FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

ETHIOPIAN METEOROLOGICAL INSTITUTE

METEOROLOGICLA DATA AND CLIMATOLOGY LEAD EXECUTIVE

REMOTE SENSING AND CLIMATOLOGICAL DESK

MONTHLY CLIMATE BULLETINMarch 2026

Some Applications of Climate Information

HIGHLIGHTS

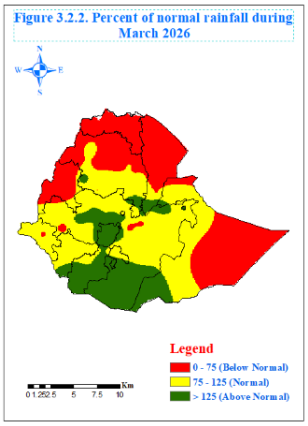
During March 2026, days remained warm across several portions of the lowlands of Ethiopia, particularly in the Gambella, Somali, Afar, Benishangul Gumuz, and North West Amhara Regions (Fig. 3.1.2). Specifically, the extreme maximum temperatures reached 43, 41.6, 41.5, 40.8, 40.8, 40, 39, 39, 38.5, 38.3, 38, and 37.3 °C. For Fugnuido,, Gambella, Metema, Elidar, Gewane, Gode, Awash Arba, Semera, Metehara (NMSA), Kibridahar, Chewka, and Sherkole stations respectively (Table 3.1.1).

On the other hand, the extreme minimum temperature values were below 6°C over some highland parts of Amhara, some part of Oromia, Tigray, and the adjoining areas of Benishangul Gumuz and Oromia regions. Specifically, the extreme minimum temperature values were 2.5, 3.2, 3.3, 3.5, 4.8, 5.5, 5.8, 6, 6, and 6 in ^{O}C over Bui, Ambamariam, Alemketema, Dangla, Debark, Wegeltena, Mehalmeda, Adigrat, Chewka, and D/Tabor, respectively (Table 3.1.2).

During March 2026, the monthly rainfall amount exceeded 250 mm, or heavier rainfall was occurring over South West Ethiopia, the southern parts of Ethiopia, Central Ethiopia, and most parts of the Oromia region. In particular, the monthly total rainfall values of March 2025 were as high as 427.1, 390.6, , 322.8, 285, 279.5, 265.1, 253.6, 250.8, and 120.3 mm over Werabe, Jinka, Arejo, Wolaita Sodo, Meisso, Yabelo, Konso, Sekoru, and A.A. Bole stations, respectively. Daily rainfall amount of more than 60 mm values were observed over Awash Arba, Dolomena, Majete, Bedelle, Harer, Bati, Burji, Metehara (NMSA), Chira, Ginnir, Nura-Era, Werabe stations, and the values were 60, 60, 60.5, 61.3, 61.8, 64, 68.5, 69.4, 71, 80, 81, and 85 1nmm respectively.

In general, the monthly total rainfall amount of March 2026 was below normal. Below Normal (Dry)Dominant in: Tigray Region, Afar Region, Amhara Region (large parts), Southern Nations, Nationalities, and People Region, Parts of the southwest Gambela Region. Local pockets in central Ethiopia were above normal, and finally, Normal Conditions cover much of the Oromia Region, the central areas, including Addis Ababa. Rainfall is close to climatology, generally stable for farming and water supply.

.



☎ 011 551 22 99 ✉ 1090 Fax 011-552-8713/011-558-7910 E-mail nmsa@ethionet.et Web:www.ethiomet.gov.et

Foreword

This climate bulletin is prepared and disseminated by Ethiopian Meteorological Institute (EMI). It is aimed at providing climatological information to different services of the community involved in various socio-economic activities and giving some highlights about major synoptic situations.

The information contained in the bulletin is believed to assist planners, decision-makers and the community at large by providing details of the climatic conditions of the nation in a given period.

This bulletin differs from the other real time and near real time bulletins issued by the Institute, which for their input depend only on meteorological stations equipped with single side band radio for data transmission. Though this bulletin is not real time, published with a delay of at least two months, the information contained in this bulletin is based on data coming from a much larger number of meteorological stations. Moreover, the information contained in this bulletin is not sector-specific and a wide range of users can benefit from it.

The Institue disseminates monthly, seasonal and annual climatological bulletins in which all-necessary climatological information and significant climatic anomalies are highlighted.

We have a strong belief that various socio-economic activities related to planning disaster mitigation, water resources management, construction, environmental protection, transportation, recreation, tourism and others will be benefited most by the careful and continuous use of this bulletin. Meanwhile, your comments and constructive suggestions are highly appreciated to make the objectives of this bulletin a success.

