10-Day Rainfall & Agromet Bulletin

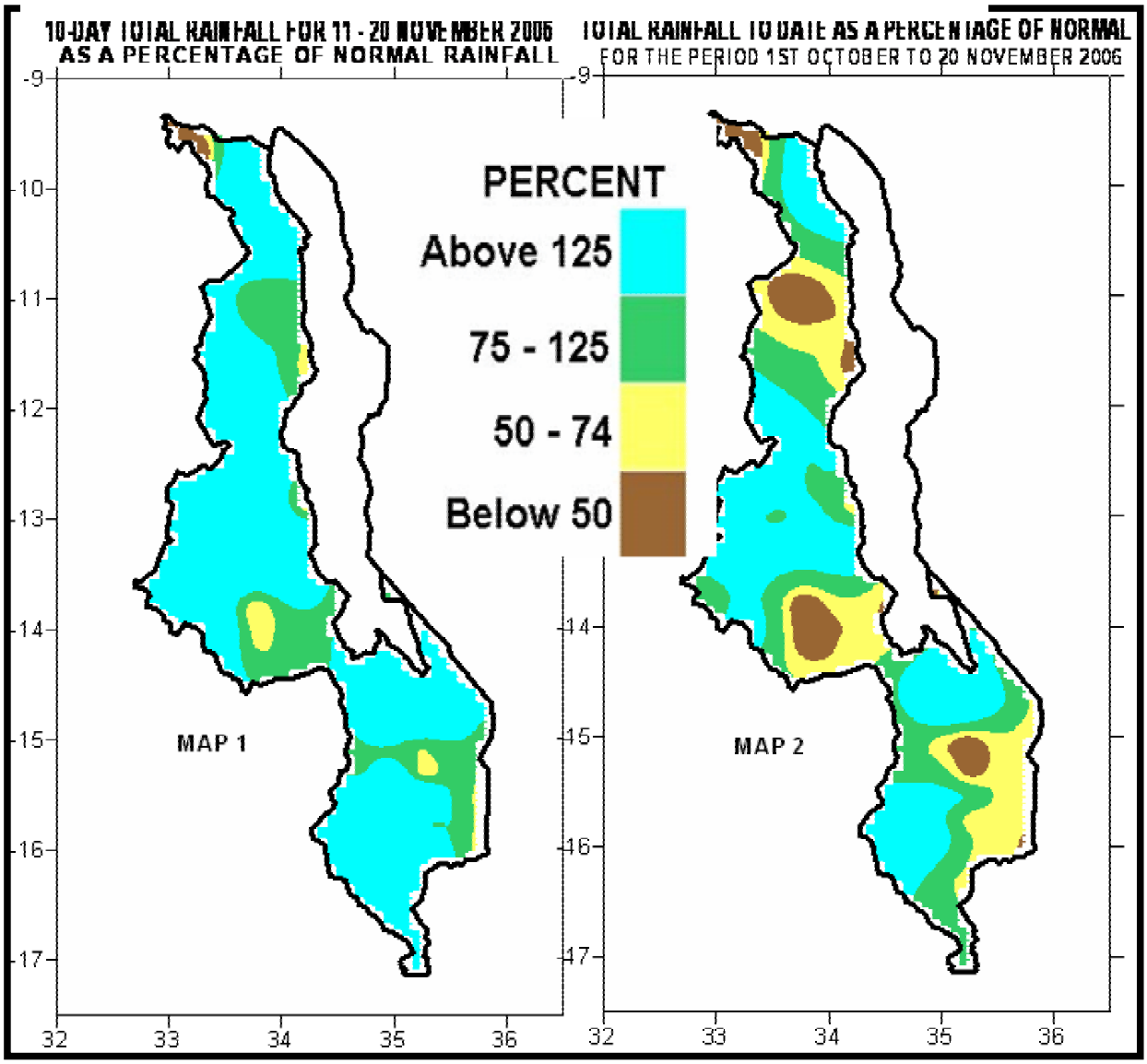
Department of Meteorological Services

Period: 11 – 20 November 2006 | Season: 2006/2007 | Issue No.05

Release date: 23 November 2006

HIGHLIGHTS

- **Good rainfall distribution and amount experienced over Malawi…**
- **Farmers in the south and parts of the centre prompted to start planting crops…**
- **Another improvement in spatial rainfall distribution expected during the last half**



All inquiries should be addressed to: The Director of Meteorological Services, P.O. Box 1808, Blantyre, MALAWI
Tel: (265) 1 822 014 Fax: (265) 1 822 215 E-mail: metdept@metmalawi.com Homepage: www.metmalawi.com

