



10-day Weather and Agrometeorological Bulletin

Produced in support of national early warning systems



Period: 01 – 10 November 2013

Season: 2013/2014

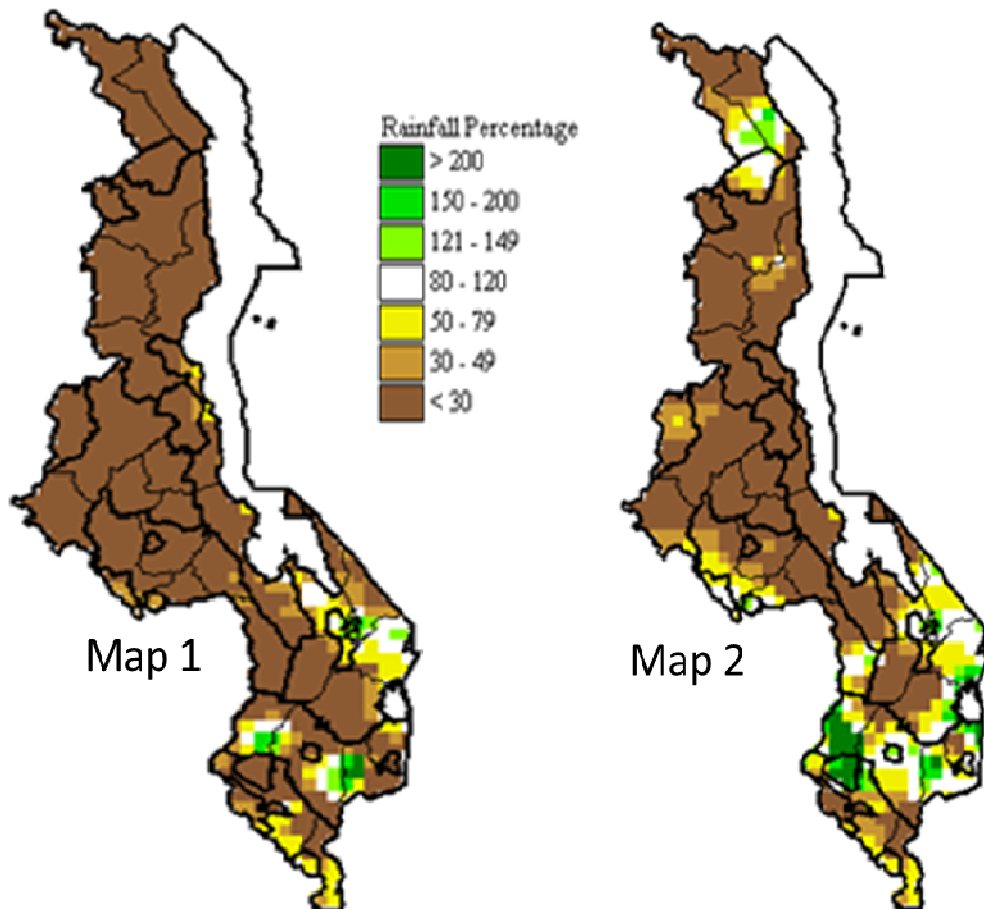
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HIGHLIGHTS

- Malawi continued to experience sporadic rainfall...
- Land preparation and farm input mobilization were major activities...
- Mostly dry weather to persist over Malawi during 11 to 20 November 2013...

Malawi Percentage of Average Rainfall



01 to 10 Nov 2013 Rainfall

01 Oct to 10 Nov 2013 Rainfall

1.0 WEATHER SUMMARY AND IMPACTS

1.1 RAINFALL SITUATION

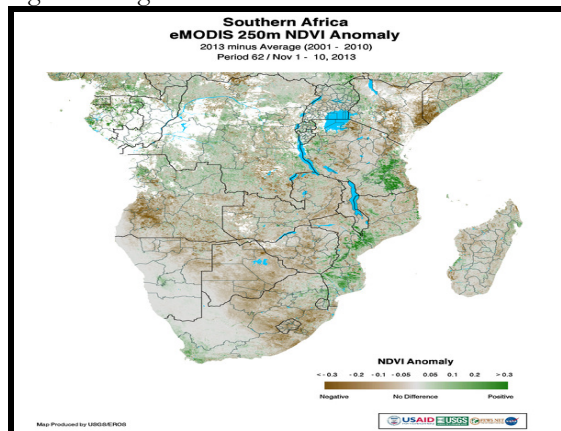
During the first ten days of November 2013 sporadic rainfall had continued in few areas in Malawi. The rainfall that was registered during this period was as a result of heating and little moisture that prevailed in some parts of the country. Most of the rains were received between 2nd and 4th November and were confined mainly to southern highlands and some parts of the lakeshore areas (Map 1). The rainfall that was reported at most of the stations was generally above the long term average for the first ten days of November. Stations that reported significant rainfall amounts of at least 20mm in the south included Mulanje Boma (131mm), Lujeri Tea Estate (39mm), Mimosa Met (35mm) and Mangochi (20mm), in the centre Nkhotakota had reported 64mm while Mzuzu in the north 34mm.

Sporadic rainfall performance is expected to persist over Malawi until when the main rain bearing systems are fully established over the country.

