



Malawi 10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services



Period: 21 – 31 March 2009

Season: 2008/2009

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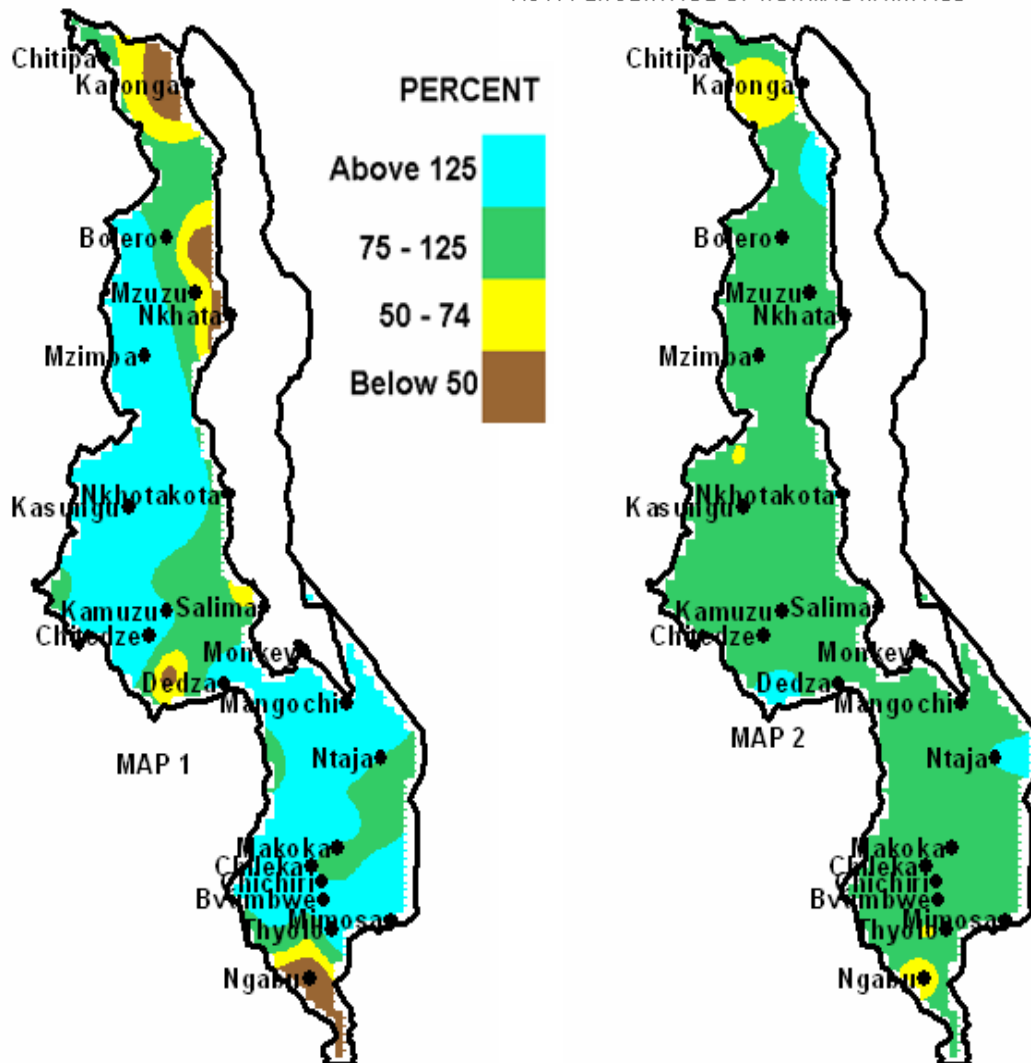
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HIGHLIGHTS

- Above average 10-day rainfall amounts reported in most areas...
- Maize crop ranged from maturity and harvesting stages...
- Wet weather to be confined to the north during 01 –10 April 2009...

10- DAY TOTAL RAINFALL FOR 21 - 31 MARCH 2009
AS A PERCENTAGE OF NORMAL RAINFALL

CUMULATIVE RAINFALL FROM 1 OCT TO 31 MARCH 2009
AS A PERCENTAGE OF NORMAL RAINFALL



1. WEATHER SUMMARY

1.1 RAINFALL SITUATION

During the last ten days of March 2009, moderate to heavy rains were reported in most parts of Malawi. As a result most areas experienced above average 10-day rainfall amounts (**light blue colour on Map 1**). Stations that reported ten day cumulative rainfall amounts of between 100 and 255mm in the south included Lujeri and Mimosa in Mulanje, Mpemba in Blantyre and Mangochi Met while in the centre such figures were reported at Chileka-Namitete, Dwangwa, Nkhotakota met, and Mwimba in Kasungu and in the north Vinthukutu in Karonga. However, although most some areas experienced high cumulative rainfall amounts generally the distribution in both time and space was poor and most areas reported less than four rainy days. More details are in Table 1.

