



10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services



Period: 1 – 10 April 2005

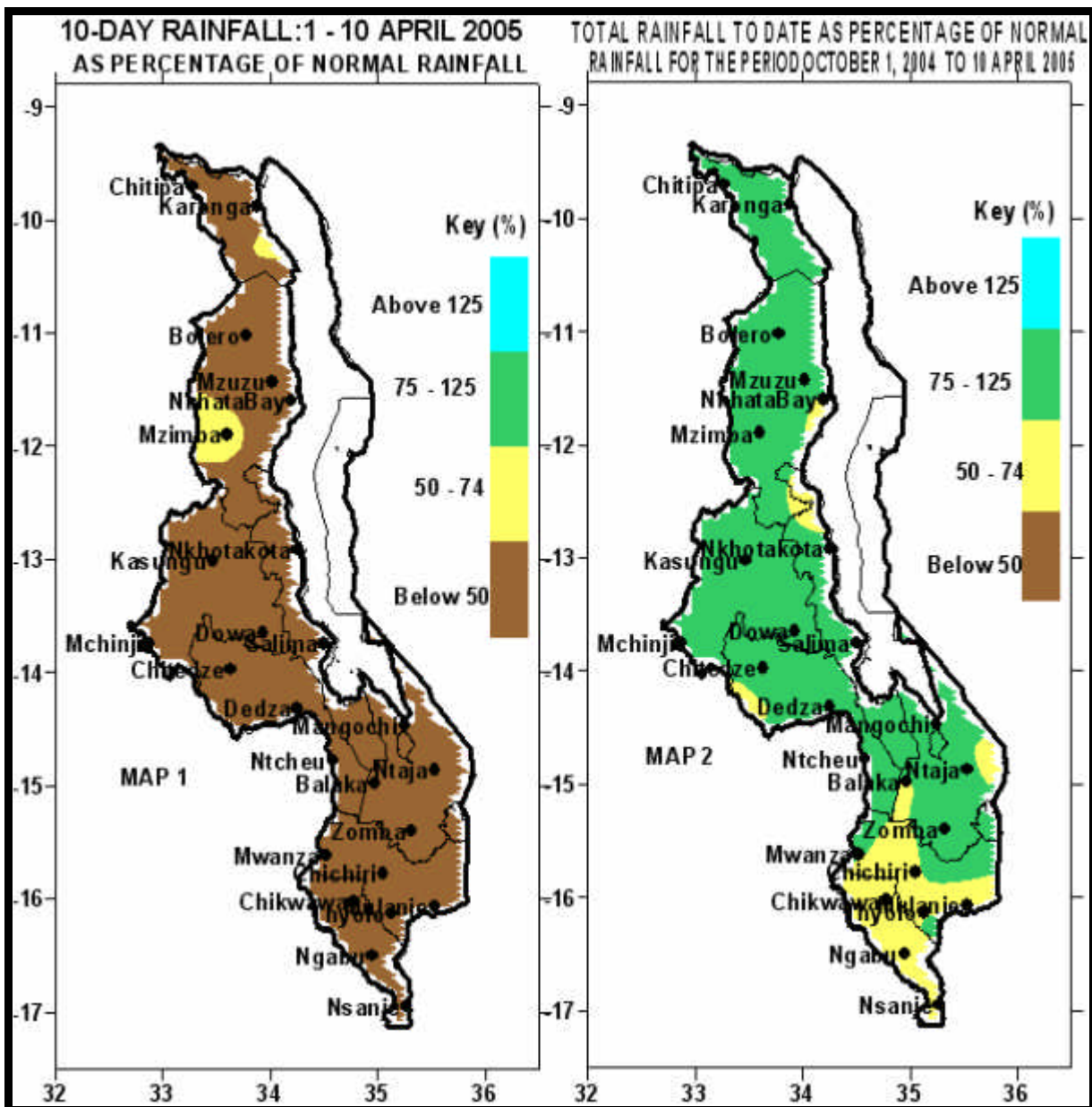
Season: 2004/2005

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HIGHLIGHTS

- Dry conditions spread to more areas in the first 10-days of April...
- Harvesting of matured crops is in progress ...
- Dry weather to persist in most parts during 11 – 20 April 2005...



. WEATHER SUMMARY**1.1 RAINFALL**

During the first 10-days of April 2005, Malawi was mostly under the influence of a ridge of high pressure from the south. As a result dry weather spread to more areas. Significant rains were only confined to some parts of Karonga district in the north where Lupembe recorded 35.5mm (63%), Karonga Met 32.1mm (42%) and Baka had 31.8mm (23%). The rest of the country received little or no rainfall at all during the entire period.

