FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

ETHIOPIAN METEOROLOGICAL INSTITUTE

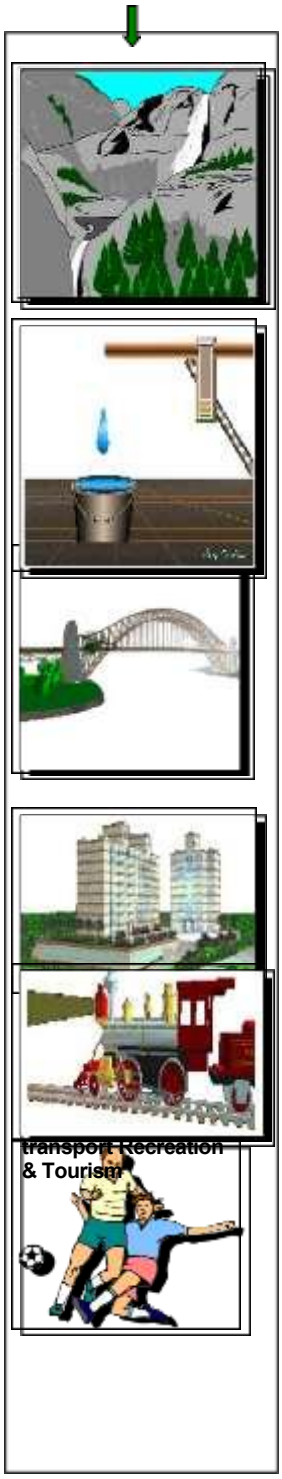
METEOROLOGICAL DATA AND CLIMATOLOGY LEAD EXECUTIVE

REMOTE SENSING AND CLIMATOLOGICAL DESK

MONTHLY CLIMATE BULLETIN

JUN 2025

Some Applications of Climate Information



Transport, recreation, & tourism

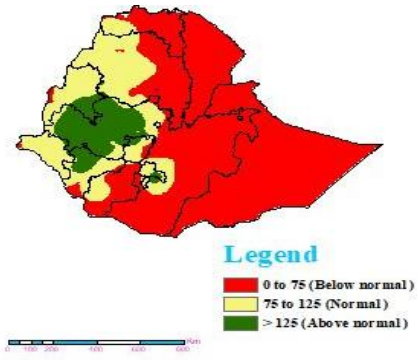
HIGHLIGHTS

During Jun 2025, days remained warm over several parts of the Ethiopian lowlands, such as Gambella, Somali, the south, east, Afar region, eastern, and the Benishangul Gumuz regions. Specifically, the extreme maximum temperature values were as high as 45, 42.8, 42.5, 42.5, 42, 41.8, 40.2, and 40 for Gewane, Metehara (EMI), Awash Arba, Chifra, Aysha, Metema, Dire Dawa, and Dalifagi stations, respectively.

Extreme minimum temperatures of less than 6°C were reported in various parts of the country, including central, southern, and eastern Amhara, and some pocket areas of the Oromia region. Specifically, Amba Mariam, Sholagebaya, Bui, Wegeltena, Alemketema, D/Brehan, Arsi Robe, and Mehalmeda were reporting exceptional minimum temperatures of 4, 4.1, 4.8, 4.8, 5, 5.2, 6, and 6 in ^{O}C, respectively (Table 3.1.2).

During June 2025, the monthly rainfall amount exceeded 350 mm or heavier rainfall occurred over most parts of western Oromia, Amhara, and most parts of Benishangul Gumuz areas. The monthly total rainfall values of June 2025 were as high as 514.5, 497.9. 477.4, 439, 422, 387.8, 384.2, 375.6, 369.9, 359.4 in mm over Nekemte, Angerguten, Gatira, Gimbi, Chewka, and Arjo, Masha, Nejo, Gide Ayana, and Aira stations, respectively.

The monthly total rainfall amount of June 2025 was below normal over all parts of Somali, Afar, most of Tigray, most parts of central, eastern, and southern Oromia, southeastern SNNP, and east and central Amhara regions. On the other hand, it is above normal in some parts of Benishangul, Gumuz, north-northwestern SNNP, and western Oromia regions. Finally, western and northwestern Amhara, most of Gambella and Benishangul Gumuz, and some parts of the SNNP and Oromia regions experienced normal rainfall conditions.



