

# Malawi 10-Day Rainfall & Agromet Bulletin

## **Department of Meteorological Services**



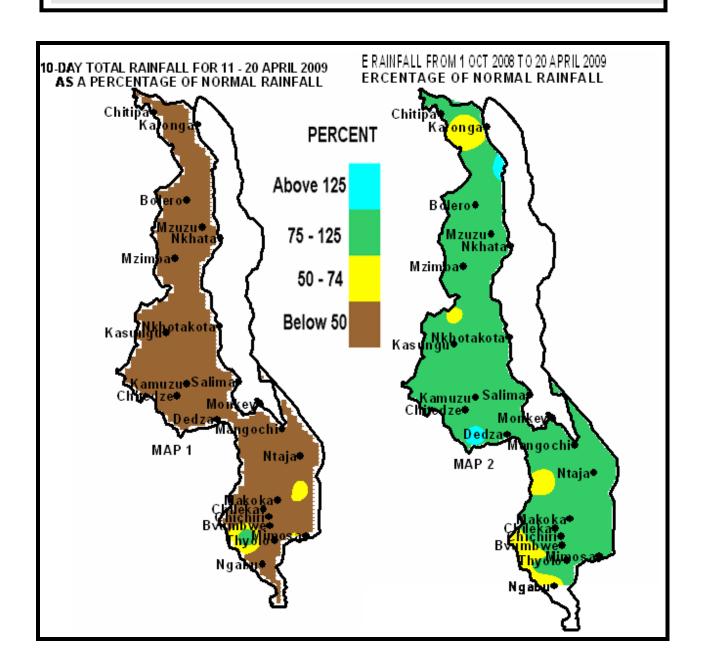
eriod: 11 – 20 April 2009 Season: 2008/2009

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### **HIGHLIGHTS**

- Dry conditions experienced over most areas...
- Crops were mostly at drying and harvesting stages...
- Generally light rainfall expected during 21 30 April 2009...



#### 1. WEATHER SUMMARY

#### 1.1 RAINFALL SITUATION

During the second ten days of April 2009, rainfall was confined to very few areas mostly over southern highlands and dry conditions were experienced over most parts of Malawi as the main rainfall season comes to an end. Stations that registered ten day cumulative rainfall amounts of more than 20mm during the period included Mulanje Boma (37mm), Mimosa and Zomba RTC (24mm) in the south and Nkhata Bay Met (22mm) in the north. Otherwise many stations reported little or nil rainfall during the entire ten day period. More details are in Table 1.

Cumulative rainfall situation Map for the period from 1<sup>st</sup> October 2008 up to 20 April 2009 shows that a greater part of Malawi had attained between 75 and 125 percent of the expected rainfall amounts for the period (green colour on Map 2) with just a few pockets of below average cumulative rainfall amounts (yellow colour on Map 2).

#### 1.2 MEAN AIR TEMPERATURE

During the period 11 to 20 April 2009 warm to hot temperatures were reported over Malawi. The daily average maximum temperatures ranged from 22°C at Dedza to 31°C at Ngabu..The highest absolute maximum temperature was 37°C recorded at Ngabu in Chikwawa and Dedza Met with 24°C reported the lowest.. The lowest daily average minimum temperatures ranged from 12 to 19°C while the absolute minimum temperatures at Kamuzu International Airport went as low as 9°C See details in Table 2.

## 1.3 MEAN DAILY WIND SPEEDS

Daily average wind speeds recorded at a height of two meters above the ground continued to be light. The highest average wind speed was 3.3m/s or 11.9Km/hr reported at Chileka International Airport in Blantyre. More details are in Table 2.

#### 1.4 MEAN RELATIVE HUMIDITY

The average daily relative humidity values continued to decrease during the period 11 to 20 April 2009 implying the atmosphere was drier than the previous ten day periods. Daily average relative humidity values ranged from 54 to 79 percent.

## 2. AGROMETEOROLOGICAL ASSESSMENT

During the period 11 to 20 April, 2009, the dry weather that covered most parts of Malawi facilitated harvesting and drying of matured crops. The general crop stand in the fields was generally reported in good condition. Maize crop which is the staple food crop for Malawi was reported mostly at drying and harvesting stages. Harvesting of matured crops was in progress in most parts of Malawi.

The rainfall distribution in both time and space this season has been the best in recent seasons. This has resulted in good crop stand in most fields which should translate into better crop yields possibly the best ever in the history of crop production in Malawi. This could among other factors be attributed to good rainfall performance and successful implementation of Government of Malawi input and fertiliser subsidy programme. The second round results from the Maize Yield assessment model estimate a national maize production of not less than 3,207,806 Metric Tonnes during the 2008/09 growing season.

#### 3. PROSPECTS OF 2008/09 SEASON

Climate prediction models continue to indicate weak La Nina to ENSO neutral conditions in the next few months. The models continue to suggest that normal rainfall amounts are expected over the greater part of Malawi during April to June 2009.

