



# Malawi 10-Day Rainfall & Agromet Bulletin



Department of Meteorological Services

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## HIGHLIGHTS

- **There was slight improvement in rainfall over southern Malawi...**
- **Land preparation and acquisition of farm inputs continued...**
- **A further improvement in rainfall expected...**

### 1.1 RAINFALL SITUATION

Malawi experienced a slight improvement in rainfall amounts particularly in the south and over a few areas in the centre while in the north generally dry weather persisted during the period under review. Places that registered over 30mm of rainfall during the period included Bvumbwe Met (75.8mm), Chizunga (68.0mm), Mpemba Vet (36.4mm), Mimosa Met (35.2mm) and Chichiri Met (31.0mm) in the south and Sinyala Agric in the centre. Some areas in the south reported up to four rainy days (see **Table 1**).

### 1.2 MEAN AIR TEMPERATURE

Mean maximum air temperatures at most places remained generally hot. Only Ngabu in the lower Shire Valley experienced very hot average maximum temperature of 37°C. The lowest mean maximum temperature of 28°C was reported at Bvumbwe. Average minimum temperatures ranged from 18°C at Bvumbwe to 27°C at Monkey Bay. See more details in Table 2.

### 1.4 MEAN WIND SPEEDS

Mean wind speeds at a height of two metres above the ground level ranged from 0.9 m/s (3.2 Km/h) at Nkhata Bay to 3.8 m/s (13.7 Km/h) at Ngabu and Chileka (see Table 2).

### 1.5 MEAN RELATIVE HUMIDITY

During the first ten days of November 2008, air over Malawi was relatively dry. Daily average relative humidity values ranged from 37% at Mimosa to 65% at Bvumbwe. More details are in the Table 2.

### 2. AGROMETEOROLOGICAL ASSESSMENT

The rainfall that has been received in some parts of the country particularly in the south prompted 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 risks. The major agricultural activities during the period under review included land preparation and gathering of farm inputs in readiness for the main rains.

### 3. PROSPECTS OF 2008/09 RAINFALL SEASON

Climate models suggest that during 2008/2009 rainfall season, a greater part of Malawi will experience normal total rainfall amounts. However, just like in any ENSO-neutral season, extreme weather events like floods and prolonged dry spells may occur in some places.

Based on this forecast farm management strategies for crop production that could be implemented in consultation with agricultural extension officers include planting early with the first effective rains, selection of medium and short season varieties with high yielding potential, diversification of crop mix with some commercial crops and staggering planting of selected crop varieties to minimize weather and climate risks