Fetene Teshome
Director General of EMI
P.O.Box 1090
Tel +251-11-551-58 51 / +251-11-551 22 99
Fax +251-11-558-6643 / +251-11-558-7910
E-mail:- emi@ethiomet.gov.et Addis Ababa

1. Synoptic Situation

1.1 Surface

The Mascarene high, with a mean central pressure value of above 1020hPa, was centered at about 37°S, 80°E.

The St. Helena high, with a mean central pressure value of above 1018hPa was centered at about 35°S, 8°W.

The Azores high, with a mean central pressure value of 1020hPa, was centered at about 38°N, 40°W.

1.2 Lower Troposphere (850 hPa vector wind)

North easterly flow of below 0 - 8m/s mean vector wind flow from the Indian Ocean was observed.

1.3 Middle Troposphere Geopotential height)

Cross-equatorial and southeastern flow of above 3 to 6 m/s was observed over the northern and western Indian Ocean, Arabian Sea, and the adjoining areas of the Horn of Africa.

1.4 Upper Troposphere (200 hPa vector wind)

The westerly wind, associated with the The subtropical westerly jet had 0- 15 m/s and strengthened further, while the upper-level easterly flow, associated with the tropical easterly jet, weakened further

2. Tropical Oceanic and Atmospheric Highlights

During March 2026, sea surface temperatures (SSTs) were near average in the central and east-central equatorial Pacific. The depth of the oceanic thermocline (measured by the depth of the 20°C isotherm) was above-average across much of the equatorial Pacific. The corresponding sub-surface temperatures were 1-4°C above-average across the equatorial Pacific.

Reference: NOAA, Climate Diagnostic Bulletin of March 2026

3. Weather

3.1 Temperature

During March 2026, days remained warm across several portions of the lowlands of Ethiopia, particularly in the Gambella, Somali, Afar, Benishangul Gumuz, and North West Amhara Regions (Fig. 3.1.2). Specifically, the extreme maximum temperatures reached 43, 41.6, 41.5, 40.8, 40.8, 40, 39, 39, 38.5, 38.3, 38, and 37.3 °C. For Fugnuido,, Gambella, Metema, Elidar, Gewane, Gode, Awash Arba, Semera, Metehara (NMSA), Kibridahar, Chewka, and Sherkole stations respectively (Table 3.1.1). On the other hand, the extreme minimum temperature values were below 6°C over some highland parts of Amhara, some part of Oromia, Tigray, and the adjoining areas of Benishangul Gumuz and Oromia regions. Specifically, the extreme minimum temperature values were 2.5, 3.2, 3.3, 3.5, 4.8, 5.5, 5.8, 6, 6, and 6 in ^{O}C over Bui, Ambamariam, Alemketema, Dangla, Debark, Wegeltena, Mehalmeda, Adigrat, Chewka, and D/Tabor, respectively (Table 3.1.2). In General, the March 2026 mean monthly temperature values were partially cooler than normal in some parts of Amhara, Tigray Benishangul and southern region and eastern Somalia On the other hand, warmer than normal over most parts of the Gambella, Afar Oromia and some parts of Amhara Benishangul and South west Ethiopia, region (Fig. 3.1.3).

Table 3.1.1 Stations with extreme maximum temperature values of greater than or equal to 37 ^{0}C during March 2026

Stations	Extreme maximum temperature (^{o}c)	Date
Fugnuido	43	20
Gambella	41.6	14
Metema	41.5	18
Elidar	40.8	30
Gewane	40.8	26
Gode	40	29
Awash Arba	39	25
Semera	39	26
Metehara (NMSA)	38.5	16
Kibridahar	38.3	21
Chewka	38	15
Sherkole	37.3	26

Table 3.1.2 Stations with extreme minimum temperature values of below or equal to 6^{o}C during March 2026

Stations	Extreme minimum temperature (^{o}c)	Date
Bui	2.5	19
Ambamariam	3.2	29
Alemketema	3.3	29
Dangla	3.5	4
Debark	4.8	22
Wegeltena	5.5	5.5
Mehalmeda	5.8	31
Adigrat	6	14
Chewka	6	16
D/Tabor	6	9

Rainfall

Normally, March is one of the months of the second rainy season of Belg (FMAM) for most parts of the country except for the north and northwest. The mean monthly rainfall exceeds 100 mm in many areas of the southern, southwestern, and southeastern parts of the country.