## 4. OUTLOOK FOR 21 – 30 APRIL 2009

Short to medium-term weather forecasts indicate that an influx of cool and moist south easterly air will affect most parts of Malawi during the first four days of the forecast period and mostly warm and dry weather up to 30 April 2009. Therefore expect light rainfall amounts during the first four days and dry weather during the remaining days of April 2009.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR **DEKAD 2 OF APRIL 2009: PERIOD 11 - 20** 

STATION NAME	DEKADAL	DEKADAL	DEKADAL	TOTAL	NORMAL	TOTAL	RAINY
	TOTAL	NORMAL	TOTAL	TO	TO	TODATE	DAYS
	RAINFALL		AS %	DATE	DATE	AS %	
SOUTHERN REGION	mm	mm	NORMAL	mm	mm	NORMAL	<sup>3</sup> 0.3 mm
Bvumbwe Met.	13.2	26.1	51	1232.7	1043.5	118	3
Chichiri Met.	5.6	21.1	27	1065.5	1053.7	101	2
Chikwawa Boma	13.8	13.6	101	516.4	722.8	71	1
Chileka Airport	0.0	16.9	0	818.0	874.6	94	0
Chingale Agric	0.0	21.4	0	814.4	939.3	87	0
Chiradzulu Agric	2.1	24.3	9	834.8	1035.8	81	1
Mpilipili (Makanjila)	0.0	N/A	N/A	1087.7	N/A	N/A	0
Makoka Met	0.4	13.2	3	1046.6	984.7	106	1
Mangochi Met.	2.1	9.2	23	802.3	817.3	98	2
Mimosa Met.	23.8	51.3	46	1542.7	1401.9	110	4
Monkey Bay Met.	0.0	8.5	0	1087.3	912.7	119	0
Mpemba Vet	0.0	24.6	0	1266.8	1134.0	112	0
Mulanje Boma	37.4	63.0	59	1233.6	1577.4	78	3
Namiasi Agric	0.0	3.3	0	764.0	789.5	97	0
Naminjiwa Agric	0.0	11.5	0	1125.8	925.9	122	0
Namwera Agric	0.0	19.6	0	989.9	1051.7	94	0
Nchalo Sucoma	9.6	18.0	53	540.9	668.2	81	1
Ngabu Met.	0.0	17.4	0	524.5	755.3	69	0
Nsanje Boma	0.0	17.1	0	743.9	820.3	91	0
Ntaja Met.	0.9	16.0	6	1091.2	881.6	124	1
Thyolo Met	8.0	30.7	26	1144.5	1119.9	102	1
Zomba R.T.C	23.9	22.2	108	1072.9	1190.7	90	2
CENTRAL REGION							
Chitedze Met.	0.0	14.9	0	824.5	897.0	92	0
Dedza Met	1.3	18.3	7	975.5	926.2	105	1
K.I.A Met	0.4	3.5	11	805.1	823.7	98	1
Lifuwu	0.0	59.8	0	840.9	1321.5	64	0
Lisasadzi	0.0	13.4	0	639.0	805.5	79	0
Malomo Agric	0.0	2.5	0	910.3	810.9	112	0
Mchinji Boma	0.0	22.5	0	1224.9	1027.0	119	0
Mkanda Met	0.0	1.1	0	1107.7	892.8	124	0
Mlangeni Njolomole	2.4	12.9	19	952.2	983.8	97	1
Mponela Agric	0.0	6.7	0	835.4	802.2	104	0
Mtakataka Airwing	0.0	20.6	0	1273.8	845.9	151	0
Nathenje Agric	0.0	19.4	0	951.5	885.7	107	0
Ntchisi Boma	0.0	17.0	0	1008.5	862.2	117	0
Salima Met	0.3	38.6	1	1213.9	1247.2	97	1
NORTHERN REGION							
Bolero Met	0.1	12.5	1	749.6	723.5	104	0
Chitipa Met	0.0	16.7	0	793.4	970.2	82	0
Karonga Met.	0.3	69.2	0	1026.4	1015.7	101	0
Mzimba Met	0.0	14.8	0	777.7	874.9	89	0
Mzuzu Met.	1.8	67.0	3	844.0	1124.9	75	1
NkhataBay Met.	21.9	91.1	24	1227.7	1490.8	82	3

**TABLE 2: AGROMETEOROLOGICAL PARAMETERS** FOR DEKAD 2 OF ARIL 2009

STATION	MAX TEMP	MIN TEMP	ABS MAX	ABS MIN	WIND SPEED	RH
	(℃)	(℃)	(℃)	(℃)	m/s	%
BOLERO	26.8	12.9	29.1	10.2	N/A	72
BVUMBWE	22.7	13.6	27.5	11.8	1.5	77
CHICHIRI	24.0	14.3	25.0	13.5	1.4	70
CHILEKA	25.9	17.0	29.9	14.1	3.3	65
CHITEDZE	25.4	13.3	27.6	11.6	0.9	68
CHITIPA	25.3	15.8	27.6	14.2	2.4	72
DEDZA	22.4	11.9	24.3	9.9	1.1	N/A
K.I.A.	24.5	11.9	26.4	9.0	1.6	67
KARONGA	29.1	20.5	30.1	18.3	1.4	70
MAKOKA	25.2	14.0	27.4	12.2	1.7	67
MANGOCHI	N/A	17.5	N/A	16.5	1.6	69
MONKEY BAY	28.1	18.1	30.3	16.0	1.8	54
MZIMBA	25.9	14.0	28.4	12.7	1.3	57
MZUZU	23.0	13.8	25.6	9.7	2.2	79
NGABU	31.5	18.7	36.5	15.4	1.4	79
NKHATA BAY	27.6	17.1	30.2	14.7	0.8	76
NKHOTA KOTA	27.4	19.2	30.1	17.9	N/A	N/A
NTAJA	26.8	16.9	30.6	15.1	1.4	70
SALIMA	27.0	18.8	29.5	16.2	2.5	65

#### Glossary of some terms on this table

- RH = Relative Humidity
- Mean Temperature of the day =  $(Max ext{ of the day} + Min ext{ of the same day})/2$
- 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