10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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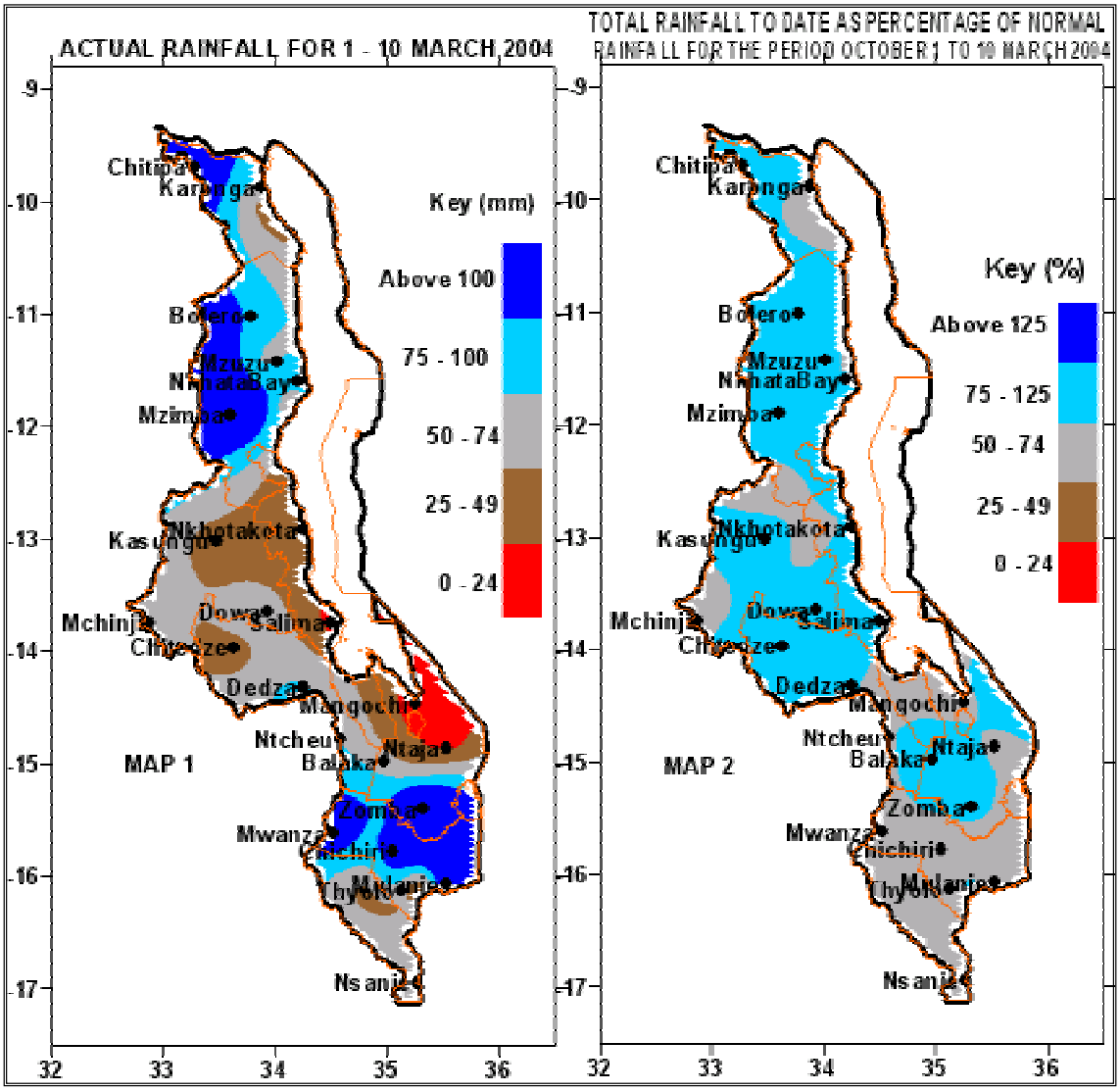
HIGHLIGHTS

