Malawi 10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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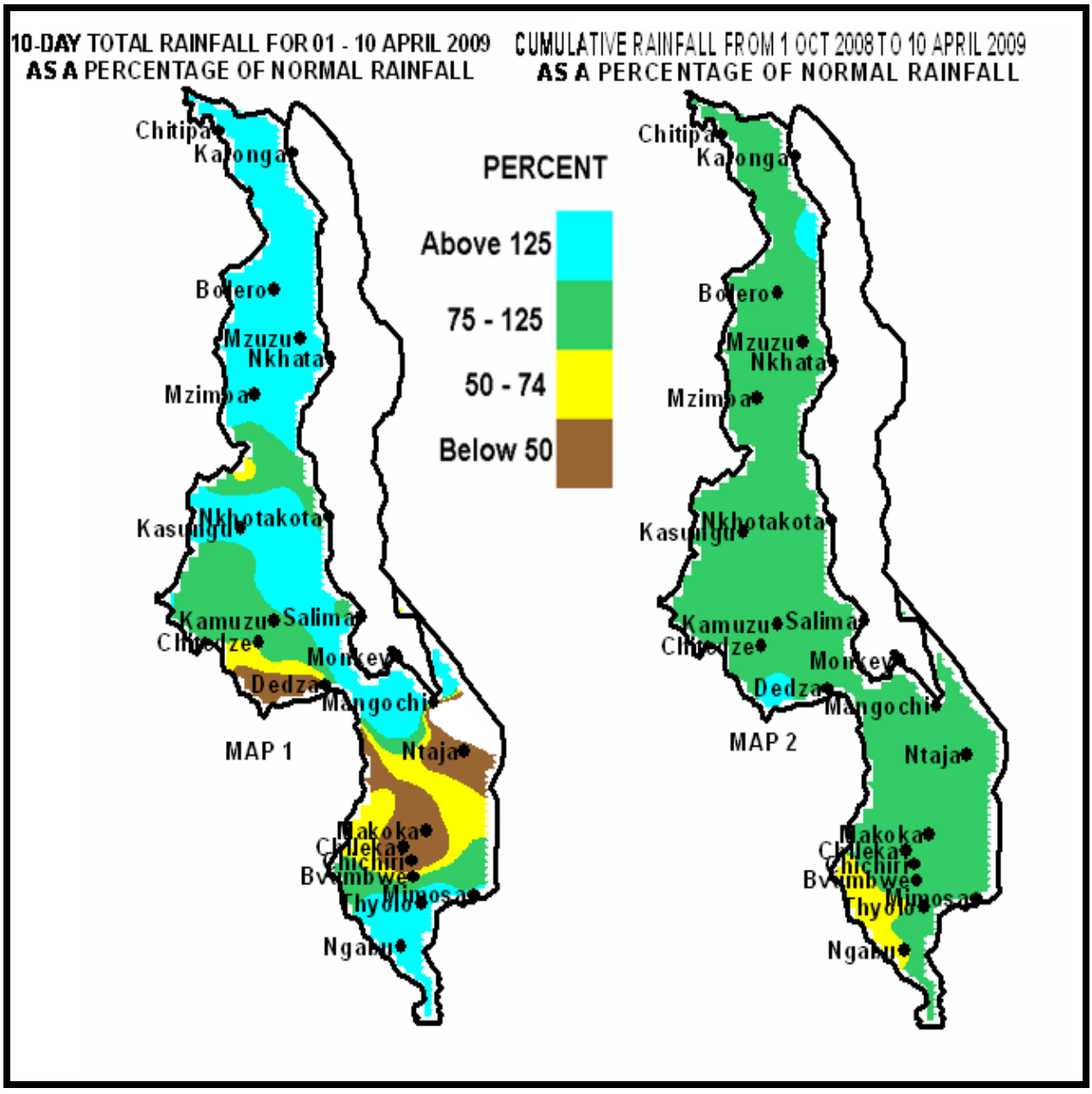
HIGHLIGHTS

- **Above average rainfall amounts continued over most areas…**
- **Crops were mostly at drying to harvesting stages…**
- **Mostly dry conditions expected during 11 – 20 April 2009…**



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1. WEATHER SUMMARY

1.1 RAINFALL SITUATION

During the first ten days of April 2009, as expected the main rain belt which is climatologically moving northwards was active over the lakeshore and northern areas of Malawi. As such above average 10-day rainfall amounts were mostly confined to lakeshore and northern areas **(light blue colour on Map 1)** .Southern Malawi generally experienced light rainfall amounts mostly due to influx of cool and moist air from the Indian Ocean into Malawi. During the period very few stations registered 10-day cumulative rainfall amounts of more than 100mm. Such stations included Lujeri Tea Estate and Masambanjati in the south and Chintheche, Karonga and Nkhata Bay Met in the north. More details are in Table 1.

