



Malawi 10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services



Period: 21 – 31 January 2009

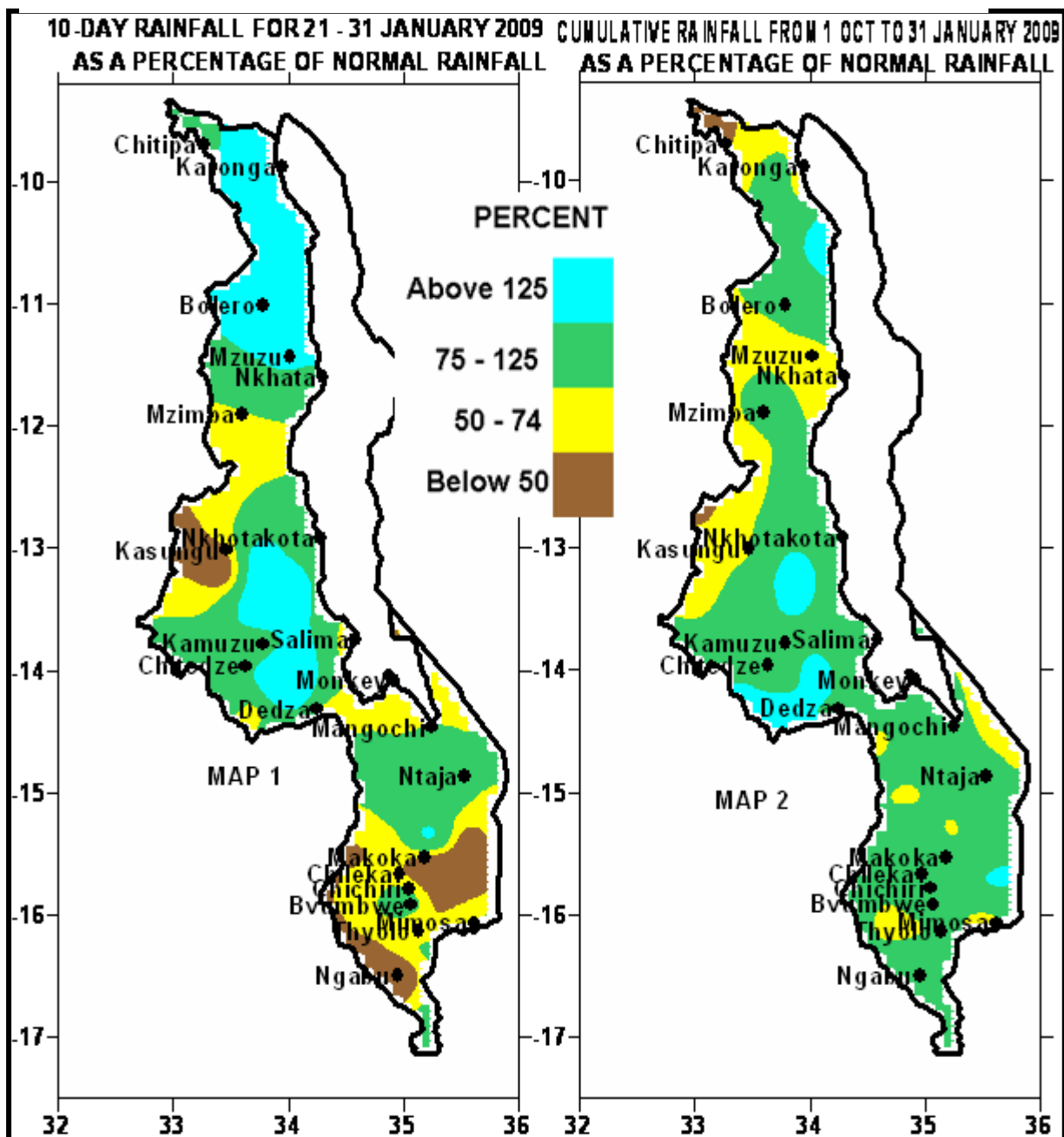
Season: 2008/2009

Issue No.12

Release date: 06 February 2009

HIGHLIGHTS

- Light to moderate rainfall was received over Malawi...
- Early planted Maize was mostly at flowering and cob formation stage...
- Widespread rains expected during 1st to 10th February 2009...



