



Government of Malawi
Ministry of Natural Resources, Energy
and Mining

Malawi 10-day Weather and Agrometeorological Bulletin

"Produced 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 October 2018

Season: 2018/2019

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HIGHLIGHTS

- Hot and dry weather existed in most parts of Malawi...
- Land preparation remained in progress over most parts...
- Sporadic rainfall expected to continue during 11 to 20 October 2018...

1.0 WEATHER SUMMARY

During the period 01 to 10 October 2018, hot and dry north easterly airmass covered most parts of Malawi. As a result mostly dry weather conditions had prevailed over Malawi except at very few places where pre-season rainfall that is locally known as Chidzimalupsya was reported.

1.1 RAINFALL SITUATION

During the first ten days of October 2018 sporadic pre-season rainfall was reported over Malawi. However, the amounts were generally less than 1mm except at Mzuzu where 24mm of rainfall was collected. Sporadic pre-season rainfall (Chidzimalupsya) is likely to persist over Malawi during the month of October 2018 until major rain bearing systems get established over the country.

1.3 AIR TEMPERATURE

Hot temperatures were reported over Malawi during the period 1 to 10 October 2018. Mean maximum temperatures had ranged from 24.6°C at Mzuzu Met to 32.6°C at Karonga Met in Karonga district while mean minimum temperatures had ranged from 12.2°C at Dedza Met in Dedza to 21.6°C at Monkey Bay in Mangochi. In absence of data from Ngabu in lower Shire Valley, the the highest maximum temperature was 34.5°C and was recorded at Karonga Airport. while the lowest temperature was 10°C recorded at Dedza Met. For more details see Table 1.

1.4 WIND SPEEDS

Mean wind speeds measured at a height of two metres above the ground level across Malawi had ranged from 3.6km per hour at Nkhotakota Met to 20.5km per hour at Chitipa Met. More details are in Table 1.

1.5 RELATIVE HUMIDITY

During the first ten days of October 2018, air over Malawi was generally dry. Daily average relative humidity values ranged from 35% at Monkey Bay Met to 67% at Mzuzu Met. Details are on the Table 1.

1.6 SUNSHINE HOURS

During the period 1 to 10 October 2018 durations of mean bright sunshine hours across Malawi had ranged from 8.6 to 9.9 hours per day and consequently the amount of solar radiation at most places was over 10.0 cal/cm²/day. Details are on the Table 1.

2. AGROMETEOROLOGICAL ASSESSMENT

During the first ten days of October 2018 the main on-farm agricultural activity in Malawi has been land preparation in readiness for 2018/2019 main rainfall season.

3. PROSPECTS FOR 2018/19 RAINFALL SEASON

Global models are projecting the development of weak to moderate El Nino conditions between September and November 2018 which are likely to persist throughout the 2018/2019 rainfall season. Based on these expectations, the rainfall forecast for the 2018/19 season in Malawi is that:

"During the period October 2018 to March 2019, most of the northern areas spilling over into north of central areas of the country are expected to receive normal to above normal rainfall amounts, while most of the southern areas spilling over into south of central areas of the country are expected to receive normal to below normal rainfall amounts."

Thus at national level, better chances for "good rains" are over the north and northern part of central Malawi, while higher chances for erratic and suppressed rainfall amounts are in the south and southern areas of central Malawi.

4. OUTLOOK FOR 11 – 20 OCTOBER 2018

Models for short and medium range forecasts indicate that local instability is likely to enhance convective activities and strong winds particularly over southern and central Malawi during the period 11 to 20 October 2018.

TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 01 TO 10 OCTOBER 2018

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	28.3	17.1	29.9	14.6	20.5	50	9.4	8.7	7.1	10.5
Karonga	32.6	20.7	34.5	20.2	8.6	51	9.7	8.4	6.8	10.7
MZUZU ADD										
Bolero	30.1	19.7	31.4	15.8	6.8	43	9.6	7.8	6.2	10.5
Mzimba	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mzuzu	24.6	15.2	26.6	13.6	6.8	67	8.6	6.4	4.9	9.8
Nkhata Bay	31.1	17.8	32.2	14.6	3.6	62	8.6	6.9	5.5	9.8
KASUNGU ADD										
Kasungu	27.8	15.3	29.4	13.0	8.6	51	9.6	7.3	5.7	10.5
LILONGWE ADD										
Chitedze	28.8	15.0	30.7	13.1	4.7	50	9.9	7.0	5.5	10.7
Dedza	24.9	12.2	24.6	10.0	7.2	50	9.5	6.6	5.1	10.4
KIA	27.7	13.9	29.0	12.0	7.9	47	9.9	7.2	5.6	10.7
NKHOTA KOTA										
Nkhota kota	30.5	20.4	31.9	18.4	3.6	51	9.6	7.6	6.0	10.5
Salima	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MAKOKA										
Makoka	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MANGOCHI										
Mangochi	32.3	19.5	34.0	16.8	5.0	52	9.9	7.8	6.2	10.7
MONKEY BAY										
Monkey Bay	31.5	21.6	32.9	21.2	11.2	35	9.9	8.8	7.1	10.7
NTAJA										
Ntaja	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLANTYRE ADD										
Bvumbwe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chichiri	26.7	15.0	30.8	13.0	7.9	53	9.0	6.9	5.4	10.0
Chileka	29.1	17.7	32.5	16.1	14.0	46	9.3	8.1	6.6	10.2
Mimosa	29.1	16.0	33.0	13.6	5.0	55	9.5	7.0	5.5	10.4
SHIRE VALLEY ADD										
Ngabu	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Glossary of some terms on this table

- Eo = Potential Evapotranspiration, Et = Actual Evapotranspiration and RH = Mean 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
- N/A – means data was not available at the time of reporting