Cumulative rainfall situation Map 2 for the period from 1st October 2008 up to 10 April 2009 shows that most areas in Malawi had received between 75 and 125 percent of the expected rainfall for the period (**green colour on Map 2)** with a few pockets of below and above average cumulative rainfall (**yellow and light blue colours on Map 2).**

1.2 MEAN AIR TEMPERATURE

During the first ten days of April 2009 warm to hot temperatures were experienced over Malawi. Daily average maximum temperatures ranged from 21°C at Dedza to 31°C at Ngabu..The highest absolute maximum temperature was 35°C still recorded at Ngabu in lower Shire Valley and Dedza Met with 23°C reported the lowest.. The lowest daily average minimum temperatures ranged from 14 to 21°C See details in Table 2.

1.3 MEAN DAILY WIND SPEEDS

Average daily wind speeds recorded at a height of two meters above the ground continued to be generally light. The highest average wind speed was 3.7m/s or 13.3Km/hr reported at Chileka International Airport in Blantyre More details are in Table 2.

1.4 MEAN RELATIVE HUMIDITY

Daily average relative humidity values during the period under discussion ranged from 71% at Monkey Bay to 85% at Mzuzu Airport

2. AGROMETEOROLOGICAL ASSESSMENT

During the first ten days of April, 2009, locally heavy rains resulted in above average rainfall performance mostly over lakeshore and northern parts of Malawi. These rains apart from supporting growth and development of roots and tuber crops also improved soil moisture reserves and water resources which will benefit winter cropping activities. On the other hand the late rains hampered harvesting and drying of matured crops, damaged some bales of Tobacco at the Tobacco auction floors.

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. Maize crop which is the staple food crop for Malawi was reported at maturity, drying and harvesting stages. Harvesting of matured crops was in progress in most parts of Malawi. The prospects of good harvest are very high this season, possibly the best ever in the history of crop production in Malawi. This could among other factors be attributed to good rainfall performance in terms of distribution and amount in both space and time, timely and successful implementation of Government of Malawi input and fertiliser subsidy programme.

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 still suggest that normal rainfall amounts are expected over the greater part of Malawi during the remaining part of the growing season.

4. OUTLOOK FOR 11 – 20 APRIL 2009

Short to medium-term weather forecasts indicate that during the period a series of high pressure cells which will be passing through south coast of the Republic of South Africa into the Indian Ocean will maintain an influx of cool and fairly moist South easterly air in to Malawi. Therefore light rainfall amounts are expected mainly over southern and northern highlands as well as lakeshore areas during the period 11 to 20 April 2009.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 1 OF APRIL 2009: PERIOD 01 - 10

