



REPUBLIC OF MALAWI

Department of Climate Change and Meteorological Services

# 10-day Weather and Agrometeorological Bulletin

*In support of national early warning systems*



Period: 11 – 20 October 2013

Season: 2013/2014

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## HIGHLIGHTS

- Sporadic rainfall experience in the south; dry weather elsewhere...
- Major agro-activities were land preparation and procurement of farm inputs...
- Sporadic rainfall to persist over Malawi during 21 to 31 October 2013...

### 1.0 WEATHER SUMMARY AND IMPACTS

#### 1.1 RAINFALL SITUATION

During the second ten days of October 2013, a fairly moist and unstable air mass continued to bring sporadic rainfall particularly over southern Malawi. Most of the rains were received during the first five days. Stations that recorded rainfall amounts of more than 10 mm included Lujeri Tea Estate (38mm) in Mulanje, Bvumbwe Met (16mm) in Thyolo, Mimosa Met (19mm) in Mulanje and Chingale Agric (15mm) in Zomba. The rainfall received at most of the stations were above the long term average over the period 11 to 20 October and were recorded in at least one to two days while dry conditions had prevailed over most parts of Malawi.

#### 1.3 AIR TEMPERATURE

Generally warm to hot temperatures prevailed over Malawi during the period 11 to 20 October 2013. Mean maximum temperatures ranged from 26.2°C at Chongoni in Dedza to around 35°C at Ngabu in Chikwawa while mean minimum temperatures had ranged from 14.1°C at Bvumbwe in Thyolo to 23.2°C at Monkey Bay (Table 2). The highest maximum temperature was still recorded at Ngabu (41.3°C) in Chikwawa while the lowest was 11.8°C recorded at Bvumbwe in Thyolo district. For more details see Table 1.

#### 1.4 WIND SPEEDS

Mean wind speeds at a height of two metres above the ground level across Malawi had ranged from 0.9 to 5.6 metres per second. The highest mean daily wind speed was reported at Chitipa (5.6 m/s). Refer to Table 1.

#### 1.5 RELATIVE HUMIDITY

During the period 11 to 20 October 2013, air over Malawi remained generally dry. Daily average relative humidity values ranged from 41% at Bolero Met in Rumphu to 74% at Makoka Met in Zomba. Details are on the Table 1.

### 2. AGROMETEOROLOGICAL ASSESSMENT

The major on-farm agricultural activity in most parts of Malawi continued to be land preparation and procurement of farm inputs in readiness for the main planting rains. Most areas had stayed dry during the period under discussion. The rainfall that was received during the second ten days of October 2013 was sporadic and only confined to a few areas in southern Malawi. These rains continued to encourage farmers to speed up land preparations.

### 3. PROSPECTS FOR 2013/14 RAINFALL SEASON

The summary of the 2013/14 rainfall outlook is that *during 2013/2014 farming season, Malawi is likely to experience normal total rainfall amounts. However, extreme weather events such as floods and dry spells are likely to occur particularly in prone areas.*

### 4. OUTLOOK FOR 21 – 31 OCTOBER 2013

Models for short and medium range forecasts indicate that Malawi is likely to continue experiencing sporadic rainfall during the last ten days of October 2013

**TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 11 TO 20 OCTOBER 2013**

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED (m/s)	RH (%)	EVAP (mm)
<b>KARONGA ADD</b>							
Chitipa	31.1	19.2	32.5	16.6	5.6	47	N/A
Karonga	33.4	21.1	36.5	20.1	1.7	51	N/A
<b>MZUZU ADD</b>							
Bolero	32.4	20.1	33.8	15.4	N/A	41	N/A
Mzuzu	27.7	14.8	29.2	12.0	1.6	57	N/A
Mzimba	30.3	18.7	32.1	17.6	1.6	46	N/A
Nkhata Bay	33.9	18.4	35.5	16.6	0.9	60	N/A
<b>KASUNGU ADD</b>							
Kasungu	32.1	N/A	34.1	N/A	2.4	44	N/A
<b>LILONGWE ADD</b>							
KIA	30.0	17.3	32.0	14.8	2.2	4.6	10.8
Chitedze	31.2	16.9	32.9	14.8	1.4	50	N/A
Dedza	26.2	15.9	28.6	14.9	2.7	54	N/A
<b>SALIMA ADD</b>							
Salima	33.6	22.9	36.0	21.0	2.9	51	N/A
Nkhotakota	32.2	22.1	34.5	20.5	2.6	50	N/A
<b>MACHINGA ADD</b>							
Makoka	30.4	17.7	33.4	15.3	2.1	74	N/A
Ntaja	33.5	20.9	36.5	18.4	2.7	50	N/A
Mangochi	34.9	21.9	38.5	20.0	2.4	50	N/A
Monkey Bay	33.3	23.2	34.9	21.8	2.7	50	N/A
<b>BLANTYRE ADD</b>							
Chileka	31.3	21.0	34.0	16.6	3.5	50	N/A
Chichiri	27.8	17.4	33.0	14.5	2.0	56	N/A
Bvumbwe	26.8	14.1	31.6	11.8	2.4	68	N/A
Mimosa	30.9	17.2	36.2	13.3	1.1	68	5.0
<b>SHIRE VALLEY ADD</b>							
Ngabu	35.2	22.7	41.3	20.0	3.5	56	N/A

**Glossary of some terms on this table**

- 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