Malawi 10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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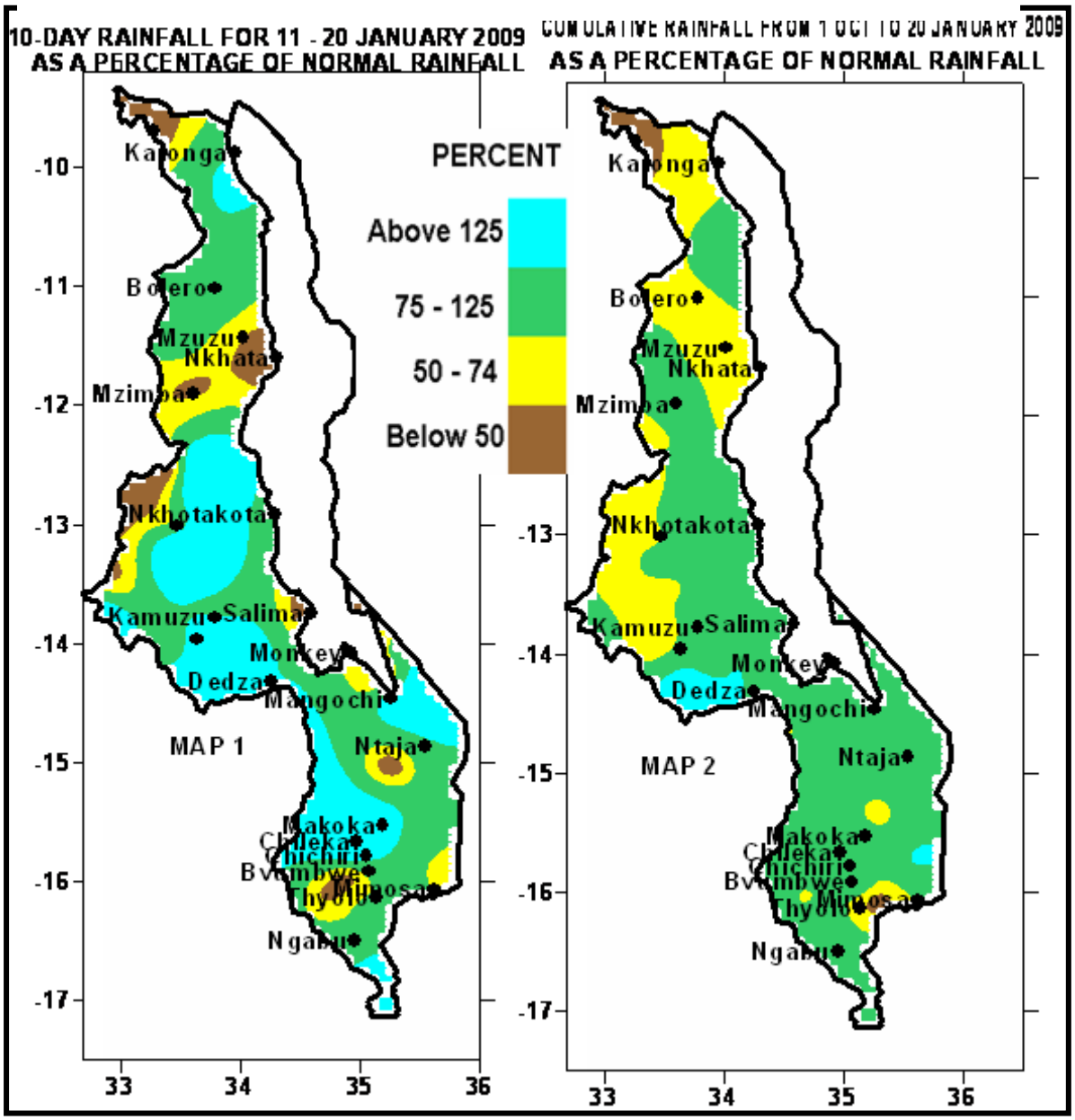
HIGHLIGHTS

- **Moderate to heavy rainfall experienced over Malawi…**
- **Maize starts flowering in some parts …**
- **Light to moderate rainfall expected during 21 – 31 January 2009…**