During March 2026, the monthly rainfall amount exceeded 250 mm, or heavier rainfall was occurring over South West Ethiopia, the southern parts of Ethiopia, Central Ethiopia, and most parts of the Oromia region. In particular, the monthly total rainfall values of March 2025 were as high as 427.1, 390.6, , 322.8, 285, 279.5, 265.1, 253.6, 250.8, and 120.3 mm over Werabe, Jinka, Arejo, Wolaita Sodo, Meisso, Yabelo, Konso, Sekoru, and A.A. Bole stations, respectively.

Daily rainfall amount of more than 60 mm values were observed over Awash Arba, Dolomena, Majete, Bedelle, Harer, Bati, Burji, Metehara (NMSA), Chira, Ginnir, Nura-Era, Werabe stations, and the values were 60, 60, 60.5, 61.3, 61.8, 64, 68.5, 69.4, 71, 80, 81, and 85 1nmm respectively (Tables 3.2.1).In general, the monthly total rainfall amount of March 2026 was below normal. Below Normal (Dry)Dominant in: Tigray Region, Afar Region, Amhara Region (large parts), Southern Nations, Nationalities, and People Region, Parts of the southwest Gambela Region. Local pockets in central Ethiopia were above normal, and finally, Normal Conditions cover much of the Oromia Region, the central areas, including Addis Ababa. Rainfall is close to climatology, generally stable for farming and water supply. (Fig. 3.2.2).

During March 2026, the moisture condition was Drier than last year. It dominates large parts of the Tigray Region, Afar Region, Somali Region, and Northern and eastern Amhara Region, which indicates a decline in rainfall, suggesting worsening dryness relative to last year. On the other hand, during the month, Wetter than Last Year Concentrated in: Oromia Region, Southern

Nations, Nationalities, and Peoples' Region. Areas around Addis Ababa show improved rainfall conditions compared to the previous year.(Fig. 3.2.3).

Table 3.2.1. Stations with more than 60 mm of rainfall in 24 hours during March 2026

Stations	Amount (mm)	Date
Awash Arba	60	22
Dolomena	60	4
Majete	60.5	27
Bedelle	61.3	26
Harer	61.8	30
Bati	64	28
Burji	68.5	6
Metehara (NMSA)	69.4	21
Chira	71	26
Ginir	80	3
Nura-Era	81	27
Werabe	85.1	24
Meisso	148.7	21

Table 3.2.2. Stations with more than 250 mm of monthly total rainfall during March 2026

Station	Amount
Werabe	427.1
Jinka	390.6
Arejo	322.8
Wolaita Sodo	285
Meisso	279.5
Yabelo	265.1
Konso	253.6
Sekoru	250.8
A.A. Bole	120.3

Figure 3.1.1. Mean maximum temperature in °C during March 2026.

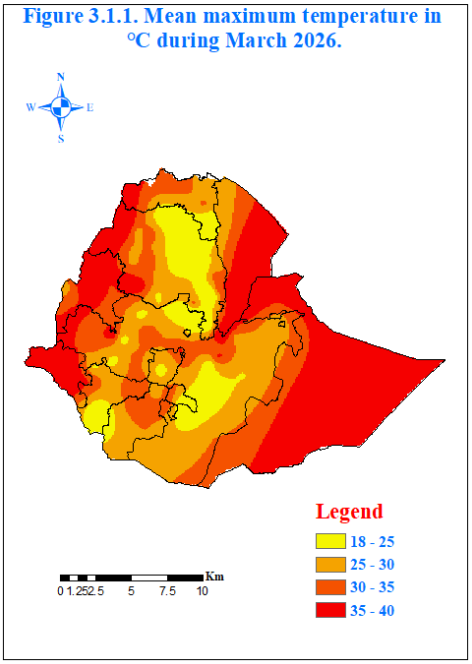


Figure 3.1.2. Mean minimum temperature in °C during March 2026.

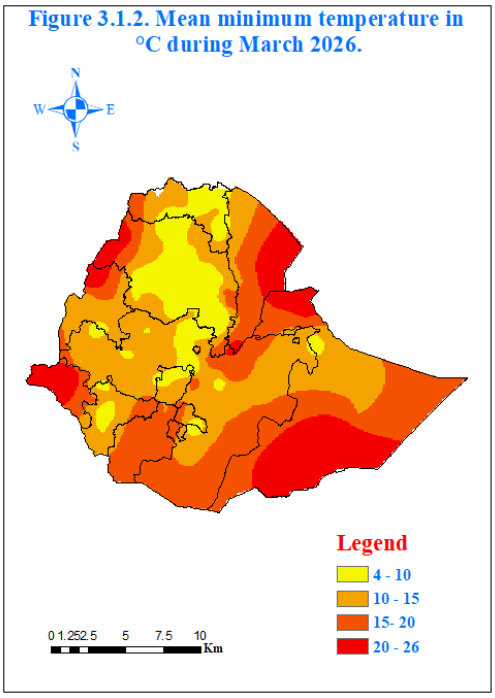


Fig.3.1.3. Departure of monthly average temperature from normal during March 2026

