



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 2015

Season: 2015/2016

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## HIGHLIGHTS

- **Mostly hot and dry weather covered Malawi...**
- **Land preparation was a major on-farm agricultural activity...**
- **Brighter prospects for rainfall activities during end of October 2015...**

## 1.0 WEATHER SUMMARY

During the period 11 to 20 October 2015, a local instability had maintained little moisture over Malawi. As a result rainfall was confined to very few areas. Otherwise hot and dry weather had continued in most areas of the country.

### 1.1 RAINFALL SITUATION

During the second ten days of October 2015, generally light and below average rainfall was recorded over very few areas in Malawi. Such areas in southern Malawi had included Bvumbwe in Thyolo district which had reported 7.5mm in two days, Makoka in Zomba received 2.0mm while in central Malawi Mchinji Boma reported 5.1mm, Tembwe also in Mchinji had 4.5mm and up north Nkhata Bay Met had 1.0mm. Sporadic rains are expected to persist over Malawi during the month of October until major rain bearing systems get established over the country, usually between November and December.

collected from various stations in Malawi had ranged from 31% at Mimosa Met to 53% at Bvumbwe. Details are on the Table 1.

### 1.6 SUNSHINE HOURS

During the period 11 to 20 October 2015 period of average sunshine hours across Malawi had ranged from 8.4 hours at Mangochi to 10.9 hours per day at Mzimba Met. The longest duration of sunshine hours was recorded at Mzimba. Details are on the Table 1.

### 1.3 AIR TEMPERATURE

Warm to hot temperatures continued over most parts of Malawi during the period 11 to 20 October 2015. Average maximum temperatures had ranged from 27.1°C at Dedza Met to 39.0°C at Ngabu Met in Chikwawa while average minimum temperatures had ranged from 13.3°C at Mzuzu Airport in Mzimba to 24.9°C at Ngabu in Chikwawa. The highest maximum temperature was still recorded at Ngabu (41.8°C) in Chikwawa while the lowest temperature was 11.1°C recorded at Mzuzu Airport in Mzimba district. For more details see Table 1.

## 2. AGROMETEOROLOGICAL ASSESSMENT

During the period 11 to 20 October 2015 the major on-farm agricultural activity in Malawi has been land preparation in readiness for the coming 2015/16 main rainfall season.

## 3. PROSPECTS FOR 2015/16 RAINFALL SEASON

The rainfall forecast for the 2015/16 season is that generally favourable amounts of rainfall are expected over Malawi during the 2015/2016 rainfall season. Most parts of Malawi are likely to receive normal to above normal rainfall amounts during the season. However, a few areas particularly in the Shire Valley are likely to receive low rainfall amounts towards the end of season.

### 1.4 WIND SPEEDS

Average wind speeds measured at a height of two metres above the ground level across the country varied from 3.2Km per hour at Nkhata Bay Met to 19.4km per hour at Chitipa Met. More details are in Table 1.

## 4. OUTLOOK FOR 21 – 31 OCTOBER 2015

Models for short to medium range weather forecasts show brighter prospects for rainfall activities in most parts of Malawi especially during the last three days of the forecast period.

### 1.5 RELATIVE HUMIDITY

During the second ten days of October 2015, air over Malawi was still very dry. Daily average relative humidity values

**TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 11 TO 20 OCTOBER 2015**

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	31.2	20.3	33.1	19.1	19.4	40	10.4	9.8	8.0	11.2
Karonga	35.2	21.8	36.5	20.5	6.8	42	10.1	8.8	7.0	11.0
<b>MZUZU ADD</b>										
Bolero	32.7	22.1	34.6	20.0	5.4	37	10.7	8.4	6.6	11.3
Mzimba	30.3	18.8	32.4	16.5	7.9	39	10.9	8.3	6.5	11.5
Mzuzu	29.0	13.3	30.0	11.1	7.2	49	10.1	7.3	5.7	10.9
Nkhata Bay	34.9	17.8	36.2	16.1	3.2	52	9.8	7.8	6.1	10.7
<b>KASUNGU ADD</b>										
Kasungu	32.4	19.0	33.7	18.1	10.8	38	10.4	8.7	7.0	11.1
<b>LILONGWE ADD</b>										
Chitedze	31.7	17.8	32.8	16.3	5.0	43	10.0	7.7	6.0	10.8
Dedza	27.1	16.8	27.9	14.4	11.2	41	9.5	7.7	6.2	10.5
KIA	30.3	16.8	30.3	14.8	7.2	38	10.5	7.9	6.2	11.2
<b>SALIMA ADD</b>										
Nkhota kota	32.9	22.8	34.3	21.5	7.6	45	10.4	9.0	7.2	11.1
Salima	34.5	23.2	35.3	21.2	8.6	42	10.3	8.9	7.2	11.0
<b>MACHINGA ADD</b>										
Makoka	31.1	18.8	32.6	15.9	6.1	37	10.7	8.0	6.3	11.2
Mangochi	31.6	23.4	38.2	21.5	6.1	43	8.4	7.9	6.4	9.8
Monkey Bay	34.3	23.9	36.0	22.6	10.1	44	10.5	9.4	7.6	11.1
Ntaja	33.5	22.0	35.6	18.8	10.4	43	9.6	8.8	7.2	10.6
<b>BLANTYRE ADD</b>										
Bvumbwe	30.1	18.7	32.4	14.6	6.5	53	9.6	7.6	6.0	10.5
Chichiri	32.0	18.8	34.9	10.5	6.8	43	9.5	7.8	6.2	10.4
Chileka	33.7	22.8	36.1	19.4	14.8	40	8.9	9.3	7.7	10.0
Mimosa	34.8	19.5	36.7	16.0	6.5	31	9.0	8.0	6.4	10.1
<b>SHIRE VALLEY ADD</b>										
Ngabu	39.0	24.9	41.8	21.6	13.7	40	10.6	10.6	8.8	11.1

**Glossary of some terms on this table**

- Eo = Potential Evaporation, Et = Potential Evapotranspiration and RH = 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