- **Parts of north and south receive heavy rains…**
- **Early planted maize was at maturity and drying stages…**
- **Most areas receive near normal to normal cumulative rainfall…**
- **Heavy rains expected over centre and north, light in the south…**



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1. WEATHER SUMMARY

1.1 RAINFALL

Heavy rains during the period 1 to 10 March 2004 in some parts of the north and south brought some relief to areas that were unseasonably dry in February. This eased moisture stress and more areas registered above normal 10-day rainfall amounts. Areas that registered rainfall amounts in excess of 100mm included Chancellor College, Zomba RTC, Mulanje Boma, Mwanza Boma, Chichiri Met., Blantyre Town hall, Makoka and Lujeri in the south and Chitipa Met, Chikangawa Forest and Mzimba Met in the north. Light rainfall was received over some parts of Mangochi, Salima, Nkhotakota and Kasungu districts.

The performance of cumulative rainfall continued to improve over most parts of Malawi. By 10 March 2004, Malawi had received near normal (50 – 74%) to normal rainfall (75 – 125%).

1.2 MEAN AIR TEMPERATURE

Temperatures were warm to hot over most parts of Malawi. Mean daily maximum temperatures ranged from 24°C at Dedza in the centre to 32°C at Ngabu in Chikwawa district in the south. The highest temperature during the period under discussion was 33°C, registered at Ngabu on 3rd March while the lowest temperature (13°C) was experienced at LIA in Lilongwe on 9th March 2004.

1.3 AVERAGE DAILY WIND SPEEDS

Wind speeds at a height of 2 meters above the ground were generally light and variable. It is normal at this time of the year to experience light and variable winds except in stormy areas. The highest wind speed was 2.5m/s, recorded at Chileka Airport.

1.4 MEAN RELATIVE HUMIDITY

In the first 10-days of March, moist air covered most parts of Malawi. As a result mean daily relative humidity values were in excess of 80% over most areas except at Kasungu, Mangochi, Nkhotakota and Salima.

1.5 MEAN SUNSHINE HOURS

Most parts of Malawi continued to experience fairly good number of sunny spells during the period except very few places. Average sunshine hours were in excess of 5 hours over most areas. This supported drying of matured crops.

2. AGROMETEOROLOGICAL ASSESSMENTS

Heavy rains that fell in the first 10-days of March 2004 in some parts of Malawi supported growth and development of tubers and late planted crops that were at advanced vegetative stage. However, light to moderate rainfall that was experienced over central Malawi was good for matured crops particularly Maize which does not need a lot of water at maturity and drying stages. Early planted maize was reported to be at physiological maturity and drying stages except the crop that was planted mid January 2004 in some parts of southern Malawi. The late planted maize was reported to have reached flowering and cob formation stages and more rainfall was needed between now and end of March 2004 to ensure that the crop reaches maturity. An abrupt end to the rainfall season could adversely affect final yields of this crop.

2. FORECAST FOR 1 – 10 MARCH 2004

Atmospheric conditions indicate that Congo air mass as well as Inter Tropical Convergence Zone (ITCZ) will be active over central and northern Malawi. Therefore, moderate to heavy rains are expected to shift to the centre and north with light rains confined to the south during the period 11 to 20 March 2004.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 1 OF MARCH 2004: PERIOD 1 - 10

