



Malawi 10-Day Rainfall & Agrometeorological Bulletin

Department of Climate Change and Meteorological Services



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HIGHLIGHTS

- There was slight improvement in rainfall amounts...
- Land preparation and acquisition of farm inputs continued...
- A further improvement in rainfall amount and distribution expected...

1.1 RAINFALL SITUATION

Malawi experienced a slight improvement in rainfall amounts during the first ten days of November 2009. Places that accumulated at least 30mm of rainfall during the period included Nsanje Boma (114.9mm), Madisi Agric in Dowa (95.5mm), Chitipa Met (70.7mm), Mponela Agric. in Dowac (66.0mm), Euthini Agric in Mzimba (50mm), Malomo Agric in Ntchisi (40mm), and Nchalo in Chikwawa (30mm). Most of the rainfall amounts received in central and northern Malawi were well above the expected rainfall amounts for the period. However, the distribution was still poor as most areas registered only one to two rainy days.. See more details in Table 1..

1.2 MEAN AIR TEMPERATURE

Mean maximum air temperatures at most places were generally hot. Only Ngabu in lower Shire Valley experienced very hot conditions (37°C). The lowest mean maximum temperature was 26°C reported at Dedza. Average minimum temperatures ranged from 16°C at Bvumbwe to 25°C at Karonga. See more details in Table 2.

1.4 MEAN WIND SPEEDS

Mean wind speeds at a height of two metres above the ground ranged from 0.7 m/s (2.5 Km/h) at Nkhata Bay to 3.9 m/s (14 Km/h) at Ngabu (see Table 2).

1.5 MEAN RELATIVE HUMIDITY

During the first ten days of November 2009, air over Malawi was fairly moist except for a few places which reported daily average relative humidity values of less than 55%. Relatively

dry conditions were reported at Chichiri and Chileka (45%), Monkey Bay (49%). The highest daily average relative humidity was reported at Mzuzu Airport (68%). More details are in the Table 2.

2. AGROMETEOROLOGICAL ASSESSMENT

Sporadic but good rainfall amounts received during the first ten days of November 2009 impelled some farmers to start planting of crops though at a smaller scale. Normally at the onset of the season clever farmers are cautious and stagger planting dates to minimize weather and climate risks. The major agricultural activities during the period under review included land preparation and gathering of farm inputs in readiness for the main rains. Distribution of coupons and procurement of government of Malawi subsidized inputs was in progress.

3. PROSPECTS OF 2009/10 RAINFALL SEASON

Climate models indicate that during October to December 2009, the northern half of Malawi is most likely to receive normal to above normal rainfall while the Southern half will receive above normal to normal rainfall.

During January to March 2010 the northern half of Malawi will receive above normal to normal rainfall while the Southern half will receive normal to above normal rainfall.

4. OUTLOOK 11 – 20 NOVEMBER 2009

A further improvement in rainfall amounts and distribution is anticipated towards the end of the forecast period as a convergence ahead of pressure rises is expected to be established over southern half of Malawi.

