10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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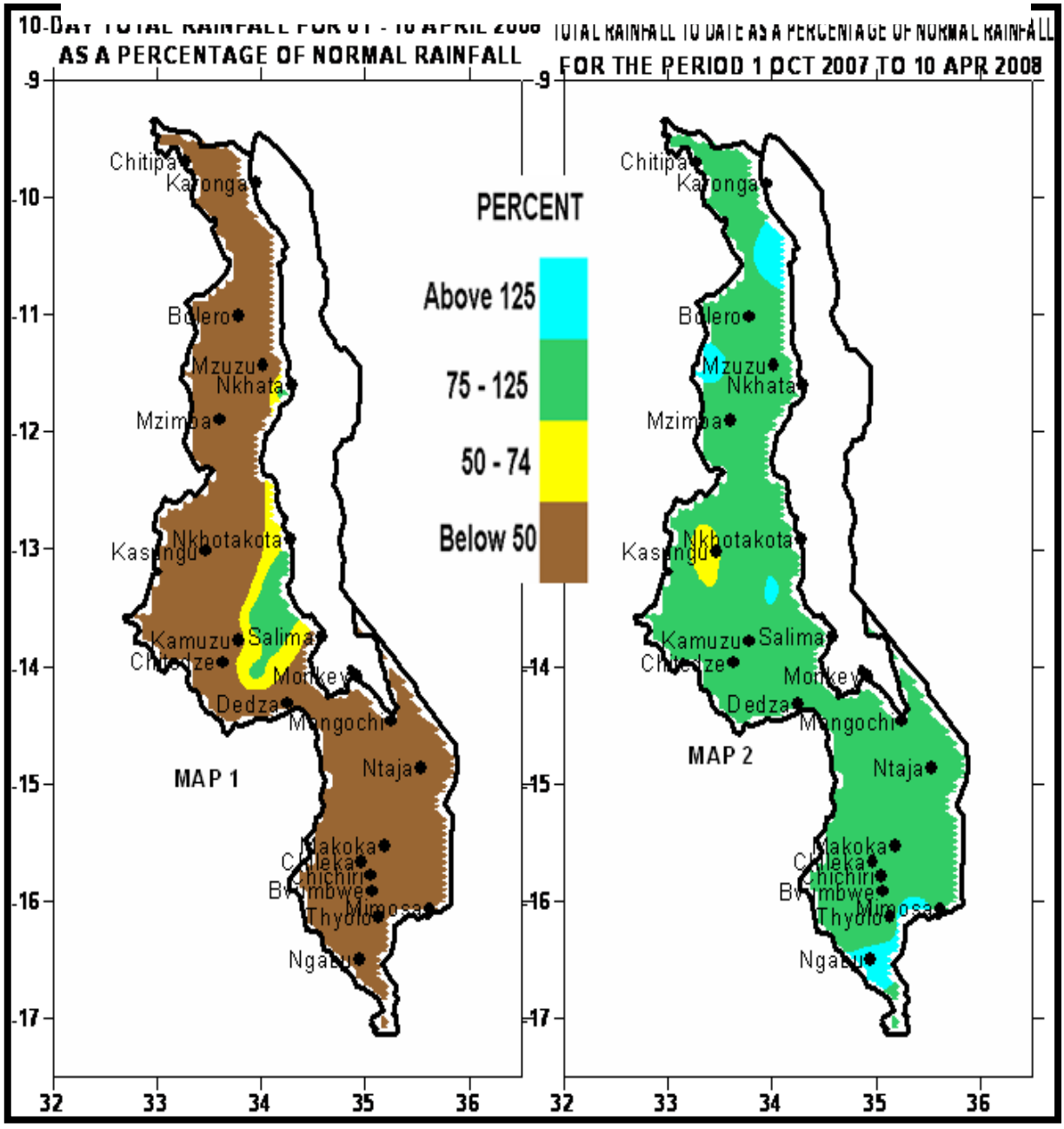
HIGHLIGHTS

- **Dry conditions were experienced over most areas…**
- **Crops were mostly at drying and harvesting stages…**
- **Mostly dry conditions to continue during 11 – 20 April, 2008…**



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1. WEATHER SUMMARY

1.1 RAINFALL SITUATION

During the first ten days of April 2008, mainly drier than normal rainfall conditions were experienced over Malawi save for a few areas over the centre and along the lakeshore which registered significant rainfall amounts causing near normal conditions. The main rain belt, the Inter-Tropical Convergence Zone (ITCZ) was still rooted over East Africa while Malawi was generally under a ridge of high pressure. During the entire period very few areas were occasionally affected by moist easterly airflow. As a result rainfall above 20mm was only reported at very few areas including NkhataBay Met, Chintheche Agric, Dwangwa, Nathenje Agric and Ntchisi Boma (Table 1).

