10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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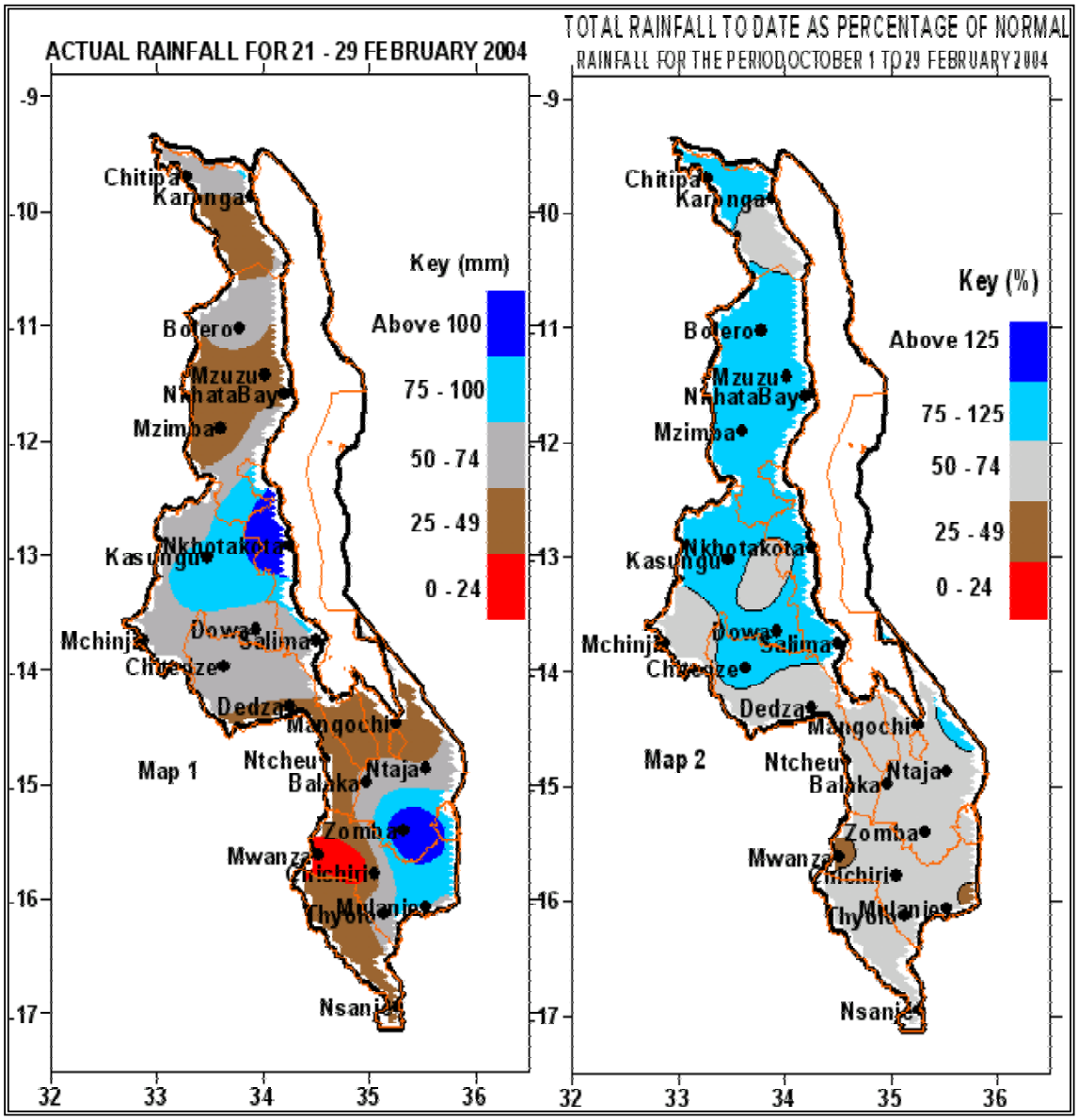
HIGHLIGHTS

- **Parts of north and south receive below normal February rains…**
- **Heavy rains cause floods in Zomba and Phalombe districts…**
- **Near normal cumulative rainfall received in most areas …**
- **Moderate to heavy rains to continue during 1 – 10 March 2004…**



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1. WEATHER SUMMARY

1.1 RAINFALL

Some areas in the north and south continued to receive below normal 10-day rainfall during the period 21 – 29 February 2004. This has been the scenario during the whole month of February. Most of these areas received below 50mm of rainfall. The worst hit area was Mwanza Boma which received 18.5 mm during the entire period. Heavy rains were confined to places such as Zomba in the south and Nkhotakota in the centre. Zomba RTC, Chancellor College and Nkhotakota Met recorded above 125mm of rainfall.

Cumulative rainfall performance continued to improve. By the end of February most areas in Malawi had received near normal (50 – 74%) to normal rainfall (75 – 125%). Pockets of below normal rainfall persisted in the south particularly around Lujeri in Mulanje district and at Mwanza Boma.

1.2 MEAN AIR TEMPERATURE

Warm to hot temperatures continued over most parts of Malawi. Mean daily maximum temperatures ranged from 25° C at Bolero in Rumphi district in the north to 34°C at Ngabu in Chikwawa in the south. Very hot (36°C) temperatures were experienced at Ngabu on 27th February. The lowest temperature (15°C) was experienced in Lilongwe on 26th February.

1.3 AVERAGE DAILY WIND SPEEDS

Light and variable wind speeds were reported over Malawi. On daily basis average wind speeds at a height of 2m above ground ranged from 0 to 2.5 m/s.

1.4 MEAN RELATIVE HUMIDITY

During the last days of February, moist air covered most parts of Malawi. As a result mean daily relative humidity values over most areas were in excess of 75% except at Mimosa in Mulanje where daily average relative humidity was at 62%.