1. WEATHER SUMMARY

1.1 RAINFALL SITUATION

During the last 10-days of January 2009, pulses of moist and unstable Congo Air brought light to moderate rainfall over most parts of Malawi. Very few areas experienced drier than normal weather (yellow and brown colours on map 1). Such areas included lower Shire Valley and surrounding areas in southern Malawi, some parts of Kasungu in the centre and Mzimba district in the north.. However, a few areas registered above normal 10-day cumulative rainfall amounts (light blue colours on Map 1) with very good spatial and temporal distribution. Overall, most areas in Malawi reported over five rainfall days. Areas that had accumulated more than 150mm during the period were confined mostly to the centre and north. These areas in the centre included Mponela Agric (158mm), and Nathenje Agric (228mm) and in the north Vinthukutu Agric (288mm). See Table 1.

Cumulative rainfall performance from October 2008 up to 31 January 2009 showed that most parts of Malawi had received average rainfall amounts with few areas registering 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 last ten days of January 2009 mean daily maximum temperatures over most areas in Malawi were in the warm to hot category. The highest maximum temperature was reported at Ngabu (34.6°C) while the lowest was reported at Dedza (23°C). At the same time, mean daily minimum temperatures ranged from 16.1°C at Dedza to 23.6°C at Ngabu. (Table 2).

1.3 MEAN DAILY WIND SPEEDS

Mean daily wind speeds measured at a height of two meters above the ground were light. The highest wind speed was reported at Chileka (2.1 m/s or 7.6 Km/hr) while the lowest wind speed was recorded at Chichiri. See Table 2.

1.4 MEAN RELATIVE HUMIDITY

The atmosphere was remained fairly moist. Daily average relative humidity values ranged from 85% at Chitipa to 72% at Mimosa. More details are in Table 2.

2. AGROMETEOROLOGICAL ASSESSMENT

Favourable rains for Agricultural production continued in the last 10-days of January 2009. The good rainfall distribution and amount coupled with sunny intervals reported in most places were good for growth and development of various crops as well as Farm Management. Crops were reported doing well at various developmental stages. If good rains continue up to end of February, yields of most crops are anticipated to be higher than last season In areas where maize crop was planted around mid November particularly in lower altitudes areas, the crop was reported doing well at flowering and cob formation stages while the late planted crop was also doing well at vegetative stage and farmers continued weeding and in some cases were finalising application top dressing fertilisers..

3. PROSPECTS OF 2008/09 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. Some floods have already been reported in Chikwawa in lower Shire. 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.

4. OUTLOOK FOR 1 – 10 February 2009

Meanwhile, models for medium range forecasts indicate that both the Inter Tropical Convergence Zone and moist and unstable Congo Air are likely to remain active over Malawi. Therefore widespread locally heavy rains are expected during the first ten days of February 2009.