STATION NAME	DEKADAL TOTAL RAINFALL	DEKADAL NORMAL	TOTAL TO DATE	NORMAL TO DATE	TOTAL TODATE AS %	RAINY DAYS
SOUTHERN REGION	mm	mm	mm	mm	NORMAL	≥ 0.3 mm
Blantyre TownHall	125.0	78.0	515.0	903.1	57	4
Chancellor College	169.0	110.7	906.3	1127.8	80	6
Chichiri Met.	131.3	76.8	668.5	887.1	75	5
Chikwawa Boma	48.1	47.0	485.3	614.9	79	6
Chileka Airport	89.0	53.6	503.7	736.7	68	4
Kasinthula Res. Stn.	40.2	87.2	478.9	616.4	78	4
Liwonde Township	51.3	63.0		709.2		4
Lujeri Tea Estate	119.7	14.8	847.4	1466.3	58	9
Makoka Met	122.7	85.3	601.3	853.1	70	5
Mangochi Met.	13.3	58.3	441.6	704.0	63	3
Monkey Bay Met.	40.0	60.6	466.3	851.8	55	4
Mulanje Boma	146.1	136.6	688.0	1251.5	55	8
Mwanza Boma	126.7	73.8	450.4	832.3	54	9
Nchalo Sucoma	47.4	57.0	337.4	588.6	57	4
Ngabu Met.	59.0	52.1	408.5	645.0	63	4
Ntaja Met.	20.9	55.8	516.3	740.9	70	4
Satemwa Tea Est. No.1	78.9	108.2	600.7	1018.0	59	9
Thyolo Met	53.1	87.7	498.9	915.8	54	8
Zomba RTC	169.2	78.1	875.1	997.9	88	6
CENTRAL REGION						
Chitedze Met.	31.9	59.1	612.0	768.6	80	2
Dedza Met	81.1	63.5		806.4		4
Dwangwa Sugar Corp.	30.5	128.4	782.2	928.7	84	5
L.I.A. Met.	79.4	72.4	620.9	727.4	85	4
Kasungu Met	36.2	62.1	723.3	768.8	94	4
Mchinji Boma	65.5	66.8	626.5	862.4	73	6
Salima Met	8.4	111.3	819.4	1023.0	80	3
NORTHERN REGION						
Baka Res. Stn.	47.4	115.8	441.0	731.3	60	4
Bolero Met	99.2	56.2	593.5	627.7	95	7
Chikangawa forest	141.2	84.7	693.1	837.6	83	6
Chitipa Met	145.9	68.2	764.6	799.4	96	8
Chintheche Agric	42.0	190.7	1159.6	1141.3	102	4
Karonga Met.	56.5	76.3	580.4	662.6	88	5
Kavuzi Rosefalls	83.6	109.9		992.8		6
Lupembe	33.2	82.7	405.5	614.3	66	5
Mzimba Met	145.3	73.9	745.7	750.4	99	7
Mzuzu Met.	50.2	83.8	666.7	830.7	80	4
NkhataBay Met.	100.2	92.5	690.1	1046.5	66	7

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 1 OF MARCH 2004

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BOLERO	27.4	18.4	29.8	16.6	0.1	89
CHICHIRI	25.7	18.7	28.5	17.0	1.5	84
CHILEKA	28.0	21.1	30.6	19.6	2.5	81
NTAJA	28.3	21.4	29.5	19.5	1.3	83
CHITEDZE	27.1	19.0	28.4	16.9	0.5	80
CHITIPA	26.3	17.2	28.6	16.3	1.5	84
DEDZA	23.8	16.4	25.5	14.5	0.9	84
KASUNGU	27.5	18.5	29.6	16.9	1.0	62
KARONGA	30.5	22.9	32.3	21.5	1.1	82
L I A	26.9	15.8	28.3	12.5	1.1	82
MAKOKA	26.9	19.0	28.1	17.9	1.6	80
MANGOCHI	31.0	22.6	32.0	20.5	1.2	75
MONKEY BAY	29.7	22.7	31.4	21.5	1.1	79
MZIMBA	26.2	17.1	28.0	15.5	0.8	86
MZUZU	26.4	17.0	28.2	15.2	1.2	85
NGABU	31.9	23.7	33.0	22.0	1.0	84
NKHATA BAY	30.6	21.2	33.0	20.4	0.8	84
NKHOTAKOTA	29.2	22.6	30.5	21.3	1.9	79
SALIMA	30.1	22.1	31.6	19.1	1.4	78
THYOLO	27.0	20.0	29.2	18.6	1.2	87

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).