Map 2 indicates cumulative rainfall performance from 01 to 10 November 2013. Generally the map shows that most areas in Malawi were still very dry (brown colour) and rainfall was confined to a few sporadic areas (green colour)

1.2 VEGETATION CONDITION

Figure 1: Vegetation Condition over Southern Africa



The vegetation difference from long term average map for Southern Africa for the period 1st to 10th November 2013 shows that most parts of the region including Malawi are experiencing below average vegetation conditions (Figure 1). As such, pastures are likely to be in poor condition, particularly in areas where low rainfall was received during the 2012/2013 seasons. The poor vegetation have been as a result of the poor rainfall performance that affected several parts of the region in the last two seasons, especially those in the southern half of the region.

1.3 AIR TEMPERATURE

Generally hot to very hot temperatures had prevailed over Malawi except over a few highlands during the first ten days

of November 2013. Very hot temperatures were still confined to lower shire where Ngabu Met in Chikwawa had reported daily average maximum temperature of 38.8°C. Mean maximum temperatures had ranged from 27.4°C at Chongoni in Dedza to 38.8°C at Ngabu in Chikwawa while mean minimum temperatures had ranged from 15.8°C at Bvumbwe in Thyolo to 24.4°C at Monkey Bay (Table 1). The highest (absolute) maximum temperature was still recorded at Ngabu (44.2°C) in Chikwawa while the lowest was 12.2°C recorded at Mzuzu in Mzimba district. For more details see Table 1.

1.4 WIND SPEEDS

Mean wind speeds at a height of two metres above the ground level over Malawi had ranged from 0.9 m/s at Nkhata Bay Met to 5.1 m/s at Chitipa Met. For more details refer to Table 1.

1.5 RELATIVE HUMIDITY

During the period under review, air over Malawi remained generally dry. Daily average relative humidity values had ranged from 40% at Chitipa Met to 70% at Makoka Met in Zomba District. The details are on the Table 1.

2. AGROMETEOROLOGICAL ASSESSMENT

The major on-farm agricultural activity in most parts of Malawi remained to be land preparation and procurement of farm inputs and equipment in readiness for the main planting rains which are now around the corner. Most areas had remained dry except at a few places. The rainfall that was received during the period under discussion was still sporadic and continued to encourage farmers to speed up land preparations in readiness for the main planting rains.

3. PROSPECTS FOR 2013/14 RAINFALL SEASON

The bottom line of the 2013/14 rainfall outlook is that *during 2013/2014 main farming season, Malawi is likely to experience normal total rainfall amounts.* However, extreme weather events such as floods and prolonged dry spells are likely to occur particularly in prone areas. The seasonal forecast can be accessed and downloaded *at the Department of Climate Change and Meteorological Services website using the link below:* http://www.metmalawi.com/forecasts/SEASONAL_FORECAST_2013_2014_Press_release.pdf

4. OUTLOOK FOR 11 – 20 NOVEMBER 2013

Models for short and medium range weather forecasts indicate that the main rain bearing systems for Malawi will most likely get established during the last ten days of November 2013. As a result during the period 11 to 20th November, 2013 sporadic rainfall is likely to persist over Malawi.

TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 01 TO 10 NOVEMBER 2013

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED (m/s)	RH (%)	EVAP (mm)
KARONGA ADD							
Chitipa	30.7	15.8	33.9	12.9	2.6	50	N/A
Karonga	35.0	22.2	36.1	21.1	2.3	42	N/A
MZUZU ADD							
Bolero	33.8	21.1	36.2	19.0	N/A	35	N/A
Mzuzu	29.0	15.2	31.5	12.2	1.7	53	N/A
Mzimba	31.7	19.6	34.8	17.6	1.6	42	N/A
Nkhata Bay	35.6	18.5	36.7	15.2	0.9	49	N/A
KASUNGU ADD							
Kasungu	30.1	N/A	36.2	N/A	1.4	41	N/A
LILONGWE ADD							
KIA	31.6	19.1	34.2	17.4	2.3	43	11.5
Chitedze	38.8	24.7	44.2	21.7	3.5	50	N/A
Dedza	27.4	17.8	30.6	14.9	3.0	55	N/A
SALIMA ADD							
Salima	35.1	23.5	37.0	21.0	2.5	48	N/A
Nkhotakota	33.3	23.3	36.0	20.6	2.2	49	N/A
MACHINGA ADD							
Makoka	31.9	19.0	34.9	16.2	1.7	70	N/A
Ntaja	35.4	23.1	37.8	20.8	3.0	43	N/A
Mangochi	36.9	23.5	39.5	21.5	2.4	47	N/A
Monkey Bay	35.0	24.4	36.5	23.0	2.7	47	N/A
BLANTYRE ADD							
Chileka	34.4	22.7	37.8	18.9	3.8	45	N/A
Chichiri	32.2	19.5	30.8	16.7	1.7	50	N/A
Bvumbwe	30.7	15.8	33.9	12.9	2.6	50	N/A
Mimosa	34.3	19.7	37.8	16.3	1.3	60	6.8
SHIRE VALLEY ADD							
Ngabu	38.8	24.7	44.2	21.7	3.5	50	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