

1. WEATHER SUMMARY

1.1 RAINFALL SITUATION

Most parts of Malawi became very wet during the first ten days of April 2011 except for a few areas in central Malawi and in lower shire valley which were relatively dry. Areas that accumulated rainfall in excess of 140mm were mostly confined to southern highlands and lakeshore areas including Lujeri, Mimosa and Mulanje Boma in the south, Nkhotakota in the centre and Nkhata Bay and Karonga in the north. More details are in Table 1.

Cumulative rainfall performance as at 10th April 2011 indicated that most areas in Malawi had received more than three quarters of the long term average rainfall amounts for the period (depicted by green colour on Map 2). However, pockets of rainfall deficits still existed in some parts of South and central Malawi (Yellow colour on Map 2).

1.2 MEAN AIR TEMPERATURE

Average daily maximum temperatures over most areas in Malawi ranged from 24°C at Mzuzu to around 33°C at Ngabu during the ten days of April 2011. The highest absolute daytime temperature was still reported at Ngabu (37°C) in Shire Valley while the lowest absolute night temperature was 13.2°C reported at Kamuzu International Airport. See more details in Table 2.

1.4 MEAN WIND SPEEDS

Average wind speeds at a height of two metres above the ground continued to be generally light. The lowest was 0.7 m/s (2.5 Km/h) recorded at Mkondezi in Nkhata Bay and the highest was 2.5 m/s (7.6 Km/h) reported at Chileka. See more details in Table 2.

1.5 MEAN RELATIVE HUMIDITY

In the first ten days of April 2011, air over Malawi remained fairly moist. The lowest reported daily average relative humidity was 67% reported at Salima and Chichiri while the highest daily average relative humidity value was 85% reported at Mzuzu. More details are in the Table 2.

2. AGROMETEOROLOGICAL ASSESSMENT

Wet weather was experienced over most parts of Malawi in the first ten days of April, 2011. This supported growth and development of the late planted crops, root and tuber crops as well as replenished water resources. On the other hand, wet weather hindered harvesting and drying of matured crops and this is likely increase field losses of most crops. Crop reports from the Ministry of Agriculture and Food Security indicated that prolonged dry spells in February have negatively impacted crop yields. The impact was most severe in low lying areas and along the Shire River from Mangochi downstream to Nsanje district. Indicators from the Crop Water Requirement Satisfaction Index (WRSI) model suggest that despite the prolonged dry spells that have been experienced particularly in southern Malawi harvest prospects this season look better than last season. This has been attributed to good rainfall performance that supported crop establishment, growth and development this season.

3. PROSPECTS FOR APRIL TO JUNE 2011

As the main rainfall season comes to an end, Easterly waves are expected to maintain rainfall in some parts of Malawi especially during the better part of April before incursions of cool and moisture air bring chiperoni weather over the country. Therefore, expect rains to persist particularly over highlands and along the lakeshore districts during May and June 2011.

4. OUTLOOK 11 – 20 APRIL 2011

Medium range forecast suggest that during the second ten days of April 2011 mostly dry weather is expected over southern and some parts of central Malawi while moderate to heavy rains will persist over lakeshore and northern Malawi.