Percent of normal rainfall for Jun 2025

☐ 011 551 22 99 ☐ 1090 Fax 011-552-8713/011-558-7910 E-mail nmsa@ethionet.et

Website: www.ethiomet.gov.et

Foreword

This climate bulletin is prepared and disseminated by the Ethiopian Meteorological Institute (EMI). It aims to provide climatological information to various community services involved in socio-economic activities and highlight major synoptic situations.

The information contained in this bulletin is believed to assist planners, decision-makers, and the community at large by providing details of the climatic conditions of the nation in each 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-sideband 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 Institute 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 benefit 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 successful.

Director General
EMI
P.O. Box 1090
Tel: +251-11-558-56-00/011-551 22 99
Fax: +251-11-552-8713/+251-11-558-7910
E-mail: emi@ethionet.gov.et
Addis Ababa

1. Synoptic Situation

1.1 Surface

The Mascarene High, with a mean central pressure value above 1020 hPa, was centered at approximately 25°S, 20°E.

The St. Helena high, with a mean central pressure value above 1018 hPa, was centered at approximately 26°S, 10°E.

The Azores High, with a mean central pressure of 1018 hPa, was centered at approximately 37°N, 18°W.

1.2 Lower Troposphere (850 hPa vector wind)

Easterly flow with below 4 – 16 m/s mean vector wind flow originating from the Arabian Sea and the Indian Ocean.

1.3 Middle Troposphere (500-hPa Geopotential height)

Cross-equatorial and southeastern flow of above 3 to 9 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 Subtropical westerly jet, had 0- 30 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 June 2025, sea surface temperatures (SSTs) were near-average across much of the equatorial Pacific. The latest monthly Niño indices were +0.6°C for the Niño 1+2 region and 0.0 °C for the Niño 3.4 region. The depth of the oceanic thermocline, measured by the depth of the 20°C isotherm, was slightly below-average across the east-central equatorial Pacific.

Reference: NOAA, Climate Diagnostic Bulletin of Jun 2025

3. Weather

3.1 Temperature

During Jun 2025, days remained warm over several parts of the Ethiopian lowlands, such as Gambella, Somali, south, east, afar region, eastern, and Benishangul Gumuz regions (Fig. 3.1.1). Specifically, the extreme maximum temperature values were as high as 45, 42.8, 42.5, 42.5, 42, 41.8, 40.2 and 40 for Gewane, Metehara (EMI), Awash Arba, Chifra, Aysha, Metema, Dire Dawa, and Dalifagi stations, respectively (Table 3.1.1).

Extreme minimum temperatures of less than 6°C were reported in various parts of the country, including central and southern and eastern Amhara, some pocket areas of Oromia, region (Fig. 3.1.2). Specifically, Amba Mariam, Sholagebaya, Bui, Wegeltena, Alemketema, D/Brehan, Arsi Robe, and Mehalmeda were reporting exceptional minimum temperatures of 4, 4.1, 4.8, 4.8, 5, 5.2, 6, and 6 in ^{0}c respectively (Table 3.1.2).

In general, the Jun 2025 mean monthly temperature values were partially warmer than normal in most parts of the Tigray region, except the northern west parts, and most parts of the Afar, Sidama, central Ethiopia, and southern regions of the country, and western and south-western Somalia regions. On the other hand, cooler than normal over northern Tigray, eastern Afar, central Amhara, central and eastern Somalia, and some pocket areas of Oromia and Benishangul gumuz

regions (Fig. 3.1.3).

Table 3.1.1 Stations with extreme maximum temperature values of greater than or equal to 40 °C during Jun 2025.

Stations	Extreme maximum temperature (^{o}c)	Date
Gewane	45	11
Metehara (NMSA)	42.8	11
Awash Arba	42.5	21
Chifra	42.5	22
Aysha	42	9
Metema	41.8	7
Dire Dawa	40.2	11
Dalifagi	40	5/19/28/29

Table 3.1.2 Stations with extreme minimum temperature values of below or equal to 6^{o}c during Jun 2025.

