



FOUR DAY WEATHER REVIEW FROM 20TH TO 23RD OCTOBER, 2011
AND
THE FOUR-DAY FORECAST VALID 25TH TO 28TH OCTOBER, 2011

Ref No: KMD/FCST/2-2011/WK/43

Issue Date: 24/10/2011

1. WEATHER HIGHLIGHTS

Review of weather for the last four-day period (20th to 23rd October 2011)

During the review period (20th to 23rd October 2011):

- There was a general reduction in rainfall activities both in amounts and spatial distribution most parts of the whole country;
- Few areas of Northeastern, Central highlands and Central Rift Valley received four-day total rainfall amount above 20mm;
- Day-time (maximum) temperatures remained relatively high except in Highlands west of rift valley and central highlands including Nairobi area confined within Eldoret and Thika areas, also parts within Wajir and Kisumu were relatively low;
- Minimum temperatures also remained low over most parts of the country except few areas in Central Rift Valley, Coastal regions and parts of northern frontier of Kenya.

Forecast for the next four days (25th to 28th October 2011):

The forecast for the next four-day period (25th to 28th October 2011) indicates:

- A pick up in rainfall activities over the Northern parts, Central Highlands, and the western parts of the country in the first two days of the forecast period;
- Heavy rainfall (> 20mm in 24 hrs) events in parts of Northern Kenya from Wajir to northern Isiolo, southern Marsabit and northeastern Samburu on the second day of the forecast period.

2. WEATHER SUMMARY FOR THE PERIOD 20TH TO 23RD OCTOBER 2011

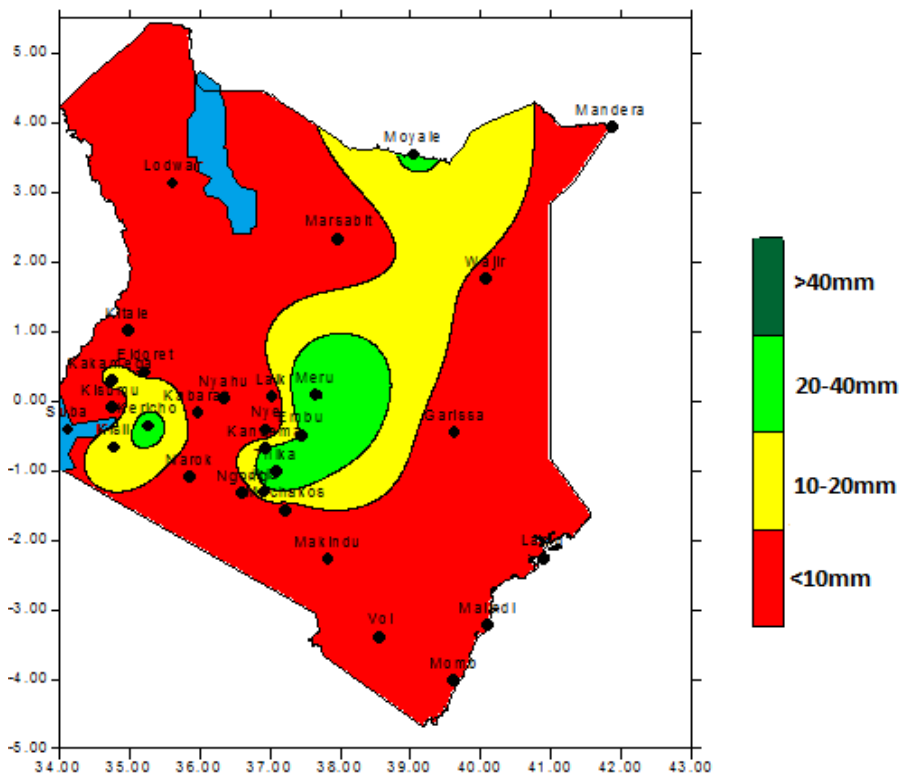
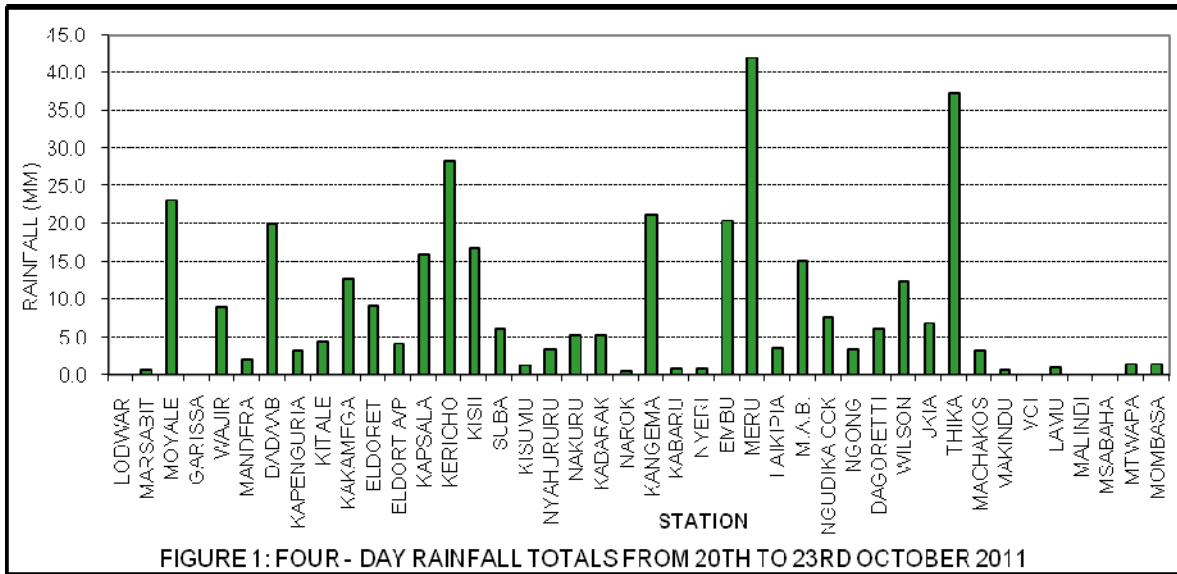
2.1 Rainfall Review