Climatologically, at this time of the year one would expect high rainfall over northern Malawi while in the south the rains are expected tail off. Contrary to expectations, 10-day rainfall figures for the period under review suggest the main rain belt has already shifted to East Africa and dry weather is now covering the entire country. Karonga district in the north is lying on the peripheral of the main rain belt. Normally end of March marks the end of the main rainfall season over southern Malawi while the main rainfall season in the north ends between April and early May.

Total seasonal rainfall from 1st October 2004 up to 10 April 2005 indicates that Malawi has received normal rainfall despite early termination of the main rains and the prolonged dry spell since February 2005. This is due to the heavy and continuous rains that were received in December and January. Pockets of below normal rainfall however still existed in the south particularly in Chikwawa and Nsanje districts in lower Shire Valley and some parts of Blantyre, Mwanza, Phalombe, Mulanje and Balaka districts. **Map 2 and Table 1.**

[Note: Normal = 75 – 125%, above normal = ? 125%, below normal = ? 75%, extremely below normal = ? 50%]

. MEAN AIR TEMPERATURE

Mean maximum temperatures over the country indicated that hot weather continued in most parts of Malawi during the first 10-days of April 2005. Observed mean maximum temperature ranged between 24°C and 34°C. Higher mean maximum temperatures above 30°C were recorded in lower Shire valley and in some areas along the lakeshore. The highest extreme value of 38.3°C was recorded at Ngabu. Lower mean maximum temperatures less than 27°C were observed mostly over highlands.

. MEAN DAILY WIND SPEEDS

Mean daily wind speeds at a height of 2 meters above ground continued to be generally light. The average values ranged from 0.7m/s (2.5km/hr) at Chitedze to 2.9m/s (10.4km/hr) at Salima. See Table 2 for more details.

. MEAN RELATIVE HUMIDITY

Mean Relative Humidity values during the period ranged from 53% to 80% countrywide giving a 10-day national average of 69%. The highest value was recorded Thyolo (80%). Salima with a 10-day average of 53% was the driest place.

. AGROMETEOROLOGICAL ASSESSMENT

In the first 10-days of April 2005 most parts of Malawi continued being dry. This facilitated harvesting of various matured crops. On the other hand, however, persistent dry conditions will have negative impacts on winter cropping season. Most river Dambos will not have enough residual soil moisture to support winter crops. This will eventually reduce production and hectareage figures for various winter crops this season.

National maize production during 2nd round crop production estimates meeting was estimated at 1,306,983 metric tonnes which is drop of 24% from 1st round estimates of 1,724,391 metric tonnes. The drop is mainly due to the dry spell that lasted for more than one month in most parts of the country particularly over the south and some parts of the centre. The situation was slightly better in the north though localised areas were also hit by the dry spell. The worst affected districts in the south include Nsanje and Chikwawa in lower Shire valley, Mwanza, Neno, Balaka, Mangochi, Machinga, Phalombe and some parts of Blantyre and Mulanje. Worst hit among the central districts are Dedza, Ntcheu, Mchinji, Salima, Dowa and Nkhotakota. In the north Rumph west, Karonga (central part) and the southern part of Nkhata Bay and Mzimba districts were also affected.

Meanwhile, harvesting of various matured crops is in progress particularly in the south and some parts of the centre. Premature drying of Maize has been experienced in some parts of the country due to drought.

. FORECAST FOR – APRIL

Current weather patterns indicate slight intensification of high pressure area over the Indian Ocean particularly towards the end of the forecast period. This will cause an influx of cool and fairly moist air from the Indian Ocean into Malawi. The main rain bearing systems will be confined to East Africa. Therefore, the weather over Malawi is expected to be mostly dry with a slight drop in daytime temperatures and very few light rainshowers over highlands during the period 11 – 20 April 2005.

**TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR
DEKAD 1 OF APRIL 2005: PERIOD 1 – 10**

STATION NAME	DEKADAL	DEKADAL	DEKADAL	TOTAL	NORMAL	TOTAL	RAINY
	TOTAL	NORMAL	TOTAL	TO	TO	TO DATE	DAYS
	RAINFALL		AS %	DATE	DATE	AS %	
SOUTHERN REGION	mm	mm	NORMAL	mm	mm	NORMAL	≥ 0.3 mm
Bvumbwe Met.	0.2	30.0	1	727.3	1017.4	71	0
Chancellor College	0.0	38.0	0	1017.2	1353.8	75	0
Chichiri Met.	7.8	29.0	27	852.8	1032.6	83	1
Chikwawa Boma	0.0	20.6	0	403.8	709.2	57	0
Chileka Airport	0.9	23.6	4	495.4	857.7	58	1
Kasinthula Res. Stn.	0.0	18.1	0	491.2	685.3	72	0
Liwonde Township	0.0	17.2	0	742.7	809.2	92	0
Lujeri Tea Estate	9.2	106.5	9	1180.9	1850.5	64	2
Makoka Met	0.0	27.7	0	803.6	971.5	83	0
Mangochi Met.	0.0	18.4	0	665.2	808.1	82	0
Monkey Bay Met.	0.0	5.8	0	810.9	904.2	90	0
Mulanje Boma	1.0	75.9	1	989.3	1514.4	65	1
Mwanza Boma	0.0	25.9	0	750.6	955.4	79	0
Nchalo Illovo	0.0	19.8	0	394.7	650.2	61	0
Ngabu Met.	4.9	16.2	30	450.5	737.9	61	2
Ntaja Met.	0.0	26.5	0	725.8	865.6	84	0
Satemwa Tea Est. No.1	7.0	53.0	13	993.7	1218.3	82	4
Toleza Farm	0.0	23.5	0	636.9	818.5	78	0
Thyolo Boma	0.0	42.6	0	673.0	1091.4	62	0
Thyolo Met	7.7	43.2	18	979.9	1089.2	90	3
Zomba RTC	0.0	39.7	0	1137.9	1168.5	97	0
CENTRAL REGION							
Chitedze Met.	0.6	23.8	3	791.3	882.1	90	1
Dedza Met	7.0	21.6	32	848.6	907.9	93	1
Dowa Agric	0.0	19.0	0	746.4	862.1	87	0
Dwangwa Sugar Corp.	0.0	108.0	0	738.5	1283.8	58	0
K.I.A. Met.	10.5	16.7	63	870.0	820.2	106	1
Kasungu Met	0.0	9.3	0	864.8	839.9	103	0
Lifuwu	0.0	45.2	0	1089.9	1261.7	86	0
Mlangeni Njolomole	0.0	27.4	0	919.1	970.9	95	0
Ntcheu - Nkhande	9.9	20.0	50	1045.4	1031.2	101	1
Ntchisi Boma	6.2	24.1	26	767.8	845.2	91	1
Salima Met	1.2	42.7	3	860.1	1208.6	71	1
Dedza RTC	0.0	22.5	0	795.4	967.5	82	0
NORTHERN REGION							
Baka Res. Stn.	31.8	140.5	23	700.1	1200.4	58	3
Chitipa Met	7.9	30.8	26	1078.5	953.5	113	1
Karonga Met.	32.1	76.1	42	1055.4	946.5	112	3
Lupembe	35.5	56.0	63	881.7	828.7	106	5
Mzimba Met	13.7	19.6	70	928.4	860.1	108	2
Mzuzu Met.	1.2	87.0	1	922.9	1057.9	87	1
Nkhata Bay Met.	3.4	85.8	4	876.3	1399.7	63	2

**TABLE 2: AGROMETEOROLOGICAL PARAMETERS
FOR DEKAD 1 OF APRIL 2005**

STATION	MAX TEMP	MIN TEMP	ABS MAX	ABS MIN	WIND SPEED	RH
	(°C)	(°C)	(°C)	(°C)	m/s	%
BVUMBWE	26.1	13.8	29.5	11.5	1.3	70
CHICHIRI	25.3	16.5	30.4	14.1	1.1	69
CHILEKA	28.7	18.8	33.5	16.9	3.1	74
NTAJA	29.2	19.2	33.5	18.5	2.0	70
CHITEDZE	27.9	15.0	30.1	11.1	0.7	62
CHITIPA	26.0	17.6	28.4	16.6	1.8	76
DEDZA	24.1	13.7	25.3	10.6	1.1	70
KASUNGU	29.3	16.3	31.8	13.3	1.2	65
KARONGA	29.7	21.5	31.0	20.3	1.2	76
K I A	27.4	13.9	29.2	10.0	1.5	67
MAKOKA	27.3	15.8	31.2	12.9	1.7	71
MANGOCHI	32.0	20.9	35.5	17.5	1.7	64
MONKEY BAY	31.7	21.2	33.8	18.0	2.1	58
MZIMBA	27.7	15.9	28.9	14.6	1.2	64
MZUZU	25.2	14.6	27.3	11.4	2.0	78
NGABU	33.9	21.5	38.3	18.0	2.0	66
NKHATA BAY	29.9	19.2	32.6	16.0	1.5	73
SALIMA	30.2	21.5	33.2	17.0	2.9	53
THYOLO	26.6	16.6	31.3	14.4	0.9	80

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