ETHIOPIA METEOROLOGY INISTITUTE Agrometeorological Bulletin

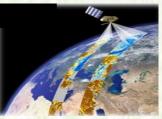
MONTHLY AGROMETEOROLOGICAL BULLETIN

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FORE WARD

This Agro met Bulletin is prepared and disseminated by the Ethiopia Meteorology Institute

(EMI). The aim is to provide those sectors of the community involved in Agriculture and

related disciplines with the current weather situation in relation to known agricultural

practices.

The information contained in the bulletin, if judiciously utilized, are believed to assist

planners, decision makers and the farmers at large, through an appropriate media, in

minimizing risks, increase efficiency, maximize yield. On the other hand, it is vital tool in

monitoring crop/ weather conditions during the growing seasons, to be able to make more

realistic assessment of the annual crop production before harvest.

The Agency disseminates ten daily, monthly and seasonal weather reports in which all the

necessary current information's relevant to agriculture are compiled.

We are of the opinion that careful and continuous use of this bulletin can benefit to raise ones

agro climate consciousness for improving agriculture-oriented practices. Meanwhile, your

comments and constructive suggestions are highly appreciated to make the objective of this

bulletin a success.

Director General

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አህፅሮት እ.ኤ.አ ማርች 2025

ባሳስፍነው የማርች ወር የመጀመሪያው አስር ቀናት አጋማሽ በኋላ በሰሜን ምስራቅ፣ በመካከለኛዉ እና በደቡብ የአገሪቱ ክፍሎች ላይ ከቀላል እስከ ከባድ መጠን ያለዉ የእርተበት ሁኔታ የተስተዋለ እንደነበር ከተለያዩ የሀገሪቱ አካባቢዎች የተሰበሰቡ የግብርና ሚቲዎሮሎጂ መረጃዎች አመልክተዋል። ይህም የተገኘው እርተበት በተለይም የበልግ ሰብል አብቃይ በሆኑት የሀገሪቱ አካባቢዎች ላይ የተሻለ የአፈር ውስጥ እርተበት እንዲኖራቸው ያስቻለ ከመሆኑ ጋር ተያይዞ የማሳ ዝግጅት ለማድርግ እና የተለያዩ ሰብሎችን ለመዝራት አዎንታዊ ሚና የነበረው ሲሆን አስቀድመው ለተዘሩ የበልግ ወቅት ሰብሎችም ሆነ በአካባቢዎቹ ለሚበቅሉ ቋሚ ተክሎች እንዲሁም ለግጦሽ ሳርና ለመጠጥ ውሃ አቅርቦት አሉታዊ ጎን ነበረው።

ባሳለፍነው የማርች ወር ሁለተኛዉ አስር ቀናት በአብዘሃኛዉ የበልግ አብቃይና እርዋበት ተጠቃሚ በሆኑት የሀገራቱ ክፍሎች ላይ በመጠንም ሆነ በስርጭት የተስፋፋ እርዋበት በተለይም በደቡብ፣ በመካከለኛው፣ በሰሜን ምስራቅ እና በምስራቅ የሀገራቱ ክፍሎች ላይ ከቀላል እስከ ከባድ መጠን ያለው እርዋበት እንደነበራቸው የተተነተኑ የግብርና ሚቲዎሮሎጂ አመላካቾች ያሳያሉ። ይህም ሁኔታ የአፌር ውስዋ እርዋበትን በማሻሻል በልግ አብቃይ ለሆኑት አካባቢዎች ማሳ ዝግጅት ለማድረግ እና ዘር ለመዝራት አንዲሁም ቀደም ብለው ተዘርተው በቡቃያ ደረጃ ለሚገኙ ሰብሎች የነላ ጠቀሜታ ነበረው። በተጨማሪም ለቋሚ ተክሎች የውሃ ፍላነት መሟላት እና ለአርብቶ አደርና ክፊል አርብቶ አደር አካባቢዎች የግጣሽ ሳርና የመጠዋ ውሃ አቅርቦትን እንዲኖር ከማስቻል አንጻር አዎንታዊ ሚና ነበረው። በአንጻሩ ግን ለነበረው ዝናብ እና ክፍተኛ ሙቀት ጋር ተያይዞ በጋሞ ዞን ጋርዳ ማርታ ወረዳ በአነዳንደ ቆሳማ አከባቢዎች የቤት እንስሳት በሽታ በመከሰቱ በጻልጋ ከብቶች ላይ ጉዳት ደርሷል።