1. WEATHER SUMMARY

1.1 RAINFALL SITUATION

During the second ten-days of November 2006, moist and unstable Congo air mass got established over Malawi. This improved temporal and spatial rainfall distribution and amounts over most parts of the country particularly over the south and some parts of the centre. Some areas for the first time this season reported up to seven rainy days during the period. Moderate to heavy rainfall was registered in most areas. Notable 10-day total rainfall amounts of more than 100mm in the south included Kasinthula (122.8mm), Chileka Airport (117.5mm, Bvumbwe (114.9mm), Mangochi Aerodrome (114.3mm) and Satemwa (108.9mm) while in the centre Kaluluma in Kasungu reported 108.0mm. Total rainfall amounts for the period 11 – 20 November 2006 expressed as percentage of normal demonstrated very high figures particularly in the south where Mangochi and Kasinthula registered about 900% while cumulative rainfall amounts received since October 2006 expressed as a percentage of normal rainfall showed that significant rainfall (light blue colour on the map) had been received around Mangochi and Chikwawa in the south, some parts of Kasungu and Mchinji in the centre and around Karonga in the north. See Table 1.

1.2 MEAN AIR TEMPERATURE

Despite the rains, generally hot weather continued over Malawi during the period. Mean daily maximum temperatures ranged from 26.9°C at Bvumbwe to 35.1°C at Ngabu in Chikwawa. On the other hand mean daily minimum temperatures ranged from 16.3°C at Bvumbwe to 24.0°C at Ngabu.

1.3 MEAN DAILY WIND SPEEDS

Mean wind speeds at a height of two meters above the ground were still light and variable. The highest wind speed was reported at Chitipa (5.4m/s or 19.4Km/hr) while the lowest wind speed was reported at Ngabu (0.3m/s or 1.1 Km/hr). See Table 2.

1.4 MEAN RELATIVE HUMIDITY

There was a significant increase in moisture in the atmosphere. Most areas reported mean daily relative humidity values of over 60%. The highest was reported at Bvumbwe (76%) while the lowest was registered at Nkhota Kota (53%).

2. AGROMETEOROLOGICAL ASSESSMENT

Good rains for agricultural production fell in most parts of the country during the period under review. However, in some areas particularly in the north and some parts of the centre these rains were mainly considered as part of the first rains (Chizimalupsya) that normally precede the onset of the main rains. Therefore the rains encouraged farmers to speed up land preparations, improved water resources and soil moisture reserves. At the same time, in the south and some parts of the centre where normal dates for onset of planting rains fall within the last twenty days of November, farmers who had already finalized land preparations and had seed were prompted to start planting crops.

The onset of the main rains for the north is climatologically expected in December. However, recently seasons with uniform onset of main rains have also been experienced over the country.

3. PROSPECTS OF 2006/07 SEASON

Most climate models have maintained that a greater part of Malawi is likely to experience normal total rainfall amounts with localized dry spells and flush floods during 2006/07 rainfall season.

4. OUTLOOK FOR 21 – 30 NOVEMBER 2006

Moist and unstable Congo air mass is expected to cover central and southern Malawi during the second half of the period 21 – 30 November 2006. Therefore expect spatial distribution of rainfall to improve mainly over the south and some parts of central region during the last five days of the forecast period.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 2 OF NOVEMBER 2006: PERIOD 11 - 20