### 4. OUTLOOK 11 – 20 NOVEMBER 2008

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 2008 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
<b>SOUTH</b>							
Bvumbwe Met.	75.8	23.4	324	83.2	54.8	152	3
Chancellor College	0.0	20.1	0	9.6	47.9	20	0
Chichiri Met.	31.0	38.5	81	40.5	72.1	56	3
Chikwawa Boma	0.0	13.5	0	16.4	29.9	55	0
Chileka Airport	5.4	26.3	21	5.8	55.3	10	3
Chingale Agric	9.5	16.3	58	25.5	30.3	84	1
Chizunga Factory	68.0	35.1	194	68.0	77.5	88	4
Kasinthula Res. Stn.	0.0	24.1	0	10.0	46.3	22	0
Lujeri Tea Estate	4.5	57.9	8	11.5	157.9	7	2
Makoka Met	1.0	20.6	5	2.2	47.5	5	1
Mangochi Met.	11.8	18.3	64	11.8	33.5	35	3
Mimosa Met.	35.2	35.5	99	49.1	96.2	51	2
Monkey Bay Met.	6.8	13.6	50	6.8	22.5	30	2
Mpemba Vet	36.4	33.1	110	36.4	70.9	51	1
Mulanje Boma	3.2	37.8	8	11.7	139.7	8	1
Namiasi Agric	3.5	5.0	70	3.5	15.1	23	2
Naminjiwa Agric	0.0	16.4	0	1.6	48.3	3	0
Ngabu Met.	5.3	19.1	28	5.3	45.5	12	1
Nsanje Boma	16.4	27.1	61	18.3	55.6	33	1
Ntaja Met.	2.6	11.5	23	2.6	26.9	10	1
Satemwa Tea Est.	19.9	38.8	51	25.3	87.8	29	4
Thyolo Met	27.1	37.6	72	27.1	80.3	34	2
Zomba RTC	2.1	23.3	9	12.0	42.2	28	1
<b>CENTRE</b>				0.0			
Chileka Namitete	8.0	16.4	49	8.0	31.2	26	1
Chitedze Met.	2.0	13.7	15	6.5	24.5	27	1
Dowa Agric	0.0	13.4	0	0.0	16.3	0	0
Dwangwa	0.0	17.6	0	1.5	28.3	5	0
Kaluluma DTC	5.3	2.3	230	5.3	7.0	76	1
K.I.A Met	0.0	11.0	0	28.4	22.1	129	0
Kasungu Met	0.0	18.3	0	0.0	27.7	0	0
Lisasadzi	0.0	7.1	0	0.0	10.0	0	0
Mchinji Boma	28.0	21.3	131	28.0	40.6	69	4
Mkanda Met	10.5	22.5	47	21.0	45.8	46	1
Mlangeni Njolomole	0.0	20.8	0	0.0	41.5	0	0
Mponela Agric	0.0	9.4	0	0.0	13.6	0	0
Mwimba Research	0.0	10.7	0	0.0	22.8	0	0
Mtakataka Airwing	0.0	17.0	0	0.0	37.0	0	0
Nathenje Agric	0.0	15.7	0	20.0	23.8	84	0
Nkhotakota Met	5.0	13.3	38	5.0	19.9	25	1
Ntcheu - Nkhande	6.0	16.0	38	11.2	38.6	29	3
Ntchisi Boma	1.7	8.6	20	1.7	12.0	14	1
Salima Met	0.0	12.2	0	10.2	18.3	56	0
Sinyala Agric	54.3	21.3	255	62.3	38.1	164	6
Dedza RTC	21.3	7.3	292	22.3	35.8	62	3
<b>NORTH</b>							
Baka Res. Stn.	0.0	3.2	0	0.0	4.6	0	0
Bolero Met	0.0	44.0	0	3.4	50.7	7	0
Bwengu Agric.	0.0	10.8	0	0.0	16.9	0	0
Chitipa Met	0.0	6.5	0	0.0	12.1	0	0
Euthini Agric.	0.0	11.1	0	0.0	20.0	0	0
Karonga Met.	0.0	3.9	0	0.0	4.8	0	0
Mbawa Res. Stn	0.0	9.4	0	5.0	18.0	28	0
Mzimba Met	0.0	12.8	0	20.9	17.5	119	0
Mzuzu Met.	4.8	20.3	24	11.3	54.4	21	1
NkhataBay Met.	4.5	69.1	7	5.0	138.5	4	1

**TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR 01 – 10 November 2008**

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
<b>BOLERO</b>	33.2	21.1	34.9	18.7	1.5	44
<b>BVUMBWE</b>	28.4	18.1	32.3	14.6	2.4	65
<b>CHICHIRI</b>	29.8	18.7	33.5	13.6	1.0	61
<b>CHILEKA</b>	32.6	22.1	36.6	19.5	3.8	59
<b>CHITEDZE</b>	31.8	18.9	33.8	17.3	1.3	51
<b>CHITIPA</b>	32.1	20.0	33.6	19.2	2.8	46
<b>K I A</b>	29.8	18.7	31.4	16.6	2.1	54
<b>KARONGA</b>	34.0	23.5	36.0	21.0	1.7	57
<b>KASUNGU</b>	32.1	20.9	34.0	19.6	3.2	49
<b>MAKOKA</b>	31.4	20.1	33.9	17.0	1.9	51
<b>MANGOCHI</b>	35.9	24.3	39.0	22.9	2.1	46
<b>MIMOSA</b>	33.9	19.4	37.7	15.0	1.6	37
<b>MONKEY BAY</b>	34.5	26.5	36.0	24.0	2.7	46
<b>MZIMBA</b>	30.6	19.6	33.4	17.2	1.4	45
<b>MZUZU</b>	28.7	15.7	31.4	14.1	2.0	56
<b>NGABU</b>	37.9	24.2	42.5	20.7	3.8	62
<b>NKHATA BAY</b>	34.2	20.1	36.0	18.4	0.9	53
<b>NTAJA</b>	33.9	22.9	36.8	20.5	3.1	51
<b>SALIMA</b>	34.2	24.7	35.2	23.1	2.6	49

**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