



KENYA METEOROLOGICAL DEPARTMENT
DEKADAL AGROMETEOROLOGICAL BULLETIN
WEATHER AND CROP REVIEW FOR DEKAD 17, 2012
11– 20 JUNE 2012

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

There was a continued reduction in rainfall activities countrywide during the current dekad. Most stations in North Eastern and Eastern regions reported dry conditions. Kisii station in Nyanza region reported the highest rainfall of 93.6 mm compared to 73.4 mm in the previous dekad. The second highest rainfall of 83.4 mm was received at Eldoret Airport station in Rift Valley region. Western region had Kakamega station reporting 76.9 mm. Lamu station in Coast region received the highest rainfall of 40.3 mm. In Central region, Nyahururu station reported 14.7 mm. Embu station in Eastern region recorded the highest rainfall of 1.9mm. The highest rainfall recorded in North Eastern region was 0.8 mm at Moyale station. Most stations in Nairobi region received insignificant rainfall with Dagoretti corner recording 0.02mm as the highest amount.

Most stations continued to report a decrease in maximum temperature save for stations at the Coast that reported an increase. Minimum temperature also continued decreasing in most stations apart from a few stations recording an increase especially at the Coast. Lodwar station in North Eastern region reported the highest temperature of 34.4 °C, which was a reduction from 35.2°C received in the previous dekad. Ngong' station in Nairobi region reported the lowest maximum temperature of 18.6°C which was a decrease from 21.4°C recorded at Nyahururu station in the previous dekad.

For more comprehensive summary of rainfall and other meteorological parameters, see Figures 3.1 to 3.4 as shown below.

2.0 CROP AND WEATHER REVIEW FOR DEKAD 17; 11 – 20 JUNE 2012

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received 63.2 mm of rainfall which was a decrease from 127.3 mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 20.8°C and 36.7 mm respectively. There was no report on sunshine hours.

Maize and beans were at emergence and flowering stages respectively. Beans have been adversely affected by excessive rainfall though normal yield is still expected.

2.1.2 Kisii

This station recorded 73.4 mm of rainfall compared to 39.8 mm in the previous dekad. The mean air temperature and total pan evaporation recorded were 20.2°C and 28.8 mm respectively. There was no report on sunshine.

Maize and beans were at emergence and flowering stages respectively. Both crops were in fair state with normal yield expected.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall of 14.4 mm compared to 52.9 mm reported in the previous dekad. The average air temperature and pan evaporation recorded were 19.4⁰C and 27.4mm respectively. There was 6.6 hours of sunshine recorded.

Maize and beans were at emergence and flowering stages respectively. Both crops are in fair state and weeding is still going on.

2.2.2 Eldoret-Kapsoya

The station recorded rainfall of 34.6 mm compared to 19.1mm in the previous dekad. The average air temperature and total pan evaporation recorded were 17.8⁰c and 37.6mm respectively. There was no sunshine report.

Maize and beans were at emergence and flowering stages respectively, and in good condition. Weeding is still in progress in most farms.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station reported 14.6 mm of rainfall compared to 27.6 mm in the previous dekad. The average air temperature and total pan evaporation recorded were 17.8⁰c and 29.6mm respectively. There was no report on sunshine hours.

Maize and beans were at ninth leaf and flowering stages respectively. Maize has been adversely affected by stalk borer though still in fair state, while beans were adversely affected by excessive rainfall and leaf hoppers and in poor state.

2.3.2 Kabete

The station recorded rainfall of 19.8 mm compared to 40.5 mm in the previous dekad. The average air temperature and pan evaporation recorded were 18.8⁰c and 25.3 mm respectively. There was 4.5 hours of sunshine reported per day.

Maize and Beans were at emergence and flowering stages respectively. Maize is in fair state while beans in poor state due to excessive rainfall.

2.3.3 Thika

The station reported 2.4 mm of rainfall compared to 6.1 mm in the previous dekad. The total mean air temperature and pan evaporation recorded at the station were 20.0⁰c and 41.4 mm respectively. There was no report on sunshine hours.

Maize and beans were at emergence stage. Maize was in fair state while beans were in poor state due to excessive rainfall.