Cumulative rainfall situation map shows that by end of March 2009 most areas in Malawi had received normal rainfall amounts (**green colour on Map 2**) with pockets of below average cumulative rainfall (**yellow colour on Map 2**) particularly around Karonga in the north and Ngabu in lower Shire Valley in southern Malawi...

1.2 MEAN AIR TEMPERATURE

During the last ten days of March 2009 daily average maximum temperatures over Malawi ranged from 21 to 33°C. The highest average maximum temperature was still reported at Ngabu in lower Shire Valley and Dedza Met still registered the lowest average maximum temperature. The lowest absolute minimum temperatures were in the range of 12 to 22°C See details in Table 2.

1.3 MEAN DAILY WIND SPEEDS

Average daily wind speeds recorded at two meters above the ground continued to be light. The highest average wind speed was still observed at Chileka International Airport in Blantyre (2.7m/s or 9.7Km/hr). More details are in Table 2.

1.4 MEAN RELATIVE HUMIDITY

Daily average relative humidity values during the period under review ranged from 72% at Dedza to 89% at Nkhotakota.

2. AGROMETEOROLOGICAL ASSESSMENT

During the last ten days of March, 2009, locally heavy rains resulted in above average rainfall performance over most areas in central and southern Malawi. The rains supported growth and development of roots and tuber crops. However, in most parts of the south and centre persistence of wet weather hampered harvesting and drying of matured crops. At the same time the rains were good for water resources and also would provide enough residual soil moisture which will facilitate growth and development of winter crops

Generally crop stand in the fields was reported to better than last season. Maize crop which is the staple food crop for Malawi was reported at maturity stage in the north and drying and harvesting stages in the south and centre. Harvesting of Maize was in progress in some parts of southern Malawi. Generally no major incidences of pests and diseases had been reported this season. There are high prospects of another good harvest this season. This could be mainly attributed to the impacts of good rainfall performance and the Government of Malawi fertiliser and input subsidy programme.

3. PROSPECTS OF 2008/09 SEASON

Climate prediction models continue to indicate weak La Nina 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 01 – 10 APRIL 2009

Short to medium-term weather forecasts for Malawi indicate that the active rain belt would be lying over northern Malawi during the first 10 days of April 2009.. Therefore wet weather is expected to be confined to the north during the period 1st to 10th April 2009.

**TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR
DEKAD 3 OF MARCH 2009: PERIOD 21 - 31**

STATION NAME	DEKADAL TOTAL RAINFALL mm	DEKADAL NORMAL mm	DEKADAL TOTAL AS % NORMAL	TOTAL TO DATE mm	NORMAL TO DATE mm	TOTAL TODATE AS % NORMAL	RAINY DAYS ³ 0.3 mm
SOUTHERN REGION							
Bvumbwe Met.	52.9	50.2	105	1194.9	987.4	121	3
Chichiri Met.	56.0	51.5	109	1048.9	1003.6	105	4
Chileka Airport	56.0	40.9	137	817.3	834.1	98	3
Chingale Agric	68.6	41.0	167	875.3	891.8	98	2
Chiradzulu Agric	42.0	48.1	87	832.7	977.5	85	1
Kasinthula Res. Stn.	76.0	21.2	358	640.2	667.2	96	1
Liwonde Township	49.5	37.2	133	793.3	792.0	100	3
Lujeri Tea Estate	254.9	131.2	194	1771.9	1744.0	102	4
Mpilipili (Makanjila)	43.8	N/A	N/A	1087.7	N/A	N/A	2
Makoka Met	46.4	38.7	120	1038.6	943.8	110	3
Mangochi Met.	140.1	37.5	374	796.5	789.7	101	2
Masambanjati Agric	52.3	64.9	81	977.0	1188.6	82	3
Mimosa Met.	113.6	78.0	146	1426.1	1288.9	111	4
Monkey Bay Met.	69.3	28.0	248	1029.3	898.4	115	1
Mpemba Vet	116.0	50.1	232	1257.5	1073.8	117	4
Naminjiwa Agric	77.5	33.6	231	1109.6	893.5	124	1
Namwera Agric	98.5	59.2	166	1083.5	997.7	109	1
Nchalo Sucoma	20.0	22.4	89	489.1	630.4	78	1
Neno Agric	78.6	49.8	158	1181.4	1054.3	112	4
Ngabu Met.	3.5	35.5	10	505.8	721.7	70	1
Nsanje Boma	2.5	24.9	10	705.6	786.6	90	1
Ntaja Met.	61.9	52.3	118	1082.8	839.1	129	4
Satemwa	63.1	63.9	99	732.8	1165.3	63	3
Thyolo Met	70.4	56.0	126	1071.0	1046.0	102	3
Zomba Land Hus.	20.8	56.5	37	1031.8	1128.8	91	1
CENTRAL REGION							
Chileka Namitete	113.0	34.6	327	647.2	861.6	75	3
Chitedze Met.	77.1	42.9	180	806.4	858.3	94	2
Dedza Met	62.0	37.0	168	964.0	886.3	109	2
Dwangwa .	166.2	160.4	104	1467.8	1175.8	125	6
Kaluluma DTC	86.9	27.8	313	562.0	764.7	73	5
K.I.A Met	45.6	31.5	145	786.2	803.5	98	4
Kasungu Met	71.5	24.9	287	620.6	830.6	75	5
Mchinji Boma	57.7	52.8	109	1183.4	971.9	122	3
Mkanda Met	54.9	55.0	100	1081.8	870.2	124	4
Mponela Agric	25.0	33.1	76	818.9	783.8	104	4
Mwimba Research	105.6	28.4	372	714.1	885.0	81	2
Mtakataka Airwing	13.3	45.6	29	1267.9	804.5	158	2
Nathenje Agric	32.0	41.5	77	928.5	836.5	111	3
Nkhotakota Met	140.9	139.6	101	1647.5	1289.6	128	3
Ntcheu - Nkhande	29.4	42.0	70	1143.5	1011.2	113	3
Salima Met	44.4	65.1	68	1167.1	1165.9	100	3
NORTHERN REGION							
Baka Res. Stn.	0.0	188.6	0	N/A	1059.9	N/A	0
Bolero Met	28.8	26.6	108	659.4	692.4	95	5
Bwengu Agric.	15.0	40.8	37	589.4	770.0	77	4
Chitipa Met	45.1	50.5	89	718.7	922.7	78	5
Chintheche Agric	62.5	201.1	31	1182.1	1444.9	82	3
Euthini Agric.	91.1	45.9	198	709.5	763.1	93	8
Karonga Met.	22.2	116.6	19	916.4	870.4	105	1
Lupembe	29.0	87.0	33	685.2	772.7	89	3
Mzimba Met	89.9	42.9	210	749.0	840.5	89	9
Mzuzu Met.	56.1	77.6	72	746.9	970.9	77	5
NkhataBay Met.	64.3	217.5	30	1010.5	1313.9	77	6
Vinthukutu Agric	147.0	132.2	111	1723.3	962.1	179	2

**TABLE 2: AGROMETEOROLOGICAL PARAMETERS
FOR DEKAD 3 OF MARCH 2009**

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BOLERO	27.6	16.2	28.5	14.5	N/A	79
BVUMBWE	23.5	15.6	26.6	13.0	1.6	79
CHICHIRI	26.3	17.3	27.5	13.8	0.9	86
CHILEKA	26.2	18.8	28.9	16.5	2.7	74
CHITEDZE	25.3	16.4	28.3	13.9	0.7	80
CHITIPA	26.7	16.4	27.8	14.6	1.8	76
DEDZA	21.2	14.2	24.4	11.8	0.8	72
K.I.A.	24.3	16.3	26.8	14.6	1.3	77
KARONGA	30.2	22.2	34.2	21.5	1.1	75
KASUNGU	26.2	12.8	28.3	16.0	1.0	78
MAKOKA	25.5	16.0	27.8	13.4	1.4	74
MANGOCHI	N/A	20.3	N/A	17.5	1.1	74
MIMOSA	26.9	19.4	31.2	13.4	1.0	75
MONKEY BAY	28.3	20.9	31.0	18.5	1.3	74
MZIMBA	26.1	16.7	27.2	16.0	0.9	77
MZUZU	24.2	16.9	25.4	15.7	1.8	85
NGABU	32.9	21.6	36.0	18.2	1.3	77
NKHATA BAY	28.8	20.7	30.7	19.9	0.8	84
NKHOTAKOTA	27.4	21.1	30.0	20.4	N/A	89
NTAJA	26.1	19.4	29.0	16.0	1.0	80
SALIMA	27.3	21.4	30.4	19.6	1.4	74

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) = mps x 3.6