</b>										
Kasungu	31.9	20.2	33.0	18.6	10.8	43	10.3	8.9	7.1	11.2
<b>LILONGWE ADD</b>										
Chitedze	32.4	18.5	34.1	17.4	5.0	45	9.7	7.9	6.2	10.8
Dedza	28.5	16.4	30.8	14.7	12.2	54	0.9	5.3	4.6	5.0
KIA	30.7	18.9	32.6	17.6	7.2	41	10.5	8.2	6.5	11.3
<b>SALIMA ADD</b>										
Nkhota kota	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Salima	35.2	24.7	36.6	23.1	8.3	45	10.7	6.1	4.7	11.4
<b>BLANTYRE ADD</b>										
Makoka	32.4	19.5	35.5	18.0	5.4	51	10.2	8.2	6.5	11.1
Mangochi	37.6	24.4	40.0	24.0	4.0	43	10.5	9.1	7.3	11.3
Monkey Bay	35.7	25.3	37.3	23.8	9.7	57	10.8	9.8	8.0	11.5
Ntaja	35.4	22.1	37.4	20.4	9.7	40	10.3	9.3	7.6	11.2
<b>SHIRE VALLEY ADD</b>										
Ngabu	N/A	N/A	N/A	N/A	N/A	41	N/A	N/A	N/A	N/A

**Glossary of some terms on this table**

- Eo = Potential or reference Evapotranspiration, Et = Actual Evapotranspiration and RH = Mean Relative Humidity
- Mean Temperature of the day =(Max of the day + Min of the same day )/2
- ABS Max (Min) = Absolute Maximum (minimum) is the highest (lowest) of maximum (minimum) temperatures observed for a given number of days (calendar month) of a specified period of months (years).
- To convert Meters Per Second (mps) to Kilometers per hour (Km/hr) = mpsx3.6
- N/A – means data was not available at the time of reporting