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

STATION NAME	DEKADAL TOTAL RAINFALL	DEKADAL NORMAL	DEKADAL TOTAL AS % NORMAL	TOTAL TO DATE	NORMAL TO DATE	TOTAL TODATE AS % NORMAL	RAINY DAYS
SOUTHERN REGION	mm	mm		mm	mm		³ 0.3 mm
Bvumbwe Met.	92.1	90.5	102	732.8	589.8	124	5
Chichiri Met.	74.6	93.0	80	658.7	597.2	110	4
Chileka Airport	36.6	79.3	46	565.0	499.7	113	5
Chingale Agric	121.3	94.8	128	407.6	535.8	76	7
Chiradzulu Agric	22.5	94.1	24	558.8	598.9	93	2
Chizunga Factory	75.7	92.2	82	681.9	736.9	93	4
Lujeri Tea Estate	112.3	134.8	83	716.2	1076.1	67	6
Mpilipili	96.9	N/A	N/A	556.1	N/A	N/A	5
Makoka Met	35.1	79.0	44	606.2	548.1	111	5
Mangochi Met.	58.8	74.0	79	386.5	445.1	87	9
Masambanjati Agric	90.3	93.9	96	575.9	690.0	83	4
Mimosa Met.	78.2	100.0	78	759.0	736.5	103	6
Monkey Bay Met.	66.5	114.2	58	434.2	545.4	80	6
Mpemba Vet	103.5	104.0	100	718.9	663.6	108	6
Namiasi Agric	43.6	89.3	49	380.3	436.1	87	6
Naminjiwa Agric	25.3	83.0	30	807.2	557.4	145	4
Nchalo Illovo Sugar	4.1	54.2	8	338.1	366.2	92	2
Neno Agric	47.0	105.5	45	698.4	609.1	115	4
Ngabu Met.	4.6	52.2	9	400.4	420.2	95	2
Nsanje Boma	86.6	75.1	115	537.0	486.4	110	5
Ntaja Met.	71.1	84.5	84	585.1	501.2	117	6
Satemwa	17.7	95.0	19	381.9	672.4	57	3
Zomba RTC	41.4	107.3	39	531.2	679.3	78	6
CENTRAL REGION							
Chitedze Met.	81.5	81.9	100	461.4	514.5	90	7
Dedza Met	74.8	95.6	78	584.0	526.1	111	4
K.I.A Met	61.4	90.9	68	479.6	478.8	100	6
Kasungu Met	39.7	67.0	59	341.6	473.9	72	6
Lisasadzi	19.7	80.9	24	459.9	469.7	98	3
Malomo Agric	119.1	55.1	216	599.4	434.8	138	6
Mchinji Boma	83.5	88.4	94	635.8	575.4	110	8
Mponela Agric	158.0	82.7	191	552.4	434.5	127	5
Mwimba Research	30.0	76.1	39	327.7	492.6	67	4
Mtakataka Airwing	40.8	69.8	58	880.4	454.2	194	3
Nathenje Agric	227.5	85.1	267	713.0	473.6	151	6
Nkhotakota Met	78.1	74.6	105	561.6	472.8	119	5
Ntcheu - Nkhande	81.1	84.0	97	828.2	605.8	137	8
Ntchisi Boma	78.1	74.6	105	561.6	472.8	119	6
Salima Met	46.0	114.4	40	576.9	636.2	91	7
Sinyala Agric	76.2	70.4	108	716.2	515.7	139	4
Dedza RTC	72.5	116.3	62	595.1	550.4	108	7
NORTHERN REGION							
Bolero Met	88.2	47.3	186	334.4	410.6	81	4
Chitipa Met	64.6	72.6	89	241.4	515.3	47	7
Chintheche Agric	66.3	82.6	80	469.6	719.0	65	5
Karonga Met.	145.6	54.1	269	436.4	422.8	103	1
Mzimba Met	45.6	63.3	72	444.7	485.1	92	6
Mzuzu Met.	101.5	69.9	145	370.8	567.5	65	5
NkhataBay Met.	53.2	53.4	100	547.4	762.1	72	7
Vinthukutu Agric	288.1	65.1	443	825.8	480.3	172	5

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

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BOLERO	28.0	17.5	29.9	16.2	0.5	76
BVUMBWE	26.2	18.2	27.7	16.5	1.5	81
CHICHIRI	27.0	18.6	29.0	17.0	0.4	75
CHILEKA	28.9	20.8	30.9	19.3	2.1	79
CHITEDZE	27.0	18.1	25.7	16.9	0.5	81
CHITIPA	26.4	19.3	27.8	17.1	0.5	85
DEDZA	23.0	16.1	20.5	13.6	1.2	77
K.I.A.	25.6	17.6	27.6	16.8	1.2	78
KARONGA	29.6	21.9	31.0	20.5	1.6	78
KASUNGU	26.6	18.6	28.5	17.5	1.3	81
MAKOKA	28.1	19.7	30.1	17.6	0.9	77
MANGOCHI	30.1	22.0	32.2	21.1	0.8	78
MIMOSA	30.5	19.0	32.4	16.8	1.0	72
MONKEY BAY	29.5	22.5	32.0	21.5	1.2	81
MZIMBA	26.9	17.1	28.4	16.0	0.6	77
MZUZU	26.1	17.3	27.4	14.8	1.5	80
NGABU	34.6	23.6	36.5	22.5	1.4	76
NKHATA BAY	30.4	21.0	32.5	19.5	0.6	81
NTAJA	29.3	21.0	31.0	20.0	1.1	80
SALIMA	28.6	21.8	31.2	20.9	0.6	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).
- To convert Meters Per Second (mps) to Kilometers per hour (Km/hr) = mpsx3.6