



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 October 2016

Season: 2016/2017

Issue No.1

Release date: 14 October 2016

HIGHLIGHTS

- Hot and dry weather covered most parts of Malawi...
- Land preparation was a main on-farm agricultural activity...
- Hot and dry weather expected to persist during 11 to 20 October 2016...

1.0 WEATHER SUMMARY

During the period 01 to 10 October 2016, a local instability had caused sporadic rainfall over Malawi. As a result a few areas had registered pre-season rainfall that is locally known as Chidzimalupsya during the first 2 to 3 days of October 2016. Otherwise hot and dry weather prevailed over most areas in Malawi.

1.1 RAINFALL SITUATION

During the first ten days of October 2016 sporadic rainfall was reported over Malawi. However, the amounts were generally less than 10mm except at Mulanje Boma where 30.2mm was deposited. Otherwise the reports indicate that Mimosa Met had also in Mulanje District had 5.9mm and at Mkondezi in Nkhata Bay 6.0mm was registered. Sporadic rains are expected to persist over Malawi during the month of October until major rain bearing systems get established over the country, normally between November and December.

1.3 AIR TEMPERATURE

Warm to hot temperatures were experienced over Malawi during the period 1 to 10 October 2016. Mean maximum temperatures had ranged from 23.2°C at Dedza Met to 35.1°C at Mangochi Met in Mangochi while mean minimum temperatures had ranged from 12.1°C at Mzuzu Airport in Mzimba to 21.1°C at Monkey Bay in Mangochi. The highest maximum temperature was recorded at Mangochi (38.2°C) in Mangochi while the lowest temperature was 8.9°C recorded at Mzuzu Airport in Mzimba district. For more details see Table 1.

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.

1.5 RELATIVE HUMIDITY

During the first ten days of October 2016, air over Malawi was still very dry. Daily average relative humidity values ranged from 40% at Ntaja Met to 58% at Mkondezi in Nkhata Bay. Details are on the Table 1.

1.6 SUNSHINE HOURS

During the period 1 to 10 October 2016 durations of mean bright sunshine hours across Malawi had ranged from 8.2 to 10.5 hours per day. The longest duration of sunshine hours was recorded Mangochi along the lakeshore areas while the shortest was registered at Chitedze in central plain. Details are on the Table 1.

2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review the main on-farm agricultural activity in Malawi has been land preparation in readiness for the coming 2016/17 main rainfall season.

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. Therefore the 2016/17 rainfall forecast presents a good opportunity for farmers in Malawi to maximize agricultural production, particularly for areas where the forecast is for normal with a bias towards above normal rainfall. However, farmers should be cautioned that there are still three (3) probabilities for normal, below or above, and thus, contingencies should be taken for the less likely outcomes.

4. OUTLOOK FOR 11 – 20 OCTOBER 2016

Models for short and medium range forecasts indicate that hot to very and dry weather conditions are likely to persist over Malawi during the period 11 to 20 October 2016.

TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 01 TO 10 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	30.2	18.4	31.4	16.2	17.6	42	9.9	9.1	7.4	10.9
Karonga	32.5	20.7	33.2	20.0	7.2	50	10.1	8.4	6.7	11.0
MZUZU ADD										
Bolero	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mzimba	29.7	16.5	32.0	14.1	6.8	46	9.9	7.5	5.9	10.7
Mzuzu	26.9	12.1	29.2	8.9	6.5	54	9.1	6.6	5.1	10.2
Nkhata Bay	33.1	16.5	35.5	14.2	2.9	58	9.1	7.1	5.6	10.2
KASUNGU ADD										
Kasungu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LILONGWE ADD										
Chitedze	30.3	15.6	33.0	12.6	4.3	45	8.2	6.8	5.3	9.6
Dedza	23.2	14.6	29.1	11.1	9.7	53	8.5	6.6	5.2	9.8
KIA	28.8	15.7	31.5	12.7	6.8	43	9.0	7.1	5.6	10.1
SALIMA ADD										
Nkhota kota	31.6	20.5	34.6	19.2	5.0	53	9.5	7.9	6.3	10.5
Salima	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLANTYRE ADD										
Makoka	29.8	16.7	33.3	12.2	5.0	49	8.4	6.9	5.5	9.7
Mangochi	35.1	20.5	38.2	17.5	4.0	51	10.5	8.3	6.6	11.1
Monkey Bay	32.8	21.1	36.0	19.3	9.4	53	9.2	8.3	6.7	10.2
Ntaja	31.5	19.3	35.6	15.4	10.1	40	9.2	8.2	6.6	10.2
SHIRE VALLEY ADD										
Ngabu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Glossary of some terms on this table

- Eo = Potential 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