2.3.4. Nyahururu

The station received rainfall of 24.3 mm compared to 56.6mm reported in the previous dekad. The mean air temperature and pan evaporation recorded were 15.4⁰c and 35.8mm respectively. There was 6.7 hours of sunshine recorded.

Maize and Beans were at emergence and flowering stages respectively. Potatoes were at flowering stage. All crops are in fair state.

2.3.5. Dagoretti

The station recorded 9.6 mm of rainfall compared to 16.1 mm recorded in the previous dekad. The average air temperature and pan evaporation recorded were 18.2⁰c and 26.6mm respectively. Sunshine hours reported were 3.5 hrs per day.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station reported dry conditions compared to 18.6 mm in the previous dekad. The average air temperature and pan evaporation recorded were 18.0⁰c and 32.0 mm respectively. There was 6.9 hours per day of sunshine.

Maize and beans were at emergence and flowering stages respectively. Both crops are in fair state.

2.4.2 Embu

The station reported rainfall of 9.1 mm compared to 39.2 mm in the previous dekad. The average air temperature and pan evaporation were 18.3⁰c and 21.9 mm respectively. Sunshine hours reported were 3.9 hrs per day.

Maize and beans were at flowering stages and in good condition. Normal yield is expected.

2.4.3 Katumani (Machakos)

The station recorded 23.5 mm of rainfall compared to 6.2 mm in the previous dekad. The average air temperature recorded was 19.0⁰c. There was no report on pan evaporation and sunshine parameters.

Maize and beans were at emergence and flowering stages respectively. Both crops are in fair state though the two crops have been adversely affected by insufficient rain.

2.5 COASTAL REGION

2.5.1. Msabaha

The station received a decrease of rainfall of 6.3 mm compared to 66.5 mm in the previous dekad. The average air temperature and pan evaporation recorded were 26.7⁰c and 40.3 mm respectively. There was no sunshine report.

Maize was at flowering stage and in fair state. Mangoes were at 80% fruit setting and both ripeness and flowering stages at 10% each and in good state.

2.5.2 Mtwapa

This station recorded decreased rainfall of 5.5 mm compared to 39.9 mm in the previous dekad. The average air temperature was 26.1⁰c. There was no report on pan evaporation and sunshine parameters.

Maize was at flowering stage and in fair state though adversely affected by stalk borers. Farmers are still weeding in most farms. Water melon was at 100% flowering stage and in unsatisfactory state due to damage by aphids, leaf miners and leaf rust. Mangoes were at 100% fruit setting stage and in moderate state.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

