REPUBLIC OF MALAWI

Ministry of Natural Resources, Energy and Mining
Department of Climate Change and Meteorological Services

10-day Weather and Agrometeorological Bulletin

In support of national early warning systems and food security

Be wise be weather-wise

Period: 21 – 31 October 2015 | Season: 2015/2016 | Issue No.3

Release date: 4 November 2015

HIGHLIGHTS

- **Locally heavy rains and strong winds destroy homes in Mzimba…**
- **Land preparation was in progress in most parts of the country…**
- **Good prospects for rainfall activities during 01 to 10 November 2015…**

1.0 WEATHER SUMMARY

During the period 21 to 31 October 2015, fairly moist and unstable air mass covered Malawi particularly during the last three days. As a result sporadic locally heavy rainfall was reported in some parts of the country.

1.1 RAINFALL SITUATION

According to reports, during the last ten days of October 2015 heavy rains that poured in some parts of the country had left over 50 families homes in Chief Mthwalo in Mzimba district. The heavy rains were accompanied by strong winds and blew off roofs of buildings that included private homes. Most areas had recorded above average rainfall. Many stations had reported significant rainfall amounts but stations with at least 20mm of rainfall in northern Malawi included Mzimba Met which in three days had recorded 44.2mm, Nkhata Bay Met 31.9mm in two days and Nyika-Chelinda had 21.5mm in three days, in central region Kamuzu International Airport had recorded 21.2mm while in the south significant rainfall amounts were reports at Lujeri Tea Estate (34mm) and Makoka (20.8mm). Sporadic rains are likely to persist over Malawi until major rain bearing systems get established over the country, usually between November and December.

1.3 AIR TEMPERATURE

Warm to hot temperatures had persisted over most parts of Malawi during the last ten days of October 2015. Average maximum temperatures had ranged from 26.4°C at Dedza Met to 36.3°C at Ngabu Met in Chikwawa while average minimum temperatures had ranged from 14.8°C at Dedza Met to 24.2°C at Monkey Bay in Mangochi. The highest maximum temperature was still recorded at Ngabu (39.4°C) in Chikwawa while the lowest temperature was 12.6°C recorded at Dedza Met in Dedza district. For more details see Table 1.

1.4 WIND SPEEDS

Average wind speeds measured at a height of two metres above the ground level across the country varied from 3.6Km per hour at Nkhata Bay Met to 15.1km per hour at Chileka Airport. More details are in Table 1.

1.5 RELATIVE HUMIDITY

During the last ten days of October 2015, there was slight improvement in amount of air moisture over Malawi. Daily average relative humidity values collected from various stations in Malawi had ranged from 45% at Ngabu Met to 61% at Makoka Met. Details are on the Table 1.

1.6 SUNSHINE HOURS

During the last ten days of October 2015 daily average hours of bright sunshine across Malawi had ranged from 7.7 at Chitedze to 10.6 at Makoka Met. Details are on the Table 1.

2. AGROMETEOROLOGICAL ASSESSMENT

Heavy rains that fell in some parts of the country had encouraged farmers to speed up land preparation in readiness for the coming 2015/16 main rainfall season. A few farmers were prompted to start planting crops but on a very small scale. Land preparation remained the major on-farm agricultural activity in Malawi.

3. PROSPECTS FOR 2015/16 RAINFALL SEASON

The rainfall outlook for the 2015/16 season is that most parts of Malawi are likely to receive normal to above normal rainfall amounts during the season. However, a few areas particularly in the Shire Valley are likely to receive low rainfall amounts towards the end of season.

4. OUTLOOK FOR 01 – 10 NOVEMBER 2015

Models for short to medium range weather forecasts show good prospects for rainfall activities and strong southeasterly winds over Malawi within the forecast period especially from 3rd to 5th November 2015.

All inquiries should be addressed to: The Director of Climate Change and Meteorological Services, P.O. Box 1808, Blantyre, MALAWI
Tel: (265) 1 822 014/106 Fax: (265) 1 822 215 E-mail: metdept@metmalawi.com Homepage: www.metmalawi.com

TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 21 TO 31 OCTOBER 2015

ADD/ STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED Km/hour	RH %	SUN SHINE HOURS	Eo mm per day	Et mm per day	RAD-TION calcm^{-2} p/day
KARONGA ADD										
Chitipa	30.4	20.1	32.8	18.5	14.8	54	8.3	8.2	6.7	9.8
Karonga	34.2	23.4	36.5	22.0	7.9	50	8.7	8.5	6.9	10.1
MZUZU ADD										
Bolero	32.0	21.3	33.1	20.0	7.2	50	9.1	8.1	6.5	10.4
Mzimba	29.5	18.4	31.4	17.5	7.6	54	8.9	7.6	6.0	10.3
Mzuzu	28.0	16.0	29.0	13.4	7.2	57	9.0	7.2	5.6	10.3
Nkhata Bay	34.5	19.4	35.9	17.9	3.6	57	9.0	7.7	6.1	10.3
KASUNGU ADD										
Kasungu	31.8	18.3	33.1	17.0	9.4	46	8.0	7.7	6.3	9.6
LILONGWE ADD										
Chitedze	27.8	17.7	32.3	16.7	4.0	47	7.7	6.7	5.3	9.4
Dedza	26.4	14.8	28.1	12.6	10.4	54	8.4	7.0	5.6	9.8
KIA	29.3	16.2	31.2	15.0	7.6	48	8.3	7.2	5.7	9.8
SALIMA ADD										
Nkhota kota	31.5	23.4	33.2	22.4	7.6	53	9.2	8.6	7.0	10.4
Salima	32.7	23.8	35.0	22.4	9.0	52	9.5	8.6	7.0	10.6
MACHINGA ADD										
Makoka	33.2	18.3	32.4	14.6	6.8	61	10.6	8.3	6.5	11.3
Mangochi	33.9	22.8	36.2	21.5	4.3	52	8.9	8.0	6.4	10.2
Monkey Bay	32.6	24.2	35.0	22.6	10.8	54	9.6	9.0	7.3	10.6
Ntaja	31.4	20.5	34.2	18.3	10.1	53	8.6	8.0	6.5	10.0
BLANTYRE ADD										
Bvumbwe	27.8	16.4	31.9	14.4	8.6	54	9.4	7.4	5.8	10.4
Chichiri	29.3	16.6	31.4	13.2	7.6	51	9.0	7.3	5.8	10.2
Chileka	31.7	19.2	33.6	15.3	15.1	49	9.5	8.8	7.2	10.5
Mimosa	32.6	17.5	34.7	16.0	5.8	46	9.0	7.6	6.0	10.2
SHIRE VALLEY ADD										
Ngabu	36.3	22.8	39.4	21.5	14.4	45	9.6	9.8	8.1	10.5

Glossary of some terms on this table

- Eo = Potential Evaporation, Et = Potential Evapotranspiration and 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