



# Malawi 10-Day Rainfall & Agrometeorological Bulletin

Department of Climate Change and Meteorological Services



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Season: 2010/2011

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## HIGHLIGHTS

- Sporadic rains experienced mostly in southern areas...
- Farmers encouraged to speed-up land preparation...
- Sporadic rains expected during 11 – 20 November 2010 ...

### 1. WEATHER SUMMARY

#### 1.1 RAINFALL SITUATION

During the first ten days of November 2010 sporadic rains were experienced Malawi. High cumulative rainfall amounts above 20mm that were reported included 35mm at Chichiri in Blantyre, 31mm at Phalula in Balaka, 31mm at Mangochi Boma and 24mm at Chiradzulu. 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 over Malawi remained hot to locally very hot during the period under review. Ngabu in Shire Valley continued to report the highest temperatures. The average for the period was 39.5°C. Overall, mean maximum temperatures were in excess of 30°C. while mean minimum temperatures were between 19 and around 27°C. Details are in Table 1.

#### 1.4 MEAN WIND SPEEDS

Mean wind speeds at a height of two metres above the ground level ranged from 0.8 to 3.8 metres per second or 2.9 – 13.7 Km/hr (see attached table).

#### 1.5 MEAN RELATIVE HUMIDITY

Dry air continued to cover most parts of Malawi. Most areas reported daily average relative humidity values of less than 50% Areas that reported at least 50% were confined to southern Malawi. The highest was 54% reported at Makoka.

### 2. AGROMETEOROLOGICAL ASSESSMENT

Hot and dry weather was widely experienced over Malawi. Sporadic rainfall was mostly confined to southern Malawi. These rains encouraged farmers to speed up land preparation and acquisition of farm inputs in readiness for main planting rains which are fast approaching. The rains that have been received, so far, have contributed to 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 11 – 20 NOVEMBER 2010

Meanwhile weather forecasting models indicate that sporadic rains are likely to persist over Malawi during the second ten days of November 2010.

**TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 01 – 10 NOVEMBER 2010**

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
<b>BOLERO</b>	34.5	22.5	35.7	20.9	N/A	36
<b>BVUMBWE</b>	31.0	18.8	32.6	15.6	2.3	52
<b>CHICHIRI</b>	32.4	19.4	33.6	15.6	0.9	51
<b>CHILEKA</b>	35.1	22.5	36.4	18.4	3.8	44
<b>CHITEDZE</b>	33.4	19.0	34.4	17.6	1.5	38
<b>CHITIPA</b>	33.6	20.2	34.4	20.2	3.0	36
<b>KARONGA</b>	35.1	24.0	37.5	23.0	1.9	43
<b>KASUNGU</b>	33.6	21.7	34.7	20.3	3.5	39
<b>KIA</b>	31.7	19.8	32.7	17.2	2.2	42
<b>MAKOKA</b>	32.3	19.3	33.6	16.1	1.5	54
<b>MANGOCHI</b>	N/A	24.3	N/A	21.1	2.1	45
<b>MONKEY BAY</b>	35.6	26.6	36.2	21.9	2.5	44
<b>MZIMBA</b>	32.3	19.7	33.6	17.0	1.8	40
<b>MZUZU</b>	30.5	15.7	31.8	14.0	1.7	44
<b>NGABU</b>	39.5	24.3	42.5	21.8	3.4	52
<b>NKHATA BAY</b>	36.3	18.4	37.2	16.7	0.8	47
<b>NKHOTAKOTA</b>	34.7	24.3	35.7	23.1	2.8	43
<b>NTAJA</b>	35.2	22.5	36.0	21.0	2.6	48
<b>SALIMA</b>	34.1	24.5	35.5	N/A	2.3	45

**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