TABLE 1: DEKADAL RAINFALL SUMMARY FOR 01 – 10 NOVEMBER 2009 AT SELECTED STATIONS

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 ≥0.3 mm
SOUTHERN REGION							
Balaka Township	1.0	18.9	5	13.7	46.2	30	1
Bvumbwe Met.	5.5	20.9	26	19.0	51.0	37	1
Chichiri Met.	0.0	69.5	0	1.4	166.4	1	0
Chikwawa Boma	0.0	11.5	0	0.0	33.7	0	0
Chikweo Agric.	0.0	12.0	0	0.0	26.0	0	0
Chileka Airport	2.7	19.6	14	13.4	48.4	28	1
Chingale Agric	6.5	17.1	38	67.5	31.8	212	1
Liwonde Township	0.0	6.9	0	0.0	24.6	0	0
Mpilipili (Makanjila)	0.0	8.4	0	0.0	27.6	0	0
Makoka Met	0.0	15.3	0	0.0	39.7	0	0
Mangochi Met.	0.0	7.3	0	14.1	21.3	66	0
Mimosa Met.	0.0	33.7	0	41.5	95.6	43	0
Monkey Bay Met.	0.0	5.9	0	0.0	10.0	0	0
Mpemba Agric	4.5	25.9	17	47.7	63.6	75	1
Namiasi Agric	0.0	5.8	0	0.0	12.2	0	0
Naminjiwa Agric	0.0	14.9	0	135.5	43.9	309	0
Nchalo Sucoma	30.0	14.3	210	32.7	30.7	107	1
Neno Agric	0.0	20.2	0	0.0	53.7	0	0
Ngabu Met.	10.1	16.7	60	42.8	39.9	107	1
Nsanje Boma	114.9	32.1	358	128.8	84.9	152	1
Ntaja Met.	0.8	9.1	9	3.5	22.2	16	1
Satemwa Tea Est. No.1	0.0	28.1	0	29.6	64.6	46	0
Thyolo Met	4.0	35.5	11	24.0	74.4	32	1
Zomba RTC	0.0	19.1	0	2.3	43.7	5	0
CENTRAL REGION							
Bunda College	18.3	15.4	119	19.2	35.4	54	2
Chileka Namitete	0.0	16.4	0	0.0	31.2	0	0
Chitedze Met.	13.7	8.6	159	15.1	20.9	72	2
Dedza Met	26.1	10.1	258	30.8	21.2	145	3
Dowa Agric	1.4	9.3	15	1.4	16.3	9	1
Kaluluma DTC	15.0	2.3	652	15.0	7.0	214	1
K.I.A Met	0.0	9.3	0	0.0	20.3	0	0
Kasungu Met	6.5	6.1	107	6.5	12.8	51	2
Malomo Agric	40.0	2.7	1481	40.0	6.3	635	2
Madisi Agric	95.5	7.4	1291	95.5	13.3	718	4
Mponela Agric	66.0	10.5	629	66.0	17.7	373	3
Mtakataka Airwing	0.0	12.8	0	14.0	22.0	64	0
Nathenje Agric	7.5	8.9	84	7.5	22.0	34	2
Nkhotakota Met	13.1	10.1	130	13.1	16.4	80	1
Ntcheu - Nkhande	0.0	18.1	0	7.0	40.5	17	0
Salima Met	0.0	6.6	0	0.0	14.0	0	0
NORTHERN REGION							
Bolero Met	22.9	3.8	603	22.9	10.0	229	3
Bwengu Agric.	12.5	10.1	124	12.5	18.8	66	1
Chitipa Met	70.7	9.7	729	70.7	14.3	494	2
Chintheche Agric	19.0	23.5	81	19.0	39.2	48	1
Euthini Agric.	50.0	7.4	676	50.0	14.4	347	1
Karonga Met.	0.0	3.4	0	0.0	5.2	0	0
Lupembe	4.0	4.0	100	4.0	5.6	71	2
Mzimba Met	36.6	9.8	373	36.6	15.1	242	5
Mzuzu Met.	19.9	12.7	157	32.2	48.8	66	3
NkhataBay Met.	22.0	16.9	130	22.0	30.7	72	2
Vinthukutu Agric	0.0	7.1	0	0.0	15.1	0	0

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR 01 – 10 November 2009

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BOLERO	32.4	19.0	33.9	16.5	N/A	57
BVUMBWE	29.0	16.3	32.0	13.9	2.6	55
CHICHIRI	30.6	17.2	33.5	14.5	1.2	45
CHILEKA	32.7	21.0	36.4	18.3	3.5	45
CHITEDZE	31.0	17.6	33.2	16.2	1.0	65
CHITIPA	30.6	19.5	31.9	18.6	2.8	58
K I A	29.5	17.7	30.5	16.3	1.9	57
KARONGA	33.5	24.7	34.5	23.4	2.2	55
KASUNGU	31.5	19.2	33.5	17.9	2.8	55
MAKOKA	N/A	17.2	N/A	14.7	2.0	51
MANGOCHI	N/A	22.5	N/A	21.4	1.9	52
MIMOSA	32.2	16.1	36.2	14.0	1.7	57
MONKEY BAY	33.7	24.1	35.2	22.7	2.4	49
MZIMBA	29.2	17.8	31.2	15.0	1.2	63
MZUZU	28.2	17.2	30.1	15.3	1.8	68
NGABU	36.9	22.7	41.1	21.1	3.9	59
NKHATA BAY	33.5	21.0	35.0	19.5	0.7	61
NTAJA	33.2	21.1	35.6	19.4	2.8	51
SALIMA	32.8	24.0	34.9	23.2	2.6	52
THYOLO	30.7	18.2	34.3	14.7	N/A	55

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