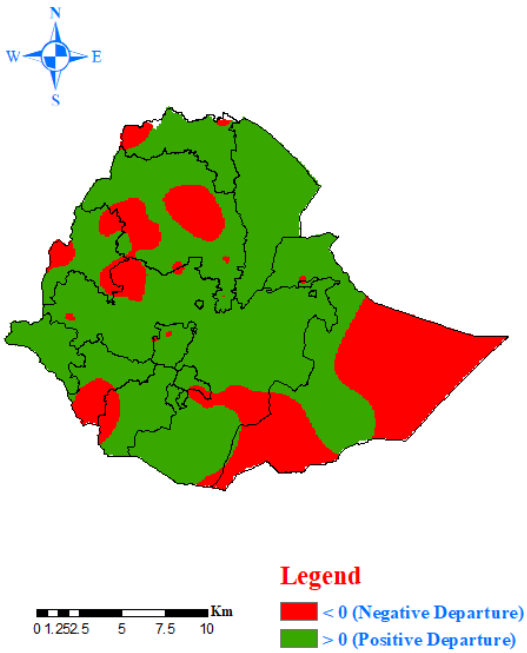


Figure 3.2.2. Percent of normal rainfall during March 2026

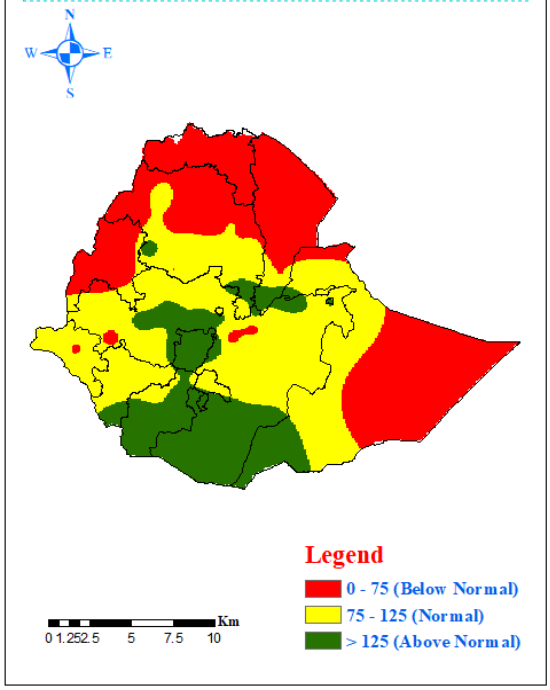


Figure: 3.2.1. Monthly total rainfall in mm during March 2026

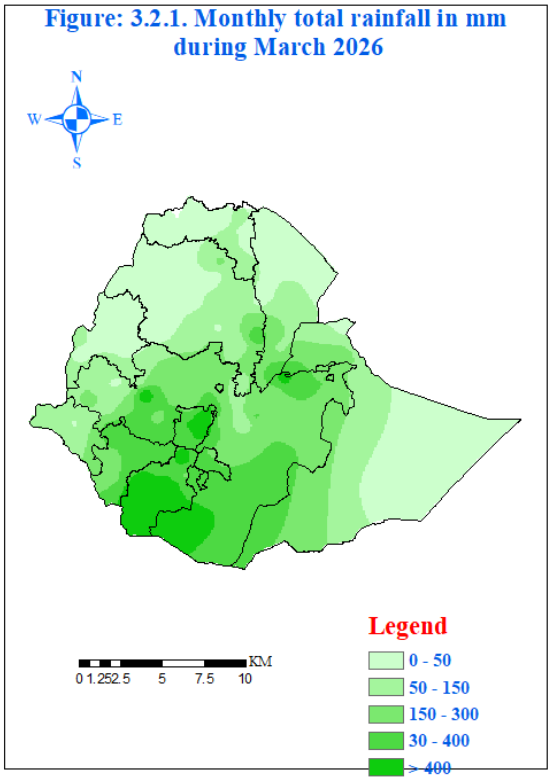


Figure 3.2.3. Monthly total rainfall of March 2026 minus monthly total rainfall of March 2025