



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: 01 – 10 November 2015

Season: 2015/2016

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HIGHLIGHTS

- Significant rainfall amounts received in some parts of Malawi...
- Land preparation and procurement of farm inputs was in progress...
- Sporadic moderate to heavy rains expected during 11 to 20 November 2015...

1.0 WEATHER SUMMARY

During the period 01 to 10 November 2015, air over Malawi was fairly moist and unstable particularly during the first five days. As a result fairly good rainfall amounts were reported over the country.

1.1 RAINFALL SITUATION

During the first ten days of November 2015 moderate to heavy rainfall was reported in some parts of Malawi. Many stations had reported significant rainfall amounts but stations with at least 65mm of rainfall were confined to northern Malawi and had included Mzuzu Met which in three days had recorded 105.8mm, Chitheche Agric 100.1mm in two days and Nkhata Bay Met had reported 65mm in two days. Elsewhere high rainfall amounts were recorded in Mulanje district where Mulanje Agric had registered 63.3mm, Mimosa 62mm and Thuchila Agric had 53mm. Other rainfall figures of above 25mm were reported as follows: Mzimba Met 49mm, Mwanza Agric 39mm, Toleza Farm in Balaka 38mm, Chelinda (Nyika) 35mm, Mbawa Research Station in Mzimba 34mm, Kaluluma in Kasungu had recorded 29mm, Ntaja in Machinga had 28mm, Ntchisi Agric 27mm while Embangweni Agric recorded 26mm. Sporadic rains are likely to persist over Malawi until major rain bearing systems get established, usually between November and December.

1.3 AIR TEMPERATURE

Generally hot temperatures were experienced over Malawi during the first ten days of November 2015. Average maximum temperatures had ranged from 25.1°C at Dedza Met to 35.5°C at Ngabu Met in Chikwawa while average minimum temperatures had ranged from 14.8°C at Dedza Met to 22.7°C at Karonga Met. The highest maximum temperature was still recorded at Ngabu (43.7°C) in Chikwawa while the lowest temperature was 9.3°C recorded at Dedza Met. 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 3.2Km 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 first ten days of November 2015, there was a significant increase in amount of air moisture over most parts of Malawi. Daily average relative humidity values collected from various stations in Malawi had ranged from 46% at Kasungu Met to 67% at Chitipa Met. Details are on the Table 1.

1.6 SUNSHINE HOURS

During the first ten days of November 2015 daily average sunshine across Malawi had dropped due to an increase in cloudiness. The lowest was reported at Bolero Met (6.3) while the highest was 10.3 reported at Nkhata Bay Met (Mkondezi). Details are on the Table 1.

2. AGROMETEOROLOGICAL ASSESSMENT

Moderate to 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 in areas where significant rainfall was received particularly in northern Malawi and some parts of Mulanje district in the south were reported to have started planting crops. Land preparation and procurement of farm inputs was in progress in most parts of 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 11 – 20 NOVEMBER 2015

Models for short to medium range weather forecasts show that Malawi is likely to experience sporadic moderate to heavy rains during the period 11 to 20 November 2015.

TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 01 TO 10 NOVEMBER 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	29.1	18.4	32.0	16.7	10.4	67	6.7	6.8	5.5	8.8
Karonga	33.0	22.7	39.0	20.5	8.3	55	7.8	8.0	6.5	9.5
MZUZU ADD										
Bolero	30.6	19.3	35.0	15.1	7.2	57	6.3	6.8	5.5	8.6
Mzimba	28.0	17.2	31.6	14.7	6.5	59	7.4	6.7	5.3	9.3
Mzuzu	26.7	15.8	33.1	12.4	7.6	66	6.9	6.3	5.0	9.0
Nkhata Bay	35.1	19.2	36.2	16.6	3.2	54	10.3	8.2	6.5	11.2
KASUNGU ADD										
Kasungu	31.0	18.1	34.9	13.4	8.3	46	7.8	7.5	6.1	9.6
LILONGWE ADD										
Chitedze	29.6	16.8	33.3	18.3	4.7	51	7.9	6.9	5.5	9.6
Dedza	25.1	14.8	30.6	9.3	11.2	56	6.8	6.5	5.3	8.9
KIA	28.9	17.0	33.5	12.0	8.3	51	7.3	7.0	5.6	9.2
SALIMA ADD										
Nkhota kota	30.9	22.1	34.5	19.5	10.8	51	9.6	9.1	7.5	10.7
Salima	31.8	22.3	36.7	20.0	11.9	49	8.3	8.4	6.9	9.8
MACHINGA ADD										
Makoka	28.2	15.6	35.2	11.5	7.9	60	7.6	6.8	5.4	9.4
Mangochi	32.4	21.2	36.5	16.9	5.4	54	8.2	7.7	6.2	9.8
Monkey Bay	32.0	22.3	35.7	18.1	11.2	50	8.0	8.3	6.9	9.7
Ntaja	30.8	20.6	37.3	15.0	9.4	51	7.2	7.6	6.2	9.1
BLANTYRE ADD										
Bvumbwe	26.8	16.5	34.3	10.8	7.2	60	7.6	6.7	5.3	9.4
Chichiri	28.2	17.4	36.0	11.6	7.6	57	7.5	6.9	5.5	9.3
Chileka	31.3	19.6	38.2	11.6	15.1	49	7.4	8.3	6.8	9.2
Mimosa	28.2	16.6	35.2	11.5	7.9	60	7.6	6.8	5.5	9.4
SHIRE VALLEY ADD										
Ngabu	35.5	22.3	43.9	17.2	11.2	53	10.0	9.4	7.7	10.9

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