Stations	Extreme minimum temperature(^{o}c)	Date
Alemketema	5	21
Ambamariam	4	16 and 27
Arise Robe	6	2 and 3
Bui	4.8	4
D/Brehan	5.2	2
Mehalmeda	6	20

Table 3.1.3. New records of maximum temperature during Jun 2025.

Name	Previous record	New record	Date
Alemaya	30.5	31	29
Alem Ketema	32.5	34	16
Bahir Dar New	32.5	33	13
Cheffa SF	38.5	38.8	15
Chewaka	34.2	35	3
Dire Dawa	39.5	40.2	11
Majete	37	37.6	12
Metehara (NMSA)	41	42.8	11
Shola Gebeya	25.3	25.9	7
Tepi	33	33.4	12

Table 3.1.3. New records of maximum temperature during June 2025.

Name	Previous Record	New Record	Date
Alemketema	5.4	5	21
Sholagebaya	8	4.1	4

3.2 Rainfall

June typically falls within the rainy season in Kiremt (JJAS) rain-benefiting regions of the nation. Many parts of the country's north, northwest, southwest, and central regions receive an average monthly total rainfall of more than 350 millimeters. During June 2025, the monthly rainfall amount exceeded 350 mm or heavier rainfall occurred over most parts of western Oromia, Amhara, and most parts of Benishangul Gumuz areas. The monthly total rainfall values of June 2025 were as high as 514.5, 497.9. 477.4, 439, 422, 387.8, 384.2, 375.6, 369.9, and 359.4 in mm over Nekemte, Angerguten, Gatira, Gimbi, Chewka, and ArejoMasha, Nejo, Gide Ayana, and Aira stations, respectively (Tables 3.2.2).

The monthly total rainfall amount of June 2025 was below normal over all parts of Somali, Afar, most of Tigray, most parts of central, eastern, and southern Oromia, southeastern SNNP, and east and central Amhara regions. On the other hand, it is above normal in some parts of Benishangul, Gumuz, north & northwestern SNNP, and western Oromia regions. Finally, western, and northwestern Amhara, most of Gambella and Benishangul Gumuz, and some parts

of the SNNP and Oromia regions experienced normal rainfall conditions.

In other cases, pocket areas of Tigray, central and eastern Afar, western, and southern Oromia, Gambela, much of Somali, and a considerable part of SNNP were wetter than last year. On the other hand, all of Amhara and Tigray, southern and western Afar, central, and eastern Oromia, and some parts of Benishangul Gumuz areas were drier than June 2024 (Fig. 3.2.3).

Table 3.2.1. Stations with more than 60mm of rainfall in 24 hours during Jun 2025.

Stations	Amount (mm)	Date
Nekemte	71	24
Aira	64.6	16
Dangla	66	25
Gidaayana	62.3	18
Jinka	60.7	21
Kachise	62.3	28
Limugenet	60	24
Masha	60.4	14

Table 3.2.2. Stations with more than 350 mm of monthly total rainfall during Jun 2025.

Stations	Amount (mm)
Nekemte	514.5
Angerguten	497.9
Gatira	477.4
Gimbi	439
Chewka	422
Arejo	387.8
Masha	384.2
Nejo	375.6
Gidaayana	369.9
Aira	359.4

Table 3.2.3. New records of maximum rainfall in 24 hours during Jun 2025.

Name	Previous record	New record	Date
Aysha	17.1	27	26
Nefasmewucha	50.2	59	29

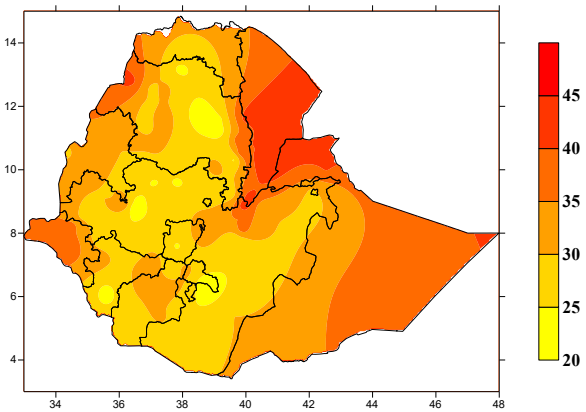


Fig. 3.1.1. Mean Maximum Temperature in ^{O}C During Jun 2025.

