



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

- Hot and dry weather continued over Malawi...
- Major on-farm agricultural activity has been land preparation ...
- Sporadic rains expected from 16th October onwards ...

1.1 RAINFALL SITUATION

Dry weather continued over Malawi during the first ten days of October 2010. This type of weather is likely to continue until major rain bearing systems get established over the country.

1.2 MEAN AIR TEMPERATURE

Mean maximum air temperatures were generally hot during the period under review except at Ngabu in Shire Valley where mean maximum temperatures reached very hot category (36°C). Overall, mean maximum temperatures ranged from 27°C at Chitipa to 36°C at Ngabu while mean minimum temperatures ranged from 11°C at Mzuzu to around 23°C at Ngabu. For more details see Table.

1.4 MEAN WIND SPEEDS

Mean Wind speeds at a height of two metres above the ground level ranged from 1.1 and 4.3 metres per second or 4.0 – 15.5 Km/hr (see table). The highest wind speeds were reported at Chitipa (4.3 m/s).

1.5 MEAN RELATIVE HUMIDITY

During the first ten days of October 2010, air over Malawi was still dry. Daily average relative humidity values ranged from 41% at Kasungu to 59% at Makoka in Zomba. Details are on the Table 1 on page 2.

2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review the main on-farm agricultural activities in Malawi included

land preparation in readiness for the main rains.

3. PROSPECTS OF 2010/11 RAINFALL SEASON

The climate models indicate that during the period October to December 2010, the northern half of Malawi is likely to have normal to below normal total rainfall amounts while the southern half is likely to have above normal to normal total rainfall amounts. During the period January to March 2011, the northern half of Malawi is likely to have normal to above normal total rainfall amounts while the southern half is likely to have above normal to normal total rainfall amounts.

In summary, the forecast suggests that during 2010/2011 rainfall season, a greater part of Malawi will 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

4. OUTLOOK 11 – 20 OCTOBER 2010

Mostly sunny and hot weather is expected to continue over Malawi up to 15th October 2010. Thereafter, there is a high chance that the country might start receiving sporadic rains due to incursions of moist and unstable air. Rainfall is expected to continue being sporadic until the main rain bearing systems become established over the country.

TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 1 – 10 OCTOBER 2010

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BVUMBWE	27.2	15.9	30.5	14.5	2.5	54
CHICHIRI	29.1	16.7	31.5	15.0	1.2	51
CHILEKA	31.6	18.6	34.1	14.2	3.6	48
NTAJA	32.1	17.9	35.0	16.5	2.6	53
CHITEDZE	30.8	15.8	33.7	14.2	1.1	44
CHITIPA	27.0	17.2	32.6	16.1	4.3	40
KASUNGU	30.9	16.7	34.0	15.1	2.3	41
KARONGA	32.7	20.4	35.1	19.5	1.8	51
K I A	29.1	15.6	32.2	13.5	1.9	45
MAKOKA	29.5	15.9	31.9	13.1	1.7	59
MANGOCHI	N/A	20.5	N/A	17.7	1.9	46
MIMOSA	32.1	15.4	34.2	14.1	1.3	45
MONKEY BAY	33.3	22.2	35.4	20.1	2.2	46
MZIMBA	29.4	15.5	33.4	12.2	1.8	44
MZUZU	27.7	11.1	30.3	8.4	1.7	52
NGABU	36.1	22.5	38.5	20.3	3.6	60
NKHOTAKOTA	31.5	21.2	33.7	19.1	N/A	51
SALIMA	31.9	21.0	33.5	17.9	2.5	49

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