ባሳለፍነው የማርች ወር ሶስተኛዉ አስራ አንድ ቀናት በአብዘሃኛዉ የበልግ አብቃይና እርጥበት ተጠቃሚ በሆኑት የሀገሪቱ አካባቢዎች ላይ በተለይም የደቡብ፣ ደቡብ ምዕራብ፣ መካከለኛዉ እና የሰሜን ምስራቅ የሀገሪቱ ክፍሎች ላይ በመጠንም ሆነ በስርጭት የተስፋፋ እርጥበት የነበራቸው ሲሆን ይህም ሁኔታ የአፌር ውስጥ እርጥበትን በማሻሻል በልግ አብቃይ ለሆኑት አካባቢዎች የበልግ ሰብሎችን ለመዝራት እና ቀደም ብለዉ ተዘርተው በቡቃያ ደረጃ ለሚገኙ ሰብሎች እድገት የጎላ ጠቀሜታ ነበረው፡፡ በተጨማሪም ለቋሚ ተክሎች የውሃ ፍላጎት መሟላት እና ለአርብቶ አደርና ክፌል አርብቶ አደር አካባቢዎች የግጦሽ ሳርና የመጠዋ ውሃ አቅርቦትን እንዲኖር ከማስቻል አንጻር አዎንታዊ ሚና ነበረው።

ባሳለፍነው የማርች ወር በተለይም በመጀመሪያዎቹ አስር ቀናት በአብዛኛዎቹ የሀገሪቱ አካባቢዎች ላይ ደረቃማ የእርዋበት ሁኔታ የነበረ ሲሆን ነገር ግን በሁለተኛው አስር ቀናት እና በሶስተኛዉ አስራ አንድ ቀናት ከፍተኛ የእርዋበት መጨመር እንደነበረ የተሰበሰቡ የግብርና ሚቲዎሮሎጂ መረጃዎች ያሳያሉ። ይህም ሁኔታ የበልግ ሰብል በስፋት አምራች ለሆኑት ለደቡብ ምእራብ፣ ለሰሜን ምስራቅ እና ለመካከለኛው የሀገሪቱ አካባቢዎች የማሳ ዝግጅት ለማከናወንና የተለያዩ የበልግ ወቅት ሰብሎችን ለመዝራተ እንዲሁም የረጅም ጊዜ ሰብሎችን አስቀድመው ለሚዘሩ አካባቢዎች የማሳ ዝግጅት ለማካሂድ አዎንታዊ ሚና ነበረው። በተጨማሪም ለቋሚ ተክሎች የውሃ ፍላጎት መሟላትና ለመጠዋ ውሃና ለግጦሽ ሳር አቅርቦት የጎላ ሚና የነበረው ሲሆን የአፌር ውስጥ እርዋበትን ከማሻሻልና ለመጠዋ ውኃ አቅርቦት አስተዋጽኦ የሚያበረክቱ ምንጮችን ከማጎልበት አንጻር በወሩ ውስጥ የተገኘው እርጥበት ከፍተኛ ጠቀሜታ ነበረዉ።

SUMMARY MARCH 2025

During the first dekad of March 2025, due to the relative strengthening of rain bearing weather systems better moisture has been relatively improving over Belg rain benefiting and growing areas of the country, particularly after the second half of the dekad north eastern, central, southern and south western parts of the country experienced light to heavy moisture. This condition might have positive impact to perform water requirements of early planted Belg season crops and sowing of crops in areas where the rain onset was a bit delayed from its normal time of sowing as well as water needs for perennial plants. In addition, the condition had been favourable toward improving the availability of pasture and drinking water over the pastorals and agro-pastoral communities.