Cumulative rainfall performance from October 2007 to 20 March, 2008 suggests the country has experienced generally normal to slightly above-normal rainfall amounts (green and blue colours on Map 2). However, below average rainfall has been recorded in Kasungu (Yellow colour Map2).

1.2 MEAN AIR TEMPERATURE

Between 1 and 10 April 2008, Malawi experienced warm to hot temperatures during the day. Reported mean daily maximum temperatures ranged between around 24°C and 32°C at Dedza and Ngabu respectively. The highest absolute maximum temperaure was reported at Ngabu (36.3°C) while the lowest absolute minimum temperature was 10.3°C reported at Kamuzu International Airport (Table 2).

1.3 MEAN DAILY WIND SPEEDS

Mean daily wind speeds measured at a height of two meters above the ground were light. The highest speed was reported at Chitipa (5.2 m/s or 18.7 Km/hr) See Table 2.

1.4 MEAN RELATIVE HUMIDITY

Mean Relative Humidity values reported during the period were generally slightly lower than during the previous dekad. The mean daily values ranged from 62% at Ngabu in lower Shire Valley to 82% at Nkhata Bay in the north. See Table 2.

2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review, dry conditions spread and covered most parts of Malawi. The major agricultural activity over the country particularly over the south and some parts of the centre continued to be harvesting and drying of matured crops.

The general crop stand in the fields was reported generally in good condition. Maize crop which is the staple food crop was reported at drying and harvesting stages. However, in some parts of the centre and north the late planted crop is drying prematurely due to early cessation of the main rainfall season. Prospects of a good harvest this season have been compromised by late start of rains in some parts, heavy rains and floods in January and unusually dry conditions in February and March in some areas. The dry spell in February coincided with a more vulnerable stage of crop development. In general crop production this season is expected to be less than last season.

3. PROSPECTS OF 2007/08 SEASON

Most climate prediction models predict the Cold episode (La Niña) to continue through June / July 2008 and rainfall over Malawi is likely to be confined to highlands and lakeshore areas as the main rainfall season comes to an end.

4. OUTLOOK FOR 11 – 20 April 2008

Meanwhile, short to medium-term forecasts suggest that Malawi will mainly be under easterly airflow.. This will result in light rainfall mainly over highlands and along the lakeshore during the forecast period.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 1 OF APRIL 2008: PERIOD 01 - 10