1.5 MEAN SUNSHINE HOURS

Most parts of Malawi experienced a fairly good number of sunny spells during the period. This supported photosynthesis in most crops. Average sunshine hours were in excess of 6 hours over most areas.

2. AGROMETEOROLOGICAL ASSESSMENTS

Rains that fell in the last days of February were sufficient to maintain soil moisture in most parts of Malawi. However, floods caused by the locally heavy rains in Zomba and Phalombe districts in the south resulted in loss of crops, lives, property and infrastructure. According to reports by Malawi News Agency (MANA) in the Weekend Nation Newspaper of 6th March 2004, in Phalombe alone 5 people lost their lives, over 640Ha of crops were washed away, 888 families were made homeless.

These floods will seriously affect overall crop production in the two districts this season.

Maize is mostly at flowering and cob formation stages. Early planted maize has reached physiological maturity and some households are consuming green maize and other matured crops. Reports indicate that the general crop stand is good especially where fertilizer has been applied. Good harvests are possible particularly if rains can continue falling consistently up to end of March.

2. FORECAST FOR 1 – 10 MARCH 2004

Atmospheric conditions indicate a tropical depression in the Indian Ocean and an active moist and unstable Congo air mass over Malawi. Therefore, widespread rains which will be locally heavy over some parts Malawi are expected during the period 1 to 10 March 2004.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 3 OF FEBRUARY 2004: PERIOD 21 - 29

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	18.0	59.2	390.0	825.1	47	2
Bvumbwe Met.	45.5	52.0	496.5	800.9	62	6
Chancellor College	129.8	79.3	737.3	1017.1	72	9
Chichiri Met.	47.7	50.7	537.2	810.3	66	5
Chikwawa Boma	52.2	37.2	437.2	567.9	77	3
Chileka Airport	15.9	44.7	414.7	683.1	61	5
Kasinthula Res. Stn.	88.1	41.4	438.7	529.2	83	3
Lujeri Tea Estate	71.4	110.3	715.1	1451.5	49	7
Mangochi Met.	38.7	45.5	428.3	645.7	66	1
Mimosa Met.	59.1	60.3	502.4	998.8	50	9
Monkey Bay Met.	46.7	42.0	426.3	791.2	54	6
Mulanje Boma	74.3	85.8	541.9	1114.9	49	4
Mwanza Boma	18.5	54.1	321.2	758.5	42	1
Nchalo Sucoma	38.7	39.4	290.0	531.6	55	4
Ngabu Met.	36.3	44.7	349.5	592.9	59	3
Ntaja Met.	49.4	55.9	495.4	685.1	72	3
Satemwa Tea Est. No.1	71.5	55.8	521.8	909.8	57	7
Thyolo Met	72.7	42.8	445.8	828.1	54	7
Zomba RTC	138.8	70.6	705.9	919.8	77	6
CENTRAL REGION						
Chitedze Met.	62.6	58.4	596.0	709.5	84	4
Dwangwa Sugar Corp.	50.9	68.9	693.9	800.3	87	2
L.I.A. Met.	54.8	49.6	541.5	655.0	83	4
Kasungu Met	74.3	58.9	687.1	706.7	97	4
Mchinji Boma	44.5	60.9	500.5	795.6	63	3
Mwimba Research	95.2	79.4	652.8	723.1	90	6
Nkhotakota Met	155.6	89.2	740.4	896.5	83	7
Ntchisi Boma	79.4	62.8	693.9	679.7	102	3
Salima Met	76.8	80.0	811.0	911.7	89	6
NORTHERN REGION						
Baka Res. Stn.	29.0	54.6	393.6	615.5	64	2
Bolero Met	66.0	30.6	494.3	571.5	86	4
Chitipa Met	54.9	50.6	618.7	731.2	85	5
Chintheche Agric	74.6	76.6	1117.6	950.6	118	3
Karonga Met.	92.5	60.3	523.9	586.3	89	4
Mzimba Met	25.4	50.1	600.4	676.5	89	3
Mzuzu Met.	27.7	51.8	616.5	746.9	83	7
NkhataBay Met.	18.1	24.6	589.9	954.0	62	4

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 3 OF FEBRUARY 2004

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BVUMBWE	26.2	17.5	27.8	15.6	1.3	84
BOLERO	25.3	16.6	29.4	16.6	0.1	74
CHICHIRI	26.8	18.8	28.5	17.0	0.8	81
CHILEKA	29.5	21.5	32.4	19.9	2.5	78
NTAJA	29.0	21.7	31.0	20.0	1.7	82
CHITEDZE	27.7	18.0	28.9	15.0	0.4	77
CHITIPA	27.4	17.0	28.5	15.9	1.3	76
KASUNGU	27.9	20.4	29.3	17.0	1.1	80
KARONGA	30.2	22.5	32.0	21.5	1.0	77
L I A	27.2	16.5	28.5	15.4	1.0	83
MANGOCHI	30.7	22.9	31.5	21.5	1.1	76
MIMOSA	29.9	20.3	32.4	19.1	0.9	62
MONKEY BAY	29.4	22.8	31.3	21.4	1.1	80
MZIMBA	27.3	16.9	28.4	16.2	0.8	83
MZUZU	27.6	17.1	28.7	15.4	1.2	83
NGABU	33.5	24.2	36.0	22.7	1.3	75
NKHATA BAY	30.3	21.3	32.8	20.1	1.8	80
NKHOTAKOTA	28.6	21.7	30.0	20.5	2.0	80
SALIMA	29.5	21.7	31.1	21.0	1.6	80
THYOLO	28.4	20.0	30.5	18.9	1.4	81

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).