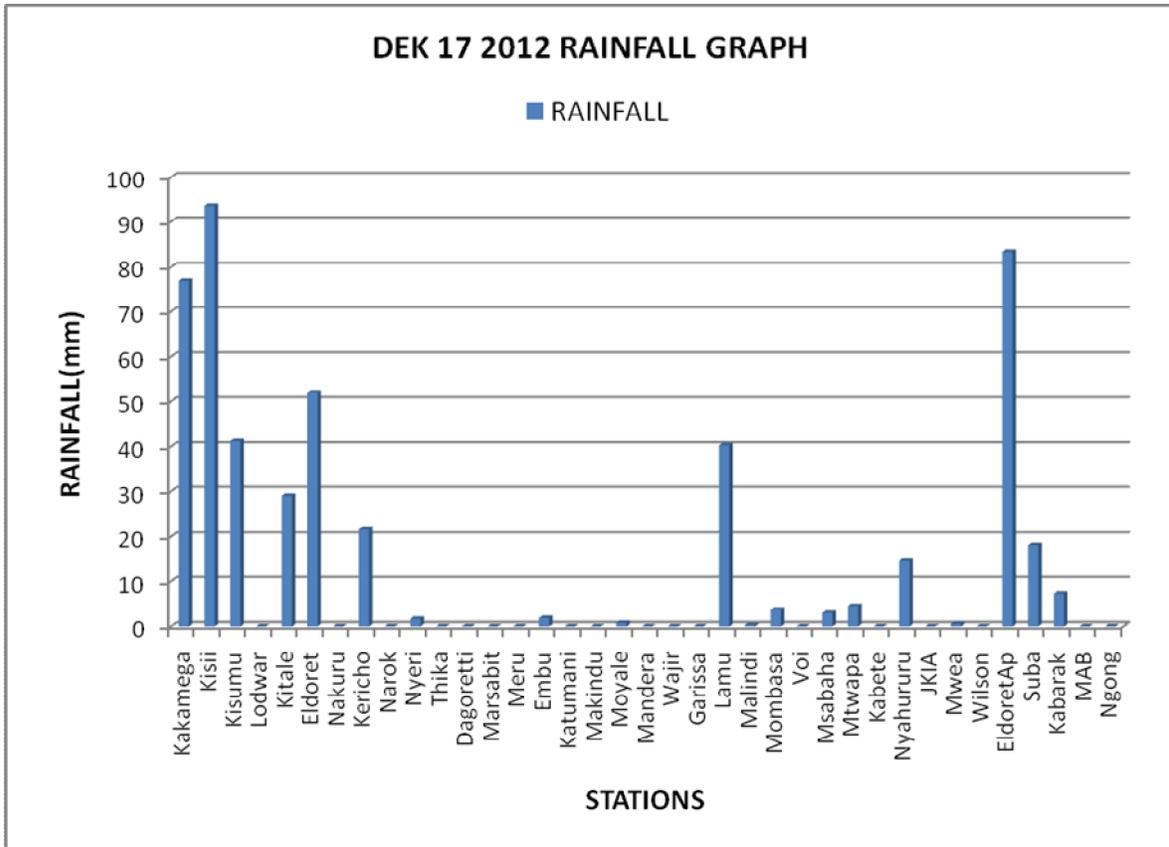


Figure 3.1: Dekadal rainfall totals for 11-20 June 2012

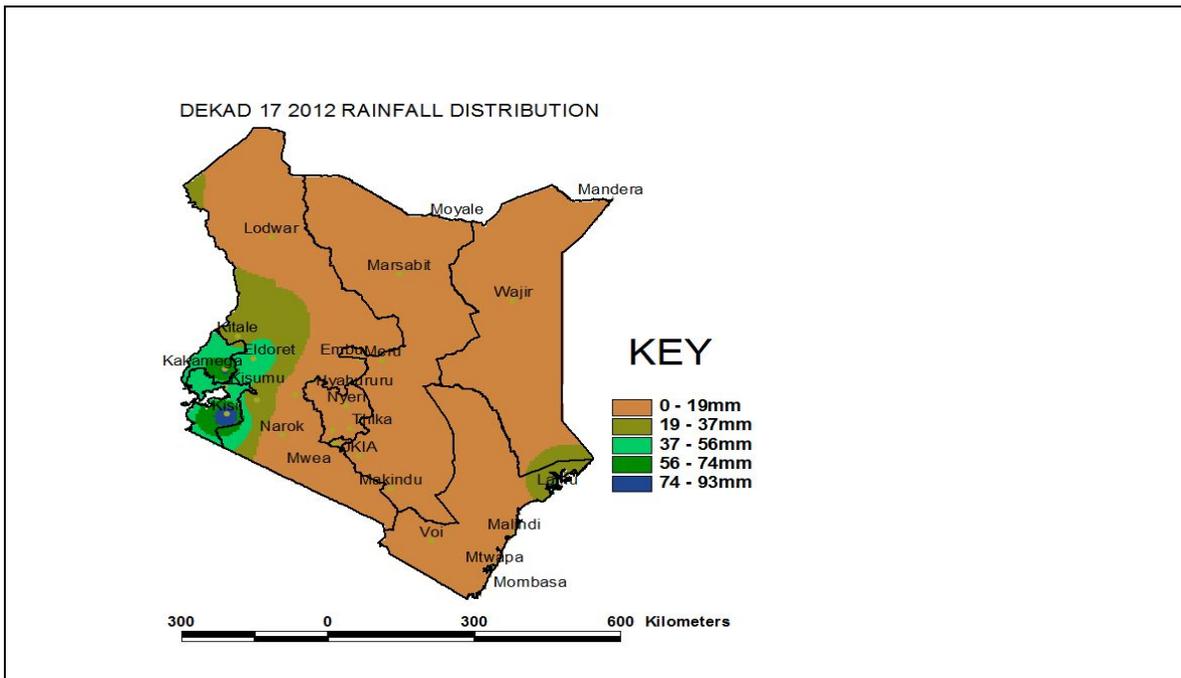


Figure 3.2: Dekadal rainfall distribution

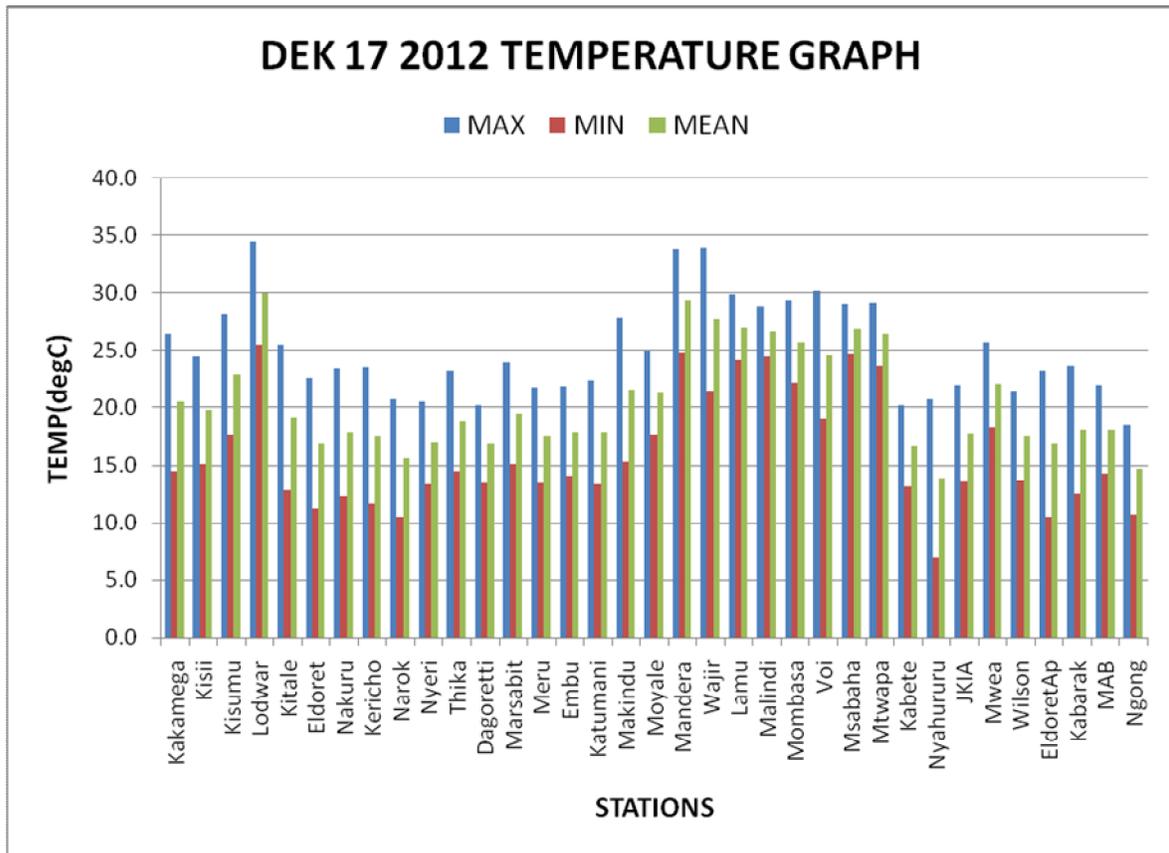


Figure 3.3: Maximum, Minimum and Average temperature in ⁰c

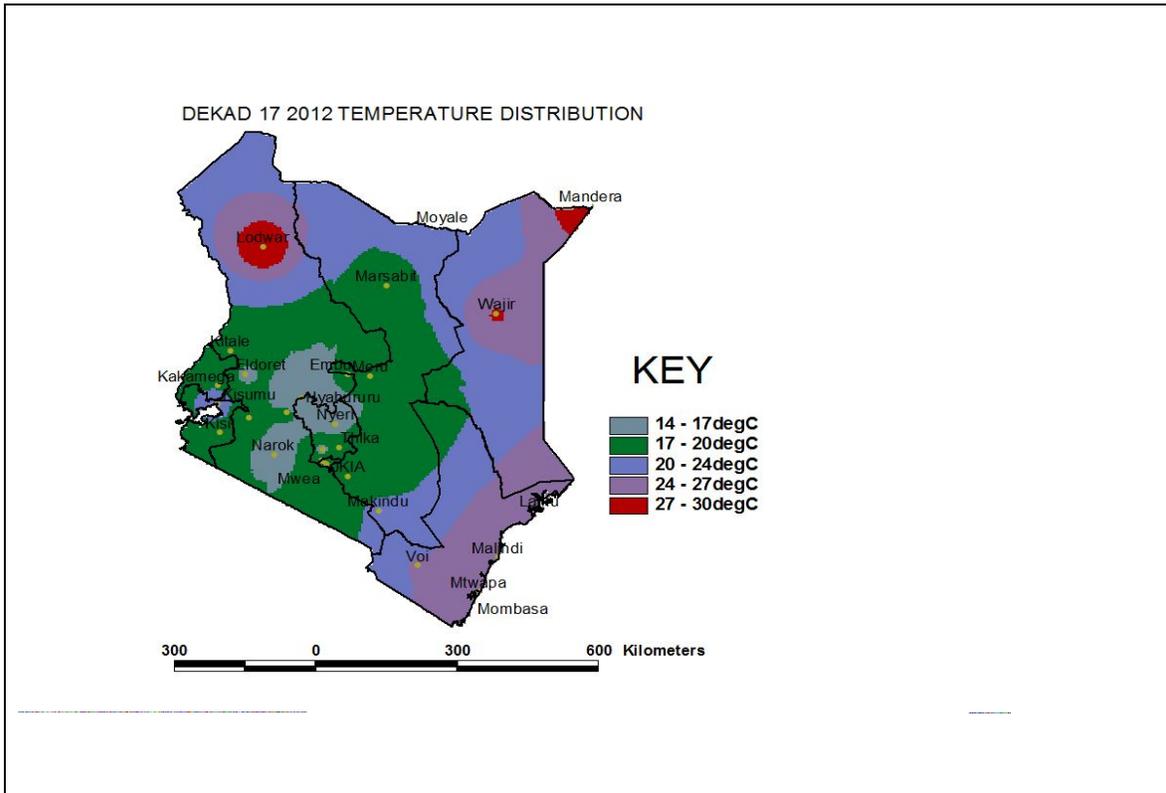


Figure 3.4: Mean temperature distribution

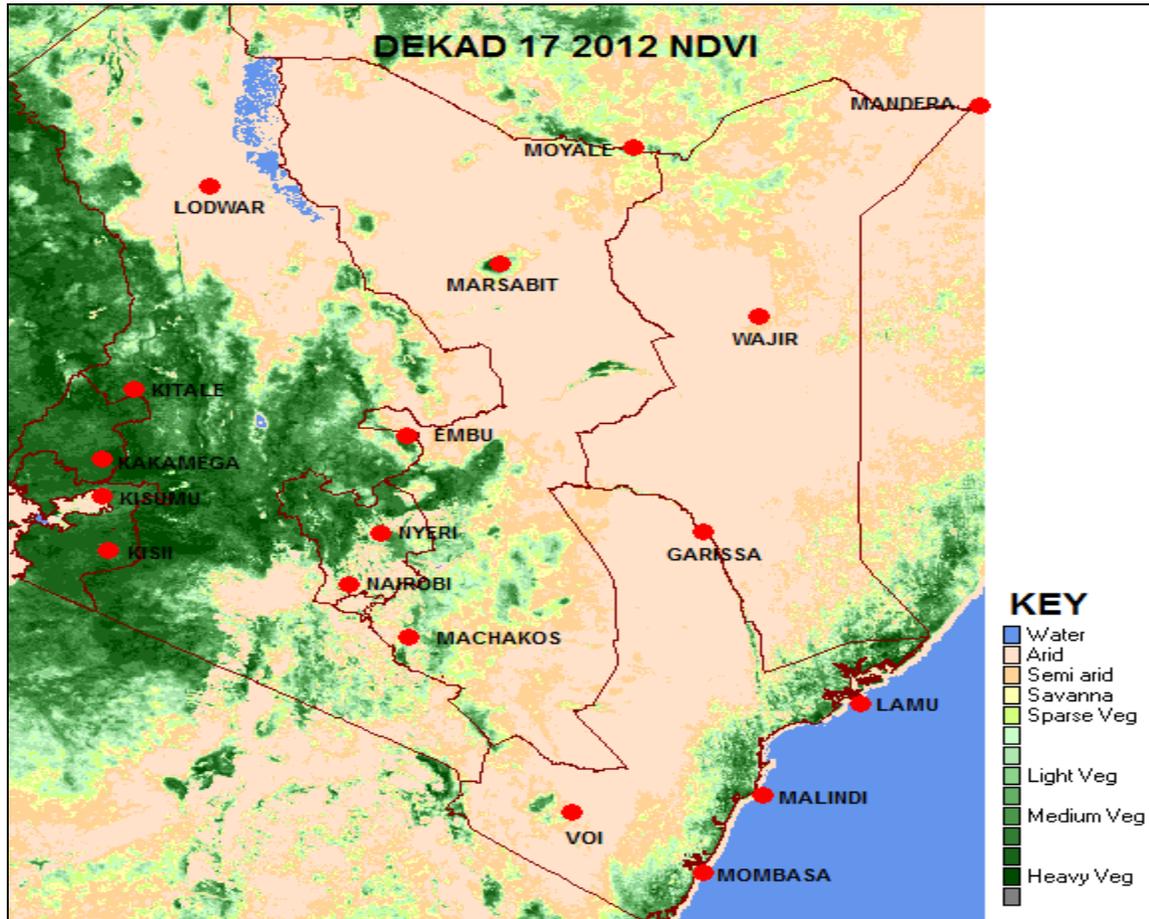


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21-30 JUNE 2012

- ✚ **Counties within the Lake Victoria Basin, Highlands west of the Rift Valley, Central and south Rift Valley (Kitale, Kakamega, Kisumu, Kisii, Migori, Nyamira, Kericho, Bomet, Uasin-Gishu, Nakuru, Narok, Nyandarua, etc)**, are