



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: 11 – 20 October 2016

Season: 2016/2017

Issue No.2

Release date: 24 October 2016

HIGHLIGHTS

- Hot and dry weather had persisted over Malawi...
- Land preparation and mobilization of farm inputs were agricultural activities...
- Good rainfall prospects for southern Malawi towards end of October 2016...

1.0 WEATHER SUMMARY

During the period 11 to 20 October 2016, a local instability had maintained sporadic rainfall over Malawi. As a result very few areas continued to register pre-season rainfall that is locally known as Chidzimalupsya. Otherwise hot and dry weather prevailed over most areas in Malawi.

1.1 RAINFALL SITUATION

During the period 11 to 20 October 2016 very few areas in Malawi had received rainfall. However, the reported amounts were less than 1mm. For instance Bvumbwe Met had 0.3mm and Dedza Met station registered 0.1mm. Sporadic rains are expected to persist over Malawi during the month of October until major rain bearing systems get established, normally between November and December.

1.6 SUNSHINE HOURS

During the period 11 to 20 October 2016 durations of mean bright sunshine hours across Malawi had ranged from 9.6 to 11.5 hours per day. The longest duration of sunshine hours was recorded at Nkhota kota Met along the lakeshore areas while the shortest was registered at Kasungu Met in central plain. Details are on the Table 1.

1.3 AIR TEMPERATURE

During the period 11 to 20 October 2016, most areas in Malawi had experienced warm to hot temperatures. Very hot temperatures were confined to some lakeshore areas and in Shire Valley. Mean maximum temperatures had ranged from 27°C at Dedza Met to 36°C at Mangochi Met in Mangochi while mean minimum temperatures had ranged from 14°C at Mzuzu Airport in Mzimba to 23.8°C at Monkey Bay in Mangochi. The highest maximum temperature was recorded at Mangochi (38.4°C) in Mangochi while the lowest temperature was 14.3°C recorded at Dedza Met. For more details see Table 1.

2. AGROMETEOROLOGICAL ASSESSMENT

During the period 11 to 20 October 2016 the main agricultural activities were land preparation in readiness for the main rainfall season and mobilization of farm inputs. The pre-season rainfall experienced so far has encouraged farmers to speed up land preparation.

1.4 WIND SPEEDS

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 17.6km per hour at Chitipa Met. More details are in Table 1.

3. PROSPECTS FOR 2016/17 RAINFALL SEASON

The rainfall forecast for the 2016/17 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 and 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, include water harvesting structures where ridging has been done, ensure adequate vegetative soil cover where conservation agriculture is practised, plant other 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

1.5 RELATIVE HUMIDITY

During the second ten days of October 2016, air over Malawi had remained very dry. Daily average relative humidity values ranged from 37% at KIA Met to 55% at Monkey Bay. Details are on the Table 1.

4. OUTLOOK FOR 21 – 31 OCTOBER 2016

Models for short to medium range weather forecasts show brighter rainfall prospects for southern Malawi during the last three days of the forecast.

TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 11 TO 20 OCTOBER 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 ⁻² p/day
KARONGA ADD										
Chitipa	30.3	18.9	31.7	18.1	17.6	39	10.9	9.4	7.7	11.5
Karonga	34.4	21.0	36.5	19.5	8.3	49	10.8	9.0	7.2	11.4
MZUZU ADD										
Bolero	31.6	19.5	33.5	16.5	5.4	38	11.0	8.2	6.4	11.5
Mzimba	29.2	16.9	32.2	13.0	6.8	43	11.0	7.9	6.2	11.6
Mzuzu	28.0	15.0	29.4	11.2	6.5	45	11.1	7.6	5.9	11.6
Nkhata Bay	34.2	16.5	35.9	15.7	2.9	46	10.6	7.8	6.1	11.2
KASUNGU ADD										
Kasungu	N/A	N/A	N/A	N/A	10.8	N/A	9.6	N/A	N/A	N/A
LILONGWE ADD										
Chitedze	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dedza	27.0	14.3	28.3	12.6	10.1	51	10.5	7.5	5.9	11.1
KIA	29.8	16.6	31.0	14.5	7.9	37	11.1	8.0	6.3	11.5
SALIMA ADD										
Nkhota kota	33.4	21.9	34.6	20.5	4.0	46	11.5	8.7	6.9	11.8
Salima	34.5	22.5	35.3	21.0	9.4	42	10.7	9.1	7.3	11.3
Makoka										
Makoka	31.8	17.5	33.3	15.6	4.3	47	10.2	7.6	6.0	10.9
Mangochi										
Mangochi	36.3	22.9	38.4	21.5	4.3	45	10.8	8.8	7.0	11.3
Monkey Bay										
Monkey Bay	34.8	23.8	35.5	22.3	9.0	55	10.7	9.3	7.5	11.3
Ntaja										
Ntaja	34.3	20.5	35.2	18.6	10.8	40	10.5	9.1	7.3	11.1
BLANTYRE ADD										
Bvumbwe	29.4	15.5	31.9	14.2	8.6	52	10.3	7.6	6.0	10.9
Chichiri	31.3	18.4	34.0	15.7	6.5	43	10.0	7.8	6.2	10.7
Chileka	33.5	20.6	36.0	18.6	12.6	40	9.9	9.0	7.4	10.7
Mimosa	33.7	17.4	36.5	16.0	6.5	43	10.2	8.0	6.4	10.9
SHIRE VALLEY ADD										
Ngabu	N/A	N/A	N/A	N/A	N/A	43	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