STATION NAME	DEKADAL TOTAL RAINFALL	DEKADAL NORMAL	DEKADAL TOTAL AS %	TOTAL TO DATE	NORMAL TO DATE	TOTAL TO DATE AS %	RAINY DAYS
SOUTHERN REGION	mm	mm	**NORMAL**	mm	mm	**NORMAL**	**³ 0.3 mm**
Balaka Township	41.3	28.4	**145**	50.3	69.5	**72**	3
Bvumbwe Met.	114.9	27.8	**413**	119.3	82.6	**144**	7
Chancellor College	43.2	29.2	**148**	61.5	77.1	**80**	5
Chichiri Met.	98.5	29.1	**338**	100.4	101.2	**99**	7
Chileka Airport	117.5	23.4	**502**	133.9	78.7	**170**	6
Chingale Agric	26.5	25.0	**106**	26.5	55.3	**48**	4
Chiradzulu Agric	44.7	27.2	**164**	44.7	71.8	**62**	4
Kasinthula Res. Stn.	122.8	13.7	**896**	130.8	60.0	**218**	4
Liwonde Township	12.0	20.6	**58**	12.0	47.6	**25**	3
Lujeri Tea Estate	71.2	90.5	**79**	125.7	248.4	**51**	5
Makoka Met	99.5	20.3	**490**	103.0	67.8	**152**	4
Mangochi Met.	114.3	12.3	**929**	176.3	45.8	**385**	4
Monkey Bay Met.	19.7	8.5	**232**	19.9	31.0	**64**	4
Mulanje Boma	76.0	56.2	**135**	105.5	195.9	**54**	3
Namiasi Agric	99.2	15.7	**632**	99.2	30.8	**322**	3
Namwera Agric	55.3	25.2	**219**	55.8	59.7	**93**	6
Nchalo Sugar	64.4	13.2	**488**	64.4	62.7	**103**	4
Neno Agric	25.7	23.2	**111**	97.0	82.6	**117**	1
Ngabu Met.	53.1	13.5	**393**	53.1	59.0	**90**	3
Nsanje Boma	38.2	31.9	**120**	72.4	87.5	**83**	3
Ntaja Met.	27.5	14.3	**192**	39.0	41.2	**95**	2
Satemwa	108.9	31.1	**350**	118.4	118.9	**100**	4
Toleza Farm	66.2	20.1	**329**	81.8	57.8	**142**	5
Zomba R.T.C	35.0	27.9	**125**	50.4	70.1	**72**	4
CENTRAL REGION							
Bunda College	25.0	35.8	**70**	25.0	73.6	**34**	2
Chileka Namitete	90.4	29.1	**311**	102.2	60.3	**169**	5
Chitedze Met.	26.5	30.2	**88**	26.5	54.7	**48**	2
Dwangwa Sugar Corp.	71.0	45.0	**158**	100.8	73.3	**138**	3
Kaluluma DTC	108.0	21.0	**514**	109.2	28.0	**390**	4
K.I.A Met	12.2	26.9	**45**	12.8	49.0	**26**	2
Kasungu Met	38.0	17.2	**221**	38.0	44.9	**85**	2
Lifuwu	6.0	12.4	**48**	9.1	20.6	**44**	2
Lisasadzi	46.5	12.8	**363**	46.5	22.8	**204**	2
Mchinji Boma	53.2	31.1	**171**	61.3	71.7	**85**	6
Nathenje Agric	21.0	23.4	**90**	21.0	47.2	**44**	3
Nkhotakota Met	5.2	20.0	**26**	14.5	39.9	**36**	2
Ntcheu - Nkhande	19.4	15.6	**124**	60.6	54.2	**112**	4
Ntchisi Boma	47.9	11.8	**406**	49.8	23.8	**209**	2
Salima Met	8.9	8.8	**101**	10.6	27.1	**39**	1
Dedza RTC	20.8	24.8	**84**	42.1	60.6	**69**	5
NORTHERN REGION							
Bolero Met	12.1	12.2	**99**	12.1	62.9	**19**	2
Bwengu Agric.	16.1	23.5	**69**	16.1	40.4	**40**	1
Chitipa Met	0.0	19.0	**0**	0.0	31.1	**0**	0
Emfeni Agric	30.2	14.0	**216**	35.2	22.1	**159**	4
Karonga Met.	35.5	8.6	**413**	35.5	13.4	**265**	2
Mzimba Met	45.0	18.1	**249**	45.0	35.6	**126**	5
Mzuzu Met.	35.6	31.7	**112**	57.7	86.1	**67**	6
NkhataBay Met.	42.1	116.6	**36**	51.8	255.1	**20**	8

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 2 OF NOVEMBER 2006

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BVUMBWE	26.9	16.3	32.0	15.0	1.7	76
BOLERO	31.5	19.8	34.4	17.2	1.8	56
CHICHIRI	27.8	18.4	32.4	16.7	0.7	71
CHILEKA	28.0	20.8	35.5	18.5	3.0	71
NTAJA	31.5	21.8	36.1	19.5	2.8	65
CHITEDZE	29.2	19.1	34.8	17.1	1.2	59
CHITIPA	31.0	19.4	33.4	18.1	5.4	57
KASUNGU	30.4	19.9	33.6	17.5	2.5	60
KARONGA	33.2	23.3	36.0	21.0	2.0	59
K I A	28.8	18.1	32.0	16.5	2.0	66
MAKOKA	28.6	18.9	33.3	21.9	1.3	75
MANGOCHI	33.0	23.1	37.0	21.5	1.7	66
MONKEY BAY	32.9	24.5	35.8	22.5	2.2	61
MZIMBA	29.5	17.8	33.0	15.5	1.2	61
MZUZU	27.8	17.1	31.2	14.5	1.8	67
NGABU	35.1	24.0	40.5	21.0	0.3	68
NKHATA BAY	33.0	21.0	36.0	19.0	1.7	66
NKHOTAKOTA	31.6	23.7	34.6	22.1	2.4	53
SALIMA	32.4	23.7	35.8	22.4	2.6	60

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