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1. WEATHER SUMMARY

1.1 RAINFALL SITUATION

In the second 10-days of January 2009, moist and unstable Congo Air covered most parts of Malawi. As a result several places reported moderate to heavy rainfall. A remarkable improvement in rain days was recorded in most areas. 10-day rainfall amounts of more than 150mm were reported at Chileka Airport and Namwera in the south, Lisasadzi, Malomo Agric, Mchinji Boma, Mtakataka Airwing, and Nathenje Agric in the Centre and Emfeni in the north.. See details on **Table 1**.
Cumulative rainfall map as at 20 January 2009, indicated that most parts of Malawi had received average rainfall with few areas experiencing below average rainfall (**yellow and brown colours in Map 2)** and above average rainfall **(light blue colour on Map 2).**

1.2 MEAN AIR TEMPERATURE

During the period under review, mean daily maximum temperatures ranged from 24°C at Dedza (Chongoni) to 33°C at Ngabu in Chikwawa district while average daily minimum temperatures ranged from 16°C to 25°C.. See more details in Table 2.

1.4 MEAN WIND SPEEDS

Mean wind speeds at a height of two metres above ground level were light. The average wind speeds ranged from 0.4 m/s (1.4 Km/h) at Chitedze to 1.9 m/s (6.8 Km/h) at Chileka (see Table 2).

1.5 MEAN RELATIVE HUMIDITY

The atmosphere was fairly moist. Daily average relative humidity values ranged from 90% at Dedza to 66% at Chitedze. More details are in Table 2.

2. AGROMETEOROLOGICAL ASSESSMENT

Good rains for Agricultural production were received in the second 10-days of January 2009. These rains brought relief in areas where crops started wilting due to dry spells. The good rainfall distribution coupled with sun intervals experienced in most places was good for crop growth and development as well as Farm Management.
Crops were reported doing well at various developmental stages. In areas where maize crop was planted earlier, the crop has attained flowering stage. In areas where rainfall commenced late particularly over the north and some parts of the centre, the crop was vegetative and farmers continued weeding and application of basal and top dressing fertilisers. Despite late start of the wet season in some parts of the country, good crop yields are anticipated this season provided good rains continue up to end of February 2009.

3. PROSPECTS OF 2008/09 RAINFALL SEASON

Climate prediction models continue to suggest that by end of April 2009 the greater part of Malawi should expect normal rainfall amounts with poor distribution in both space and time. Already there has been a delay in the onset of the wet season in some parts of the country. Externally, the influence of climate change cannot be ignored and one of the indicators is occurrence of extreme climatic events such as floods and drought. Low lying areas such as the Shire valley and lakeshore areas are more vulnerable to floods and droughts. Some floods have already been reported in Chikwawa in lower Shire.

4. OUTLOOK FOR 21 – 31 JANUARY 2009

Pulses of moist and unstable Congo Air are expected to affect most parts of Malawi during the last 10-days of January 2009.Therefore, light to moderate rainfall is expected over Malawi.

