

# 10-Day Rainfall & Agromet Bulletin

# **Department of Meteorological Services**



Period: 11 – 20 October 2007 Season: 2007/2008

Release date: 25 October 2007

#### HIGHLIGHTS

- Malawi continued to be mostly dry and hot...
- Land preparation continues in most areas...
- Sporadic rainfall expected during 21 31 October 2007...

# 1.1 RAINFALL SITUATION

During the second ten days of October Malawi remained mostly under the influence of warm north easterly air mass. Hence the country generally experienced dry weather during the period except for a few places mainly over the south where light rainfall was reported. During the period places that reported significant rainfall amounts included Chiradzulu Agriculture 24.2mm and Chancellor College 22.5mm.

Rainfall is expected to continue being sporadic until the main rain bearing systems become established over the country.

# **1.2 MEAN AIR TEMPERATURE**

Hot temperatures continued over the country. Mean maximum temperatures ranged between 27°C at Mzuzu to 36 °C at Ngabu in Shire Valley. On the other hand, mean minimum temperatures were generally mild. They ranged between 14.3°C at Bvumbwe to 24.0 °C at Monkey Bay.

#### 1.3 MEAN DAILY WIND SPEEDS

Mean wind speeds observed at a height of two meters above the ground ranged from 1 and 5.5 m/s or 3.6 - 19.8 Km/hr (see table). Chitipa reported the highest wind speed of 5.5 m/s.

#### 1.4 MEAN RELATIVE HUMIDITY

Daily mean relative humidity over Malawi ranged from 43 to 60% implying that the atmosphere was fairly dry during the second ten days of October 2007.

# 2. AGROMETEOROLOGICAL ASSESSMENT

The major agricultural activity in Malawi during the period under review was land preparation in readiness for the main rains.

#### 3. PROSPECTS OF 2007/08 SEASON

Malawi has 35% chance of rainfall total being above normal, 40% chance of being normal and 25% chance of being below normal. During the period January to March 2008, the northern half of Malawi has 35% chance of above normal rainfall, 40% of normal rainfall and 25% chance of below normal rainfall while the Southern half has 40% chance of above normal rainfall, 35% of normal rainfall and 25% chance of below normal rainfall.

In summary, the models suggest that during 2007/2008 rainfall season, a greater part of Malawi will experience normal to above normal total rainfall amounts with an increased chance of floods.

# 4. OUTLOOK FOR 21 – 31 OCTOBER 2007

Air over Malawi is expected to be relatively moist and unstable hence isolated thunderstorms are expected over Malawi during 21 - 31 October 2007. Temperatures will continue to be hot to very hot.

# TABLE FOR AGROMETEOROLOGICAL PARAMETERS FOR THE PERIOD 11 – 20 OCTOBER 2007

STATION	MAX	MIN	ABS	ABS	WIND	RH
	TEMP	TEMP	MAX	MIN	SPEED	
	(℃)	(℃)	(℃)	(℃)	m/s	%
BVUMBWE	27.6	14.3	30.4	12.7	2.9	55
BOLERO	31.2	19.5	32.3	15.7	1.0	43
CHICHIRI	28.0	16.6	31.0	13.0	1.2	50
CHILEKA	30.9	19.9	33.5	18.2	3.7	53
NTAJA	31.4	20.3	34.0	19.0	2.8	55
CHITEDZE	29.8	15.9	31.4	14.8	1.5	48
CHITIPA	30.0	18.5	30.9	17.2	5.5	43
KARONGA	33.9	22.6	36.0	21.0	2.0	48
K.I.A.	28.6	15.8	29.8	13.9	2.7	51
MAKOKA	30.2	17.1	31.4	15.6	1.7	55
MIMOSA	35.2	18.7	38.1	14.6	1.8	55
MONKEY BAY	32.8	24.0	31.5	21.5	2.9	52
MZIMBA	28.7	18.4	30.0	16.6	1.8	50
MZUZU	27.0	15.4	28.4	10.5	2.3	59
NGABU	35.6	22.7	38.4	20.2	4.3	46
NKHOTAKOTA	31.0	21.0	33.0	19.5	1.8	60
SALIMA	32.5	22.4	34.5	20.9	3.4	51

# 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