STATION NAME	DEKADAL TOTAL RAINFALL	DEKADAL NORMAL	DEKADAL TOTAL AS %	TOTAL TO DATE	NORMAL TO DATE	TOTAL TODATE AS %	RAINY DAYS
SOUTHERN REGION	**mm**	**mm**	**NORMAL**	**mm**	**mm**	**NORMAL**	**[3] 0.3 mm**
Bvumbwe Met.	24.6	30.0	**82**	1219.5	1017.4	**120**	6
Chancellor College	30.0	38.0	**79**	1026.3	1353.8	**76**	1
Chichiri Met.	11.0	29.0	**38**	1059.9	1032.6	**103**	5
Chikwawa Boma	25.4	20.6	**123**	502.6	709.2	**71**	4
Chileka Airport	0.7	23.6	**3**	818.0	857.7	**95**	1
Chiradzulu Agric	0.0	34.0	**0**	832.7	1011.5	**82**	0
Chizunga Factory	62.3	54.5	**114**	1061.6	1257.8	**84**	6
Kasinthula Res. Stn.	34.2	18.1	**189**	676.4	685.3	**99**	4
Liwonde Township	9.0	17.2	**52**	802.3	809.2	**99**	1
Lujeri Tea Estate	147.6	106.5	**139**	1919.5	1850.5	**104**	9
Mpilipili (Makanjila)	0.0	N/A	**N/A**	1087.7	N/A	**N/A**	0
Makoka Met	7.6	27.7	**27**	1046.2	971.5	**108**	1
Mangochi Met.	3.7	18.4	**20**	800.2	808.1	**99**	2
Masambanjati Agric	122.1	51.7	**236**	1099.1	1240.3	**89**	5
Mimosa Met.	92.8	61.7	**150**	1518.9	1350.6	**112**	8
Monkey Bay Met.	57.5	5.8	**991**	1087.3	904.2	**120**	1
Mpemba Vet	9.3	35.6	**26**	1266.8	1109.4	**114**	3
Mulanje Boma	93.0	75.9	**123**	1196.2	1514.4	**79**	7
Namiasi Agric	23.5	2.9	**810**	764.0	786.2	**97**	2
Namwera Agric	0.0	34.4	**0**	910.1	1032.1	**88**	0
Nchalo Sucoma	42.2	19.8	**213**	531.3	650.2	**82**	6
Neno Agric	27.3	31.3	**87**	1208.7	1085.6	**111**	6
Ngabu Met.	18.7	16.2	**115**	524.5	737.9	**71**	4
Nsanje Boma	38.3	16.6	**231**	743.9	803.2	**93**	4
Ntaja Met.	7.5	26.5	**28**	1090.3	865.6	**126**	2
Satemwa	52.7	53.0	**99**	785.5	1218.3	**64**	7
Zomba Land Hus.	17.2	39.7	**43**	1049.0	1168.5	**90**	2
CENTRAL REGION							
Bunda College	27.5	34.9	**79**	994.3	840.1	**118**	2
Chitedze Met.	17.9	23.8	**75**	824.5	882.1	**93**	2
Dedza Met	10.2	21.6	**47**	974.2	907.9	**107**	5
Kaluluma DTC	12.9	24.6	**52**	574.9	789.3	**73**	1
K.I.A Met	18.5	16.7	**111**	804.7	820.2	**98**	4
Kasungu Met	22.0	9.3	**237**	642.6	839.9	**77**	2
Lisasadzi	13.6	15.8	**86**	639.0	792.1	**81**	2
Malomo Agric	38.1	16.3	**234**	910.3	808.4	**113**	2
Mchinji Boma	41.5	32.6	**127**	1224.9	1004.5	**122**	3
Mponela Agric	16.5	11.7	**141**	835.4	795.5	**105**	4
Mwimba Research	16.6	13.4	**124**	730.7	898.4	**81**	3
Mtakataka Airwing	5.9	20.8	**28**	1273.8	825.3	**154**	1
Nathenje Agric	23.0	29.8	**77**	951.5	866.3	**110**	2
Nkhotakota Met	46.8	78.6	**60**	1698.5	1368.2	**124**	2
Ntcheu - Nkhande	0.8	20.0	**4**	1144.3	1031.2	**111**	1
Ntchisi Boma	52.9	24.1	**220**	1008.5	845.2	**119**	3
Salima Met	46.5	42.7	**109**	1213.6	1208.6	**100**	2
Dedza RTC	20.7	22.5	**92**	1015.5	967.5	**105**	4
NORTHERN REGION							
Bolero Met	90.1	18.6	**484**	749.5	711.0	**105**	5
Bwengu Agric.	69.6	24.2	**288**	659.0	794.2	**83**	4
Chitipa Met	74.7	30.8	**243**	793.4	953.5	**83**	4
Chintheche Agric	366.2	143.3	**256**	1354.0	1588.2	**85**	4
Karonga Met.	109.7	76.1	**144**	1026.1	946.5	**108**	0
Lupembe	68.0	56.0	**121**	703.2	828.7	**85**	3
Mbawa Res. Stn	23.5	17.5	**134**	805.2	815.0	**99**	4
Mzimba Met	28.7	19.6	**146**	777.7	860.1	**90**	4
Mzuzu Met.	95.3	87.0	**110**	842.2	1057.9	**80**	4
NkhataBay Met.	195.3	85.8	**228**	1205.8	1399.7	**86**	3

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 1 OF ARIL 2009

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BVUMBWE	22.5	15.5	25.0	14.0	2.2	74
CHICHIRI	23.7	15.8	25.2	14.0	0.9	77
CHILEKA	26.0	18.6	27.8	16.0	3.7	73
CHITEDZE	24.7	15.9	26.4	12.1	1.2	79
DEDZA	21.1	13.6	23.0	11.5	1.1	N/A
K.I.A.	24.4	14.7	26.2	11.1	1.9	77
KARONGA	28.2	21.1	29.3	20.4	0.9	80
MAKOKA	24.9	16.6	26.7	14.8	2.5	74
MANGOCHI	N/A	20.8	N/A	18.5	2.1	73
MIMOSA	23.2	18.1	28.2	15.6	1.2	81
MONKEY BAY	28.7	17.5	30.0	17.5	1.8	71
MZIMBA	24.4	15.4	27.3	12.1	1.1	78
MZUZU	22.8	16.4	24.6	12.8	2.2	85
NGABU	31.3	21.3	34.8	19.2	1.4	78
NTAJA	27.5	19.1	30.6	17.0	1.5	75
SALIMA	27.5	20.7	28.5	17.7	2.9	71

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