



# Malawi 10-Day Rainfall & Agrometeorological Bulletin

Department of Climate Change and Meteorological Services



Period: 11 – 20 October 2009

Season: 2009/2010

Issue No.2

Release date: 23 October 2009

## HIGHLIGHTS

- Hot and dry weather persisted over Malawi...
- Land preparation continued to be the major on-farm agricultural activity...
- Hot to very hot weather with isolated thunderstorms expected...

### 1.1 RAINFALL SITUATION

Malawi continued to experience mainly dry weather during the second ten days of October 2009. However, a few places in southern Malawi received significant rainfall amounts above 10mm threshold. Such places included Lujeri (95mm), Mimosa (42mm), Ngabu (33mm), Mulanje Boma (20mm), Masambanjati (15mm), Satemwa and Nsanje Boma(14mm), Mpemba (12mm) and Thyolo Met (11mm).

Sporadic rains are most likely to persist over Malawi in the month of October until major rain bearing systems get established over the country, normally between November and December.

### 1.2 MEAN AIR TEMPERATURE

Mean maximum air temperatures were in the warm to hot category except in lower Shire Valley where Ngabu reported an average maximum temperatures of 36°C. Overall, average maximum temperatures ranged from 26°C at Dedza to 36°C at Ngabu while average minimum temperatures ranged from 16°C at Dedza to 25°C at Monkey Bay. See Table 1 for more details.

### 1.4 MEAN WIND SPEEDS

Average Wind speeds at a height of two metres above the ground level ranged from 0.9 at Nkhata Bay to 5.3 metres per second at Chitipa or 3.2 – 19.1 Km/hr (see Table 1).

### 1.5 MEAN RELATIVE HUMIDITY

During the period under review, air over Malawi was generally dry except for southern Malawi where most areas were relatively moist. Daily average relative humidity values ranged from 38

% at Chitipa in the north to 74 % at Ngabu in lower Shire Valley. Details are on the Table 1 on page 2.

### 2.AGROMETEOROLOGICAL ASSESSMENT

During the period under review, the main on-farm agricultural activity in Malawi continued to be land preparation in readiness for the coming main rains,. The sporadic rains that were received in the south encouraged farmers to speedup land preparation if they are to plant with the first main rains.

### 3. PROSPECTS OF 2009/10 RAINFALL SEASON

Climate models indicate that during October to December 2009, the northern half of Malawi is most likely to receive normal to above normal rainfall while the Southern half is most likely to receive above normal to normal rainfall.

During the period January to March 2010, the northern half of Malawi is most likely to receive above normal to normal rainfall while the Southern half is most likely to receive normal to above normal rainfall.

The potential Agriculture impact of above-normal rains that are expected this season is that this will provide reasonably good chances of good agricultural success, although provision should be made for possibility of flooding, particularly in the low-lying areas

### 4.OUTLOOK 21 – 30 OCTOBER 2009

During the period 21 - 31 October 2009 Malawi is most likely to experience hot weather with sporadic thunderstorms and rain showers.

**TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 11 – 20 OCTOBER 2009**

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BVUMBWE	27.0	16.9	30.7	15.0	2.9	59
BOLERO	31.8	20.7	32.6	19.0	N/A	40
CHILEKA	30.4	21.3	34.0	19.9	3.7	53
NTAJA	32.9	21.3	34.5	19.6	2.7	49
CHITEDZE	30.5	16.8	31.7	15.2	1.5	46
CHITIPA	30.8	19.9	31.8	19.2	5.3	38
DEDZA	25.7	16.1	27.2	14.3	1.7	57
KASUNGU	30.6	19.5	31.7	18.7	3.7	44
KARONGA	34.4	22.3	36.0	21.9	2.6	40
K I A	28.8	16.9	30.0	15.4	2.3	45
MAKOKA	30.8	18.6	31.6	16.7	2.0	56
MANGOCHI	N/A	23.9	N/A	22.6	2.0	41
MIMOSA	32.0	18.1	35.0	16.5	1.7	56
MONKEY BAY	34.0	25.0	35.2	22.2	2.6	42
MZIMBA	29.5	19.5	30.3	18.5	2.2	44
MZUZU	28.0	14.0	29.4	18.0	2.2	45
NGABU	36.2	23.8	39.8	21.1	3.7	74
NKHATA BAY	33.9	17.9	34.7	16.7	0.9	49
SALIMA	32.5	22.5	33.8	20.3	2.7	46
THYOLO	29.6	18.8	32.5	17.0	N/A	71

**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