TABLE 1: DEKADAL RAINFALL SUMMARY FOR 01 – 10 APRIL 2011 AT SELECTED STATION

STATION NAME	DEKADAL TOTAL RAINFALL	DEKADAL NORMAL	DEKADAL TOTAL AS % NORMAL	TOTAL TO DATE	NORMAL TO DATE	TOTAL TODATE AS % NORMAL	RAINY DAYS ≥ 0.3 mm
SOUTHERN REGION							
Bvumbwe Met.	107.4	30.7	350	1104.4	1046.8	106	5
Chichiri Met.	85.9	29.0	296	1059.4	1057.5	100	6
Chileka Airport	64.4	20.0	322	952.5	846.9	112	6
Kasinthula Res. Stn.	55.4	18.1	306	735.3	685.3	107	5
Lujeri Tea Estate	246.4	106.5	231	1757.7	1850.5	95	9
Makhanga Met	10.0	16.4	61	695.9	692.4	101	1
Makoka Met	110.3	30.7	359	1145.4	935.0	123	5
Mangochi Met.	39.1	20.2	194	677.1	683.5	99	6
Masambanjati Agric	104.7	51.7	203	935.1	1240.3	75	3
Mimosa Met.	147.0	63.8	230	1095.9	1331.8	82	9
Monkey Bay Met.	9.4	6.5	145	721.1	558.1	129	3
Mulanje Boma	216.4	82.2	263	1554.3	1606.3	97	8
Mwanza Boma	71.0	34.9	203	774.1	971.8	80	4
Namwera Agric	100.7	34.5	292	847.7	1006.7	84	4
Nchalo Sucoma	26.3	18.9	139	490.2	624.3	79	3
Ngabu Met.	6.9	17.9	39	574.6	722.7	80	4
Ntaja Met.	106.9	31.2	343	890.5	858.4	104	7
Satemwa Tea Est. No.1	102.1	46.5	220	859.8	1024.9	84	7
CENTRAL REGION							
Chitedze Met.	32.1	29.3	110	730.3	859.0	85	5
K.I.A Met	13.9	19.6	71	728.1	830.4	88	4
Kasungu Met	43.8	17.6	249	581.3	760.8	76	5
Nkhotakota Met	152.3	97.1	157	1318.5	1341.7	98	4
Salima Met	8.7	44.8	19	1049.7	1168.2	90	3
NORTHERN REGION							
Bolero Met	19.6	18.2	108	499.6	614.1	81	6
Chitipa Met	48.9	37.9	129	694.4	918.4	76	5
Karonga Met.	176.7	88.0	201	1146.7	895.7	128	10
Mzimba Met	27.9	23.5	119	787.6	862.3	91	7
Mzuzu Met.	102.7	89.2	115	790.0	965.4	82	8
NkhataBay Met.	210.4	133.0	158	942.0	1215.9	77	7

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR 01 – 10 APRIL 2011

STATION	MAX TEMP	MIN TEMP	ABS MAX	ABS MIN	WIND SPEED	RH	SUN SHINE HOURS	Eo mm per day	Et mm per day	RAD- TION cal cm ⁻² p/day
	(°C)	(°C)	(°C)	(°C)	m/s	%				
BOLERO	27.7	17.8	29.0	16.5	N/A	74	6.3	5.4	4.2	8.1
BVUMBWE	24.7	N/A	27.7	N/A	2.2	83	N/A	N/A	N/A	N/A
CHICHIRI	25.6	18.4	28.6	15.7	0.8	67	N/A	3.7	3.1	4.2
CHILEKA	27.5	20.3	30.2	18.6	2.5	79	5.9	5.9	4.7	8.1
CHITEDZE	26.5	17.5	29.2	17.0	0.9	80	6.0	5.4	4.2	8.0
CHITIPA	26.0	17.0	27.8	16.1	1.6	75	N/A	N/A	N/A	N/A
K I A	26.3	16.5	28.4	13.2	2.0	75	6.7	5.8	4.5	8.5
KARONGA	29.1	21.3	30.2	20.2	1.0	81	7.4	6.7	5.3	9.5
KASUNGU	N/A	18.3	N/A	15.4	1.3	82	N/A	N/A	N/A	N/A
MAKOKA	25.8	18.2	28.1	16.5	1.6	83	5.3	5.2	4.1	7.6
MANGOCHI	30.2	22.3	33.2	21.4	1.3	79	5.9	6.1	4.8	8.0
MIMOSA	N/A	19.1	N/A	18.0	0.9	83	N/A	N/A	N/A	N/A
MONKEY BAY	30.1	22.4	32.0	21.3	1.6	74	7.4	6.8	5.4	9.0
MZIMBA	26.1	17.3	28.1	16.6	1.1	77	5.7	5.3	4.1	7.8
MZUZU	24.4	17.4	26.2	16.5	1.9	85	5.9	5.1	4.0	7.9
NGABU	33.1	21.7	36.8	20.1	1.7	71	N/A	N/A	N/A	N/A
NKHATA BAY	30.2	20.6	32.1	19.7	0.7	82	5.6	5.6	4.4	7.7
NKHOTAKOTA	28.1	21.9	30.3	19.8	2.1	79	6.2	6.2	5.0	8.2
NTAJA	28.2	20.8	31.1	19.5	1.2	83	6.6	6.2	4.8	8.8
SALIMA	28.8	22.9	30.3	21.3	2.6	67	7.5	7.0	5.7	9.0

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