



# Malawi 10-Day Rainfall & Agrometeorological Bulletin

Department of Climate Change and Meteorological Services



Period: 21 – 31 October 2010

Season: 2010/2011

Issue No.3

Release date: 2<sup>nd</sup> November 2010

## HIGHLIGHTS

- Hot and dry weather persisted in most areas...
- Farmers across the country continued with land preparation...
- An improvement in rainfall distribution expected during 01 – 10 November 2010 ...

### 1. WEATHER SUMMARY

#### 1.1 RAINFALL SITUATION

In the last ten days of October 2010 some parts of Malawi continued to experience the first rains that are locally known as *Chizimalupsya*. Stations that reported significant cumulative rainfall amounts included Mulanje Boma 20.2mm, Makoka Met 16.8mm, Mimosa 12.9mm. Sporadic rainfall is likely to continue until major rain bearing systems get established over the country.

#### 1.2 MEAN AIR TEMPERATURE

Mean maximum air temperatures remained hot to locally very hot during the period under review. Ngabu in Shire Valley reported the highest mean maximum temperature of 39°C. Overall, mean maximum temperatures ranged from 28°C at Dedza to 39°C at Ngabu while mean minimum temperatures ranged from 15°C at Mzuzu to around 26°C at Monkey Bay.

#### 1.4 MEAN WIND SPEEDS

Mean wind speeds at a height of two metres above the ground level ranged from 0.8 to 3.7 metres per second or 2.9 – 13.3 Km/hr (see table).

#### 1.5 MEAN RELATIVE HUMIDITY

Dry air continued to cover most parts of Malawi. The daily average relative humidity values ranged from 34% at Bolero to 53% at Makoka and Mimosa.

### 2. AGROMETEOROLOGICAL ASSESSMENT

Persistent hot and dry conditions were widely experienced over Malawi. The sporadic rains being experienced in some parts of Malawi should propel farmers to speed up land preparation and procurement of farm inputs if they are to plant with first main rains. The sporadic rains received, so far, have made a significant contribution towards improvement of grazing conditions for livestock and wildlife. During the period under review, the major agricultural activities for farmers included land preparation and acquisition of farm inputs.

### 3. PROSPECTS OF 2010/11 RAINFALL SEASON

The climate models suggests that during 2010/2011 rainfall season, a greater part of Malawi is likely to experience normal to above normal total rainfall amounts that will result in floods in some areas as *La Nina* conditions have become established over the eastern equatorial Pacific Ocean. In simple terms the seasonal rainfall will be adequate to support agricultural production in most parts of Malawi but high rainfall intensities will result in flooding especially in low lying areas.

The 2010/11 forecast can be downloaded at [http://www.metmalawi.com/forecasts/SEASONAL\\_FORECAST\\_2010\\_2011\\_Press\\_release\\_final.pdf](http://www.metmalawi.com/forecasts/SEASONAL_FORECAST_2010_2011_Press_release_final.pdf)

### 4. OUTLOOK 01 – 10 NOVEMBER 2010

Meanwhile weather models indicate higher chances for a general increase in rainfall distribution and amounts within the first ten days of November 2010.

**TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 21 – 31 OCTOBER 2010**

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
<b>BOLERO</b>	33.3	22.0	34.0	15.9	N/A	34
<b>CHICHIRI</b>	31.7	19.2	33.9	17.5	1.0	46
<b>CHILEKA</b>	34.3	22.0	36.9	20.4	3.7	46
<b>CHITEDZE</b>	33.0	17.7	33.8	16.7	1.4	40
<b>DEDZA</b>	27.9	15.8	28.8	13.1	1.7	49
<b>KARONGA</b>	35.2	22.8	38.8	21.6	1.9	46
<b>KASUNGU</b>	32.7	20.1	33.6	18.1	3.2	38
<b>KIA</b>	31.1	18.8	32.2	17.1	2.1	40
<b>MAKOKA</b>	31.8	19.9	33.6	17.3	1.6	53
<b>MANGOCHI</b>	N/A	24.0	N/A	20.4	2.3	49
<b>MIMOSA</b>	34.8	18.3	36.7	16.5	1.2	53
<b>MONKEY BAY</b>	35.8	25.9	37.7	22.5	2.3	43
<b>MZUZU</b>	29.7	15.3	31.4	10.0	1.9	44
<b>NGABU</b>	39.1	24.4	42.3	23.1	3.9	47
<b>NKHATA BAY</b>	35.5	17.1	36.9	15.2	0.8	48
<b>NKHOTAKOTA</b>	33.8	22.5	35.0	21.5	N/A	43
<b>NTAJA</b>	35.2	21.7	36.8	23.9	3.5	44

**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) = mps x 3.6