expected to experience sunny intervals in the morning and afternoon/night showers accompanied by thunderstorms over several places for much of the forecast period. The rainfall is expected to be heavy Around Mt Elgon, Kisumu and the Nandi Hills in the first two days of the forecast period.

The sunny intervals and afternoon showers are quite beneficial for the growing crops in this region.

- ✚ **Over the Northwestern counties (Turkana, West Pokot etc)** are expected to experience sunny intervals for much of the forecast period. Showers are likely to occur over a few places bordering Uganda in the First half of the forecast period.

The expected showers will continue to replenish the pasture and general vegetation of the region.

- ✚ **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, etc)** cool and cloudy morning with light rains/drizzle over few places and mainly sunny intervals in the afternoon. A few places are, however, expected to receive light afternoon/night showers. The showers are likely to be heavy around Meru in the second half of the forecast period.

The light rains and showers will continue benefiting the growing crops in the region especially maize and beans.

- ✚ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc),** are likely to experience sunny intervals throughout the forecast period.

The continued sunny conditions will start having a negative impact on the pasture and crops grown in this region.

- ✚ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos, Kitui, Mwingi, etc)** are likely to experience sunny intervals throughout the forecast period.

The current sunny intervals will start having a negative impact on the pasture for livestock kept in this region.

- ✚ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)** are expected to experience light to moderate morning showers over few places for much of the forecast period.

The showers in this region are beneficial to mangoes and watermelons which are in their fruit setting stage.

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