There was a general reduction in rainfall activities both in amounts and spatial distribution over most parts of the whole country. Low key rainfall activities occurred over most parts of the country. Parts of Northeastern, Central highlands and Central Rift Valley received four-day rainfall totals above 20mm.

The review period was devoid of heavy rainfall events (> 20mm) within 24 hours of most parts of the country. The heavy rainfall events were only observed in two locations namely Meru and Dadaab with 41.6mm and 20mm respectively on 20th October 2011.

The highest four-day rainfall total amount of 42mm was also received in Meru Meteorological Station. Thika, Kericho, Moyale, Kangema, Embu and Daadad followed 37.4mm, 28.3mm, 23.1mm,

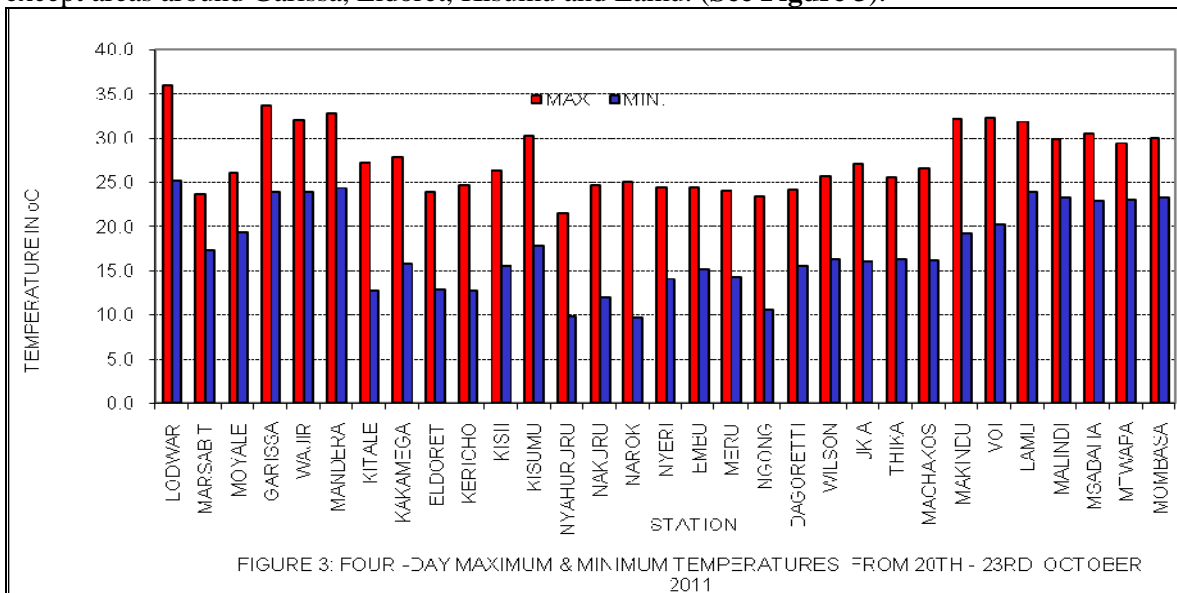
21.3mm, 20.5mm and 20.0mm respectively. The total rainfall amounts as well as the spatial distribution are depicted in *figures 1 and 2 below*.