STATION NAME	DEKADAL TOTAL RAINFALL	DEKADAL NORMAL	**DEKADAL TOTAL AS % OF**	TOTAL TO DATE	NORMAL TO DATE	**TOTAL TODATE AS % OF**	RAINY DAYS
SOUTHERN REGION	mm	mm	**NORMAL**	mm	mm	**NORMAL**	
Bvumbwe Met.	6.1	30.0	**20**	1041.5	1017.4	**102**	2
Chichiri Met.	0.0	29.0	**0**	972.6	1032.6	**94**	0
Chikwawa Boma	0.0	20.6	**0**	749.3	709.2	**106**	0
Chileka Airport	3.8	23.6	**16**	910.8	857.7	**106**	1
Chingale Agric	0.0	26.1	**0**	1070.1	917.9	**117**	0
Chizunga Factory	0.0	54.5	**0**	1393.0	1257.8	**111**	0
Liwonde Township	0.2	17.2	**1**	839.1	809.2	**104**	0
Lujeri Tea Estate	15.8	106.5	**15**	2399.1	1850.5	**130**	4
Makoka Met	0.0	27.7	**0**	1136.0	971.5	**117**	0
Mangochi Met.	0.0	18.4	**0**	803.7	808.1	**99**	0
Monkey Bay Met.	0.0	5.8	**0**	1055.0	904.2	**117**	0
Namiasi Agric	0.0	2.9	**0**	850.2	786.2	**108**	0
Naminjiwa Agric	0.0	20.9	**0**	817.5	914.4	**89**	0
Nchalo Sucoma	0.0	19.8	**0**	755.5	650.2	**116**	0
Neno Agric	1.2	31.3	**4**	1278.9	1085.6	**118**	1
Ngabu Met.	0.0	16.2	**0**	971.1	737.9	**132**	0
Nsanje Boma	0.0	16.6	**0**	935.9	803.2	**117**	0
Satemwa Tea Est.	0.0	53.0	**0**	1218.3	1218.3	**100**	0
Thyolo Met	0.4	43.2	**1**	1205.2	1089.2	**111**	1
CENTRAL REGION							
Chitedze Met.	7.4	23.8	**31**	924.2	882.1	**105**	1
Dedza Met	0.0	21.6	**0**	1023.0	907.9	**113**	0
Dowa Agric	20.0	21.0	**95**	996.8	862.1	**116**	1
Dwangwa Sugar Corp.	57.0	108.0	**53**	1334.0	1283.8	**104**	1
K.I.A Met	2.3	16.7	**14**	798.3	820.2	**97**	1
Kasiya Agric	1.5	22.6	**7**	776.4	926.4	**84**	1
Lisasadzi	0.0	15.8	**0**	569.9	792.1	**72**	0
Malomo Agric	2.5	16.3	**15**	992.6	808.4	**123**	1
Mkanda Met	0.0	21.5	**0**	931.9	891.7	**105**	0
Mlangeni Njolomole	0.0	27.4	**0**	995.9	970.9	**103**	0
Mponela Agric	4.0	11.7	**34**	1011.8	795.5	**127**	1
Mwimba Research	0.0	13.4	**0**	649.2	898.4	**72**	0
Nathenje Agric	28.5	29.8	**96**	1054.8	866.3	**122**	3
Ntcheu - Nkhande	0.0	20.0	**0**	1223.6	1031.2	**119**	0
Ntchisi Boma	26.8	24.1	**111**	1033.6	845.2	**122**	1
Salima Met	11.6	42.7	**27**	1270.8	1208.6	**105**	1
Dedza RTC	0.0	22.5	**0**	892.0	967.5	**92**	0
NORTHERN REGION							
Bolero Met	0.0	18.6	**0**	694.0	711.0	**98**	0
Chitipa Met	0.8	30.8	**3**	786.0	953.5	**82**	1
Chintheche Agric	84.5	143.3	**59**	1672.0	1588.2	**105**	3
Karonga Met.	2.5	76.1	**3**	945.9	946.5	**100**	2
Mzimba Met	4.2	19.6	**21**	712.9	860.1	**83**	2
Mzuzu Met.	12.9	87.0	**15**	1084.2	1057.9	**102**	5
NkhataBay Met.	125.5	85.8	**146**	1137.9	1399.7	**81**	6
Vinthukutu Agric	0.0	114.2	**0**	1859.9	1076.3	**173**	0

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 1 OF APRIL 2008

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BOLERO	27.7	15.6	29.0	13.9	1.0	70
BVUMBWE	24.5	14.7	30.0	12.3	2.2	72
CHICHIRI	25.0	15.4	29.9	13.0	1.1	71
CHILEKA	27.6	17.5	32.5	14.5	2.9	67
CHITEDZE	26.7	13.7	29.2	11.3	0.8	66
CHITIPA	26.2	17.1	27.2	16.0	5.2	69
DEDZA	24.0	12.8	25.1	10.6	1.1	67
K I A	26.3	13.2	28.5	10.3	1.8	68
KARONGA	29.8	21.7	31.1	20.9	2.2	67
MAKOKA	26.4	14.3	29.9	10.6	1.4	69
MANGOCHI	30.5	19.4	33.5	16.1	1.8	66
MONKEY BAY	29.9	19.9	32.7	18.1	2.0	63
MZIMBA	26.0	16.3	27.5	15.3	1.5	69
MZUZU	22.5	15.9	25.7	13.0	1.9	85
NGABU	32.1	20.3	36.3	19.1	1.6	62
NKHATA BAY	28.1	19.6	30.9	18.3	0.6	82
NTAJA	28.2	17.9	32.0	15.0	1.8	67
SALIMA	29.0	21.0	31.8	19.9	2.8	64

Glossary of some terms on this table

- 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