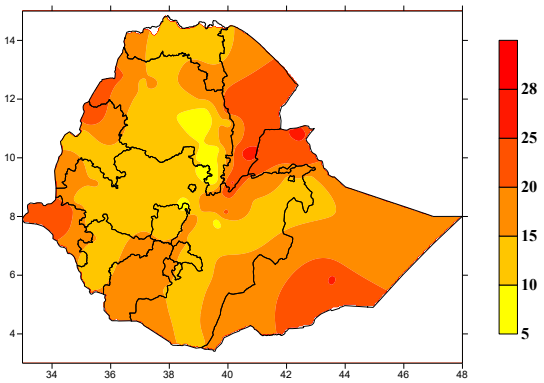


Fig. 3.1.2. Mean Minimum Temperature in ^{O}C during Jun 2025.

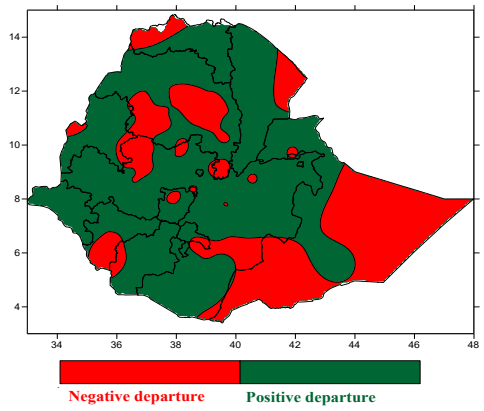


Fig.3.1.3. Departure of monthly average temperature from normal during Jun 2025.

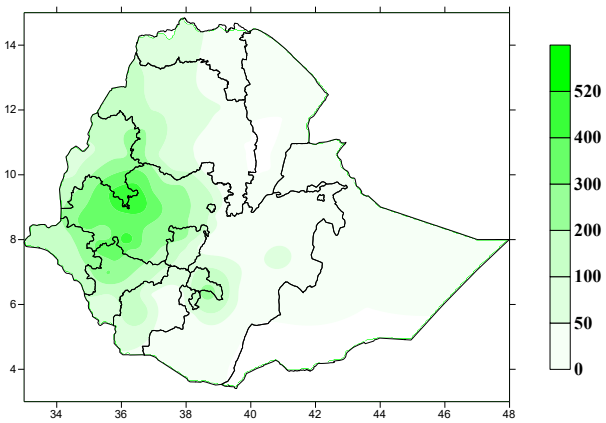


Fig.3.2.1. Monthly Total Rainfall in mm During June 2025.

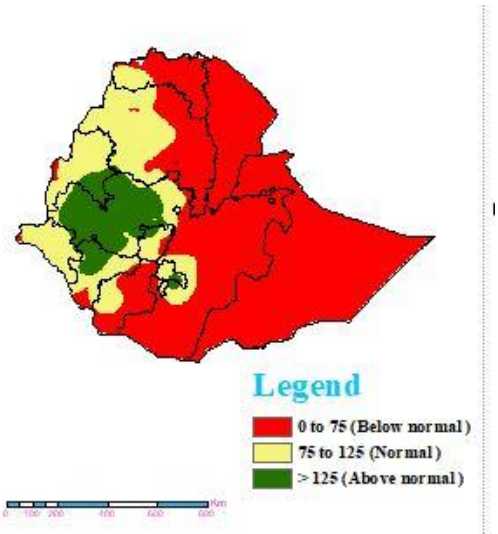


Fig. 3.2.2. Percent of normal rainfall during Jun 2025.

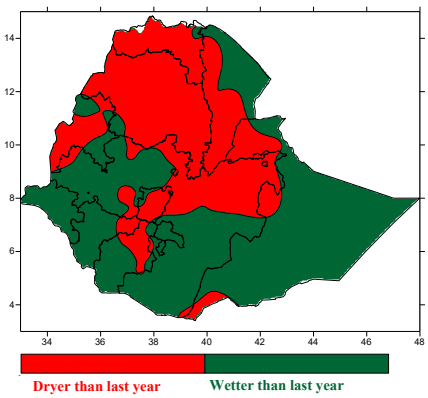


Fig. 3.2.3. Monthly Total Rainfall of June 2025 Minus Monthly Total Rainfall of June 2024.