2.2 Temperature

During the review period (20th to 23rd October 2011), day-time (maximum) temperatures were relatively higher than in the previous period except in Highlands west of rift valley and central highlands including Nairobi area. Minimum temperatures were; on the other hand, relatively lower than in the previous period over most parts of the country except few areas in Central Rift Valley, Coastal regions and parts of northern frontier of Kenya. The highest daily maximum temperature of 36.4°C was recorded at Lodwar Meteorological Station on 21st October 2011 while the lowest daily minimum temperature of 7.1°C was recorded at Nyahururu Meteorological Station on the same date 23rd October 2011. The same stations recorded the highest and the lowest average maximum and minimum temperatures of 36.4°C

and 9.3°C respectively; the maximum temperature trends indicates a general cooling (i.e. the current review period having lower values than the previous four day forecast period) over the whole country except areas around Garissa, Eldoret, Kisumu and Lamu. (See Figure 3).



3. EXPECTED SYNOPTIC DEVELOPMENTS FROM 25TH – 28TH OCTOBER 2011

It is expected that pressures will be:

- Moderate pressures over southern Atlantic Ocean (St. Helena) throughout the forecast period;
- Weak over the tip of southern Africa also throughout the forecast period;
- Weak over the Mozambique Channel slightly strengthening at the middle of the forecast period;
- Very weak over Southwest Indian ocean (Mascarene) for much of the forecast period;
- Very weak over the Azores region strengthening as the forecast period progresses;
- Very Strong over the Mediterranean region throughout the forecast period; and
- Strong and continental over the Arabian region for most of the forecast period but weakening slightly at the end of the period.

It is also expected that winds will be:

- Weak Convergence of south-easterlies and northerlies/north-easterlies in the lower levels but southeasterly/southerlies dominate the flow at the end of the forecast period.
- Divergence of weak easterlies over the northern parts of the country and convergence of northeasterly and northwesterly over central and southeastern lowlands at the middle of this while easterlies dominate the upper levels as the period progress.

These developments point towards:

- A pick up in rainfall activities over the Northern parts, Central Highlands, and the western parts of the country in the first two days of the forecast period;
- Heavy rainfall (> 20mm in 24 hrs) events in parts of Northern Kenya from Wajir to northern Isiolo, southern Marsabit and northeastern Samburu on the second day of the forecast period.

4. FORECAST FOR THE NEXT FOUR DAYS FROM 25TH – 28TH OCTOBER 2011

The Lake Victoria Basin, Highlands west of the Rift Valley Central and south Rift Valley (Kitale, Kakamega, Kisumu, Kisii, Migori, Nyamira, Kericho, UasinGishu, Nakuru, Narok, Nyandarua counties etc) Sunny intervals with occasional morning rains confined to the first half of

the forecast period and afternoon showers and thunderstorms over several places through the forecast period.

The Northwestern counties (Turkana, West Pokot etc), will experience mainly sunny intervals in the morning, showers and thunderstorms of several places in the first half of the forecast, followed by sunny intervals for the rest of the period.

Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, etc) will experience morning rains and afternoon/night showers over few places, sunny intervals and afternoon showers and thunderstorms over several places through the forecast period.

Northeastern counties (counties of Marsabit, Mandera, Wajir, and Garissa Tana River etc) will experience morning rains and afternoon/night showers over several places for much of the forecast period. Heavy rainfall events are expected on the second day of the forecast period in parts of Wajir, northern Isiolo, northeastern Samburu and southern Marsabit.

Southeastern lowlands (Taita Taveta, Makueni, Machakos, Kitui, Mwingi counties etc), will experience sunny intervals in the first half of this forecast, followed by morning rains and afternoon showers over few places as the forecast period progresses.

The Coastal strip (Mombasa, Malindi, Kilifi, Lamu, Kwale etc) will experience sunny intervals in the first half and light morning showers over few places in the second half of the forecast period.

N.B: This forecast should be used in conjunction with the daily (24-hour) forecast issued by this Department.

KEY OF SCIENTIFIC WORDS USED

High Pressure System (Anticyclone): An area associated with clear skies or fine weather.

Ridge: An elongated area of high pressure from which winds flow outward.

Most Places: Between 66% and 100%.

Several Places: Between 33% and 66%

Few Places: Between 0 and 33%

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FOR: DIRECTOR OF METEOROLOGICAL SERVICES