



Government of Malawi
Ministry of Natural Resources, Energy and Mining

Malawi 10-day Weather and Agrometeorological Bulletin

"In support of National Early Warning Systems and Food Security"



Be wise be weather-wise
Department of Climate Change and
Meteorological Services

Period: 01 – 10 November 2019

Season: 2019/2020

Issue No.04

Release date: 15 November 2019

HIGHLIGHTS

- Isolated rainfall experienced over Malawi ...
- Land preparation and procurement of farm inputs remained major agro-activities...
- Local instability is likely to enhance rainfall activities mostly over Southern and Central Malawi....

1.0 WEATHER SUMMARY

During the period 01 to 10 November 2019, warm easterly airmass influenced weather over Malawi. As a result, isolated thundery activities were experienced over Malawi.

1.1 RAINFALL SITUATION

During the period 01 to 10 November 2019, light to moderate rainfall amounts were recorded over Malawi. The highest recorded rainfall amount was 67.4mm at Ntchisi Agriculture. Mpemba Vet recorded 44.7mm, Salima Meteorological station recorded 37.8mm, Makhanga meteorological station recorded 30.2mm, Chikangawa recorded 28.1mm, Lifuwu in Salima recorded 22.9mm, Chichiri Meteorological station recorded 13.5mm, Lisasadzi recorded 13.3mm, Madisi Agriculture recorded 11.2mm and Chiradzulu Agriculture reported 10.0mm.

1.3 AIR TEMPERATURE

Generally hot temperatures were experienced over Malawi during the period 01 to 10 November 2019. Mean daily maximum temperatures had ranged from 26.7°C at Dedza to 38.2°C at Ngabu. On the other hand, mean daily minimum temperatures had ranged from 16.6°C at Dedza to 25.3°C at Ngabu Meteorological station. Details in Table 1.

1.4 WIND SPEED

During the period 01 to 10 November 2019 most parts of Malawi experienced light wind speeds. Daily average wind speeds measured at a height of two metres above the ground level across the country had ranged from 3.6 km per hour at Nkhata Bay Meteorological station to 13.3 km per hour at Chileka Meteorological station in Blantyre. More details in Table 1.

1.5 RELATIVE HUMIDITY

During the period 01 to 10 November 2019, air over Malawi was generally dry. Daily average relative humidity values recorded from various weather stations in Malawi had ranged from 40% at Monkey Bay Meteorological station to 64% at Dedza and Bvumbwe Meteorological stations. Details as in Table 1.

1.6 SUNSHINE HOURS

Generally medium to long hours of bright sunshine were observed over Malawi during the period under review. Daily values had ranged from 7.5 hours per day at Mimosa to 11.4 hours per day at Karonga Meteorological station and consequently the amount of Solar Radiation had ranged from 9.3 to 11.9 cal/cm²/day. For details see Table 1.

2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review, the main agro-activities over Malawi included land preparation and procurement of farm inputs in readiness for effective planting rains.

3. PROSPECTS FOR 2018/2019 RAINFALL SEASON

ENSO-neutral conditions have become established over central tropical Pacific Ocean. Climate models are projecting that the ENSO-neutral conditions are likely to persist throughout the 2019/2020 rainfall season. Based on these expectations and other analyses conducted, the rainfall forecast for the 2019/2020 is that:

"During October to December 2019, most of the north and northern parts of central areas of the

country are expected to receive normal to below normal rainfall amounts, while most of the south and southern parts of central areas are expected to receive normal to above normal rainfall amounts;

During January to March 2020, most of the north and northern parts of central areas of the country are expected to receive above normal to normal rainfall amounts, while southern areas and southern parts of

central areas are expected to receive normal to below normal rainfall amounts.”

4. OUTLOOK FOR 11-20 NOVEMBER 2019

Models for short and medium range forecasts indicate that local instability is likely to enhance convective activities mostly over southern and central Malawi during the second ten days of November 2019.

TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 01 TO 10 NOVEMBER 2019

STATION/ADD	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED Km/Hr	RH %	SUN SHINE HOURS	Eo mm per day	Et mm per day	RADIATION cal cm ⁻² p/day
KARONGA ADD										
CHITIPA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
KARONGA	35.9	23.4	37.4	21.3	10.4	44	11.4	13.5	11.6	11.9
MZUZU ADD										
BOLERO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MZIMBA	30.2	19.1	31.9	16.8	7.6	53	10.4	10.0	8.3	11.2
MZUZU	29.2	18.2	30.1	14.8	7.2	56	10.7	9.6	7.9	11.5
NKHATA BAY	35.7	20.8	36.9	17.8	3.6	55	7.6	8.5	7.0	9.4
KASUNGU ADD										
KASUNGU	31.3	20.3	33.0	17.0	11.5	44	7.6	11.5	10.1	9.4
LILONGWE										
CHITEDZE	31.4	18.5	32.7	16.8	4.3	53	8.1	8.3	6.8	9.7
DEDZA	26.7	16.6	28.5	14.3	4.7	64	7.8	7.3	5.9	9.5
K I A	31.0	18.7	32.4	15.5	9.4	54	9.6	10.3	8.7	10.7
SALIMA ADD										
NKHOTAKOTA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SALIMA	33.0	24.6	35.6	21.3	9.0	57	9.3	7.2	5.9	10.5
MACHINGA ADD										
NTAJA	33.0	21.7	34.9	20.1	4.2	57	7.7	8.1	6.5	9.4
MAKOKA	31.2	18.6	32.6	16.6	4.0	61	7.6	7.8	6.3	9.4
MANGOCHI	33.5	23.6	37.8	22.1	4.0	55	8.1	8.9	7.3	9.7
MONKEY BAY	27.7	19.6	35.5	19.0	6.5	40	7.8	9.4	7.9	9.5
BLANTYRE ADD										
BVUMBWE	28.9	17.7	31.7	15.2	9.0	64	7.6	8.6	7.2	9.4
CHICHIRI	30.7	18.5	34.3	16.1	5.8	52	7.7	8.6	7.2	9.4
CHILEKA	33.0	20.9	35.7	18.0	13.3	49	8.1	12.4	10.9	9.7
MIMOSA	33.6	19.2	36	17.0	4.7	46	7.5	8.8	7.4	9.3
SHIRE VALLEY ADD										
NGABU	38.2	25.3	42.1	23.7	5.4	45	8.1	10.6	9.0	9.7

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 Kilometres per hour (Km/hr) to Meters Per Second (mps) = Km/hr ÷3.6