



10-day Weather and Agrometeorological Bulletin

In support of national early warning systems



Period: 01 – 10 October 2012

Season: 2012/2013

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HIGHLIGHTS

- Dry conditions prevailed over Malawi...
- Land preparation has been the main on-farm agricultural activity...
- Dry conditions are expected to continue during 11 – 20 October 2012...

Malawi Total Rainfall for 1-10 October 2012 Malawi Percentage of Average Rainfall for 1-10 October 2012

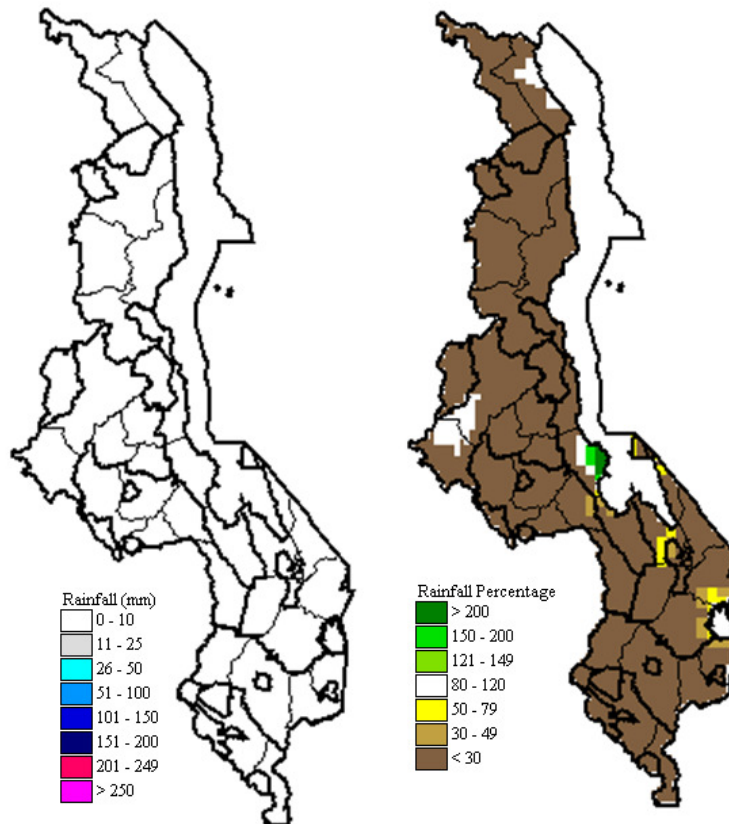


Figure 1: Rainfall Maps for Malawi for 01-10 October 2012

1.0 WEATHER SUMMARY AND IMPACTS

1.1 RAINFALL SITUATION

During the first ten days of October 2012, Malawi was mostly dry such that no station reported rainfall. As can be seen from the two maps on the previous page, dry weather conditions prevailed over the whole country.

1.2 VEGETATION CONDITION

Vegetation condition in the Southern African region, including Malawi indicate suppressed vegetation over the larger parts. This is can be attributed to the dry conditions that are characteristic of the period prior to the onset of the rainfall season. Refer to Figure 2 below:

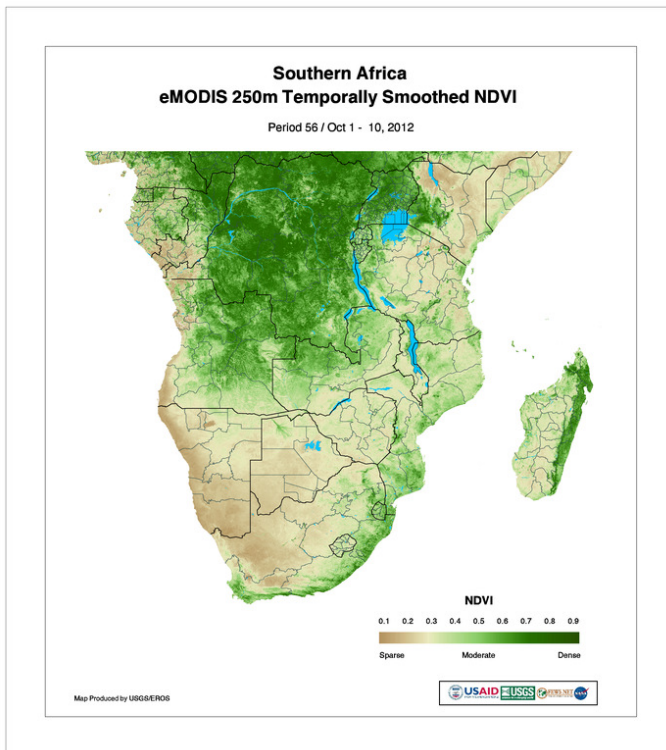


Figure 2: Vegetation Condition over Southern Africa for 01-10 October 2012

1.3 AIR TEMPERATURE

Temperatures were hot in low altitude areas and warm over highlands during the first ten days of October 2012. Mean maximum temperatures ranged from 28°C at Mzuzu to about 39°C at Ngabu while mean minimum temperatures ranged from around 13°C at Mzuzu to around 24°C at Ngabu and Salima. For more details see Table 1.

1.4 WIND SPEEDS

Mean wind speeds at a height of two metres above the ground level across the country ranged from 0.8 to 6.0

metres per second (m/s). The lowest and highest wind speeds were reported at Nkhata Bay and Chitipa (0.8 and 6.0 m/s, respectively).

1.5 RELATIVE HUMIDITY

During the period under review, air over Malawi was generally dry. Daily average relative humidity values ranged from 39% at Makoka and Bolero to 53% at Nkhata Bay. Details are in the Table 1.

2. AGROMETEOROLOGICAL ASSESSMENT

The main on-farm activity during the first ten days of October 2012 has been land preparation in most parts of the country. This is in readiness for the first planting rains. Land preparation is expected to intensify as the start of the rains draws nearer.

3. PROSPECTS FOR 2011/12 RAINFALL SEASON

The summary of the 2012/2013 rainfall forecast is that ***“Normal total rainfall amounts are expected over most parts of Malawi during the 2012/2013 rainfall season”***. The rainfall forecast indicates that the greater part of the country will experience normal to above normal total rainfall amounts during the period from October 2012 to March 2013.

This forecast covers the rainfall season from October 2012 to March 2013 and is relevant only to seasonal time-scales and relatively large areas. It does not fully account for local and month to month variations in distribution of rainfall such as localised dry spells and flash floods.

The seasonal forecast is issued to users as a planning tool. For day to day operations, users are advised to make use of the available short and medium range forecasts and the 10-day Rainfall and Agrometeorological bulletin.

4. OUTLOOK 11 – 20 OCTOBER 2011

Short and medium range forecasts indicate that warm Easterly to Northeasterly airflow will persist over Malawi. Therefore the country will experience mainly dry weather conditions during the second ten days of October 2012.

**TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR THE PERIOD 01 – 10
OCTOBER 2012**

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED (m/s)	RH (%)	EVAP (mm)
KARONGA ADD							
Chitipa	30.8	18.9	32.3	16.5	6.0	41	N/A
Karonga	34.3	21.8	36.5	20.0	2.4	43	N/A
MZUZU ADD							
Bolero	31.9	20.1	33.8	15.2	N/A	39	N/A
Mzuzu	28.3	12.7	30.3	10.5	1.6	52	N/A
Mzimba	29.3	17.8	31.6	14.0	2.0	46	N/A
Nkhata Bay	34.1	16.7	36.1	15.7	0.8	53	N/A
KASUNGU ADD							
Kasungu	31.5	18.8	33.7	17.1	3.3	45	N/A
LILONGWE ADD							
KIA	29.3	15.5	31.3	13.6	2.2	42	10.5
Chitedze	30.6	16.2	32.4	14.9	1.4	44	N/A
SALIMA ADD							
Salima	33.4	22.0	35.5	20.6	2.4	51	N/A
Nkhotakota	31.9	21.7	33.6	19.0	2.3	49	N/A
MACHINGA ADD							
Makoka	30.7	18.4	33.1	17.3	1.5	39	N/A
Ntaja	33.1	20.6	35.6	19.6	2.5	47	N/A
Mangochi	35.0	21.5	38.0	19.0	1.9	47	N/A
Monkey Bay	33.7	22.8	35.8	20.7	2.3	45	10.5
BLANTYRE ADD							
Chileka	33.0	20.7	36.2	18.0	3.6	45	N/A
Chichiri	29.5	16.9	33.3	11.7	1.4	44	N/A
Bvumbwe	29.4	16.1	32.3	14.4	2.2	50	N/A
Mimosa	34.3	17.6	37.6	15.1	1.6	48	N/A
SHIRE VALLEY ADD							
Ngabu	38.6	24.4	41.0	21.1	1.9	43	N/A

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