TABLE 1: DEKADAL RAINFALL SUMMARY FOR 11 – 20 JANUARY 2009 AT SELECTED STATIONS

STATION NAME SOUTH	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
Bvumbwe Met.	72.2	76.2	95	640.7	499.3	128	7
Chancellor College	119.4	92.3	129	503.5	641.2	79	6
Chichiri Met.	90.6	74.7	121	584.1	504.2	116	7
Chikwawa Boma	13.6	59.5	23	229.4	356.6	64	2
Chileka Airport	152.9	50.2	305	528.4	420.4	126	7
Chingale Agric	93.4	75.9	123	286.3	441.0	65	6
Chizunga Factory	75.0	70.9	106	606.2	644.7	94	7
Lujeri Tea Estate	52.2	127.7	41	603.9	941.3	64	7
Makoka Met	116.2	73.7	158	571.1	469.1	122	6
Mangochi Met.	103.4	59.6	173	327.7	371.1	88	7
Mimosa Met.	55.0	70.7	78	680.8	636.5	107	4
Monkey Bay Met.	48.9	74.0	66	367.7	431.2	85	6
Mpemba Vet	45.0	80.2	56	615.4	559.6	110	6
Mulanje Boma	75.5	81.1	93	482.0	713.6	68	5
Namiasi Agric	21.2	65.4	32	336.7	346.8	97	5
Namwera Agric	168.7	84.5	200	387.4	492.9	79	7
Nchalo	26.9	35.8	75	334.0	312.0	107	4
Ngabu Met.	42.9	41.4	104	395.8	368.0	108	5
Nsanje Boma	99.2	60.5	164	450.4	411.3	110	4
Satemwa Tea Est.	37.1	55.0	67	364.2	577.4	63	9
Thyolo Met	78.8	68.3	115	522.0	521.6	100	8
CENTRE							
Bunda College	96.3	44.2	218	404.7	428.4	94	9
Chileka Namitete	27.3	61.3	45	238.8	445.9	54	5
Chitedze Met.	118.2	62.8	188	379.9	432.6	88	7
Dedza Met	96.5	69.3	139	509.2	430.5	118	10
Kaluluma DTC	40.2	76.9	52	265.5	384.0	69	6
K.I.A Met	93.9	83.2	113	418.2	387.9	108	9
Kasungu Met	57.4	72.2	80	301.9	406.9	74	8
Lisasadzi	205.5	67.7	304	440.2	388.8	113	8
Malomo Agric	221.3	125.7	176	480.3	379.7	126	7
Mchinji Boma	175.6	77.0	228	552.3	487.0	113	4
Mkanda Met	21.4	85.5	25	347.5	471.9	74	3
Mponela Agric	92.9	72.7	128	394.4	351.8	112	6
Mwimba Research	99.4	84.3	118	297.7	416.5	71	5
Mtakataka Airwing	210.6	54.9	384	839.6	384.4	218	7
Nathenje Agric	155.5	64.1	243	485.5	388.5	125	8
Nkhotakota Met	56.6	81.5	69	471.6	508.6	93	5
Ntchisi Boma	78.8	81.0	97	483.5	398.2	121	7
Salima Met	21.2	124.9	17	530.9	521.8	102	6
Sinyala Agric	123.2	67.9	181	640.0	445.3	144	9
Dedza RTC	137.7	87.2	158	522.6	434.1	120	7
NORTH							
Bolero Met	60.1	52.0	116	246.2	363.3	68	8
Chitipa Met	13.1	62.5	21	176.8	442.7	40	4
Emfeni Agric	170.4	61.1	279	373.5	374.3	100	5
Euthini Agric.	45.6	44.3	103	304.8	361.4	84	6
Karonga Met.	71.8	60.0	120	290.8	368.7	79	6
Lupembe	82.0	53.7	153	181.2	309.1	59	6
Mzimba Met	26.7	70.1	38	399.1	421.8	95	8
Mzuzu Met.	33.3	67.9	49	269.3	497.6	54	6
NkhataBay Met.	25.6	109.3	23	494.2	708.7	70	7
Vinthukutu Agric	68.3	62.1	110	537.7	415.2	130	2

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR 11 – 20 JANUARY 2009

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BOLERO	29.4	17.5	31.5	15.9	N/A	77
BVUMBWE	26.3	18.7	27.2	17.5	1.2	82
CHICHIRI	26.9	19.0	28.0	17.8	1.3	77
CHILEKA	30.5	19.5	30.5	19.5	1.9	79
CHITEDZE	27.1	18.7	28.2	17.9	0.4	66
CHITIPA	28.4	17.4	30.1	16.6	0.8	70
DEDZA	24.3	16.4	26.2	15.7	0.9	90
K I A	26.3	17.8	27.7	17.1	1.0	82
KARONGA	31.4	22.3	32.4	20.8	1.2	71
KASUNGU	27.6	19.3	29.1	18.3	1.3	84
MAKOKA	28.3	18.9	30	18.4	1.1	79
MANGOCHI	30.9	22.8	34.8	21.6	0.9	72
MONKEY BAY	30.2	23.6	32.4	22.6	1.7	78
MZIMBA	27.0	18.1	28.9	17.5	0.7	74
MZUZU	26.8	17.7	28.6	15.7	1.2	80
NGABU	33.0	24.7	36.5	23.2	1.0	76
NKHATA BAY	31.1	21.1	32.8	19.7	0.7	79
NKHOTAKOTA	29.6	22.3	30.8	20.5	N/A	74
SALIMA	30.1	25.5	32.2	21.6	1.0	75

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