During the second dekad of March, due to the relative strengthening of rain bearing weather systems better moisture has been improving over Belg rain benefiting and growing areas of the country, particularly over southern, south-western, central, north-eastern and eastern parts of the country experienced moist to hyper humid moisture. Heavy rainfall was also recorded in many places. This condition might have positive impact to perform land preparation and planting for Belg season crops in areas where the rain onset was a bit delayed from its normal time of sowing as well as for perennial plants and early sowed crops. In addition, the condition had been favourable toward improving the availability of pasture and drinking water over the pastorals and agro-pastoral communities. Moreover, the obtained heavy rainfall could be favorable, for farmers who are in moisture stress areas, to collect and store rainwater where that can be used in time of deficit. However due to high daily extreme temperature with rainfall animals' disease outbreak was occurred over Gamo zone Garda marta woreda which is the case of many animals died.

During the third dekad of March 2025, according to the data collected from various agro meteorological stations, better moisture was observed over Belg rain benefiting and growing areas especially in the southern, south-western, central and north-eastern parts of the country. In line with this, the received moisture combination with the moisture obtained in the previous dekads had positive contribution to perform planting of Belg season crops and crop that found in different growth stages. The observed moisture was also inmprove the water need of perennial plants and to sustain for the provision of pasture and drinking water as well. Occasional received Heavy rainfall was also recorded greater than 30mm in 24 hours

in some part of the country. This situation has significant contribution to collect and store rainwater, especially for moisture stress areas.

During the month of March 2025, according to agricultural meteorological data collected from different parts of the country especially in the first ten days of the month dry moisture conditions was observed in most parts of the country, however there was a significant increase in moisture conditions in the second and third dekad of the month particularly over the southwest, northeast and central parts of the country, This situation had positive contribution for land preparation, sowing of Belg crops as well as satisfies the water need of perianal plants and availability of pastors and drinking water across the pastoral and agro-pastoral areas. Also the observed moisture over the south-western, north-eastern and central parts of the country which condition was sustain sowing of long cycle crops as well as satisfy the water need of perennial plants. In addition, the situation was also favourable the generation of pasture and the availability of drinking water over pastoral and agro pastoral areas. Heavy rainfall was also recorded in 24 hours over most part of belg rain benefiting areas of the country, the obtained heavy fall could be favourable for farmers who are in moisture stress areas, to collect and store rainwater where that can be used in time of deficit.

1. WEATHER ASSESSMENT

1.1. Rainfall amount (21 – 31) March 2025

During the third dekade of March 2025 on the most part of the country was good the rain fall distribution. particularly Tip areas of West Tigray Metkel, South Gonder, South Wello, Afar Zone3&5,South West Shewa, most part of Gurage, Jimma, Siliti, Alaba, Hadiya, Woliyta, Keffa, Dawero, Sidama, Amaro, Borena, Guji, Bale, Liben, Afder, Gode, Korahe, Warder, Fik, Degahabur, West and East Hararghe, Jijiga Zones are received 50-100 mm rain fall. some areas of Warder, Korahe, Gode, Bale, Arsi, Konso, Gedo, Basketo, Benchmaji, Godere, Sheka, Gambela Zone2, Illibabur, Jimma, West Shewa, Addis Ababa, pocket areas of East Gojjam, South WelloAfar Zone 5&3,zones are received 25-50mm rain fall. The rest part if the country was received 0.25 mm rain fall.

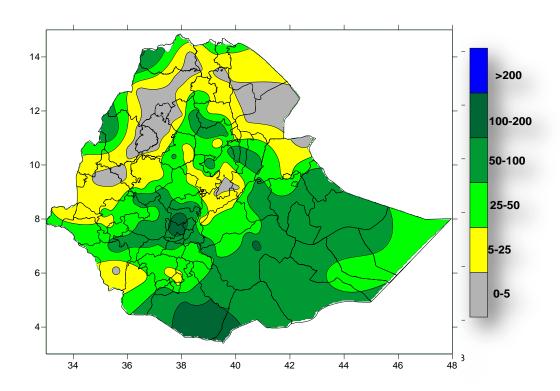


Fig 1. Rainfall distribution in mm (21-31) March 2025

1.2. Rainfall Anomaly (21 – 31 March 2025)

When we look at to the rainfall anomaly map below, during the third dekade of march 2025, percent of Normal rain fall was most part of the country particularly some areas of North Western and North Eastern, Most part of Western ,Central, South Western, Southern and Eastern part of the country was exhibited Normal to Above Normal Rain fall. The rest part of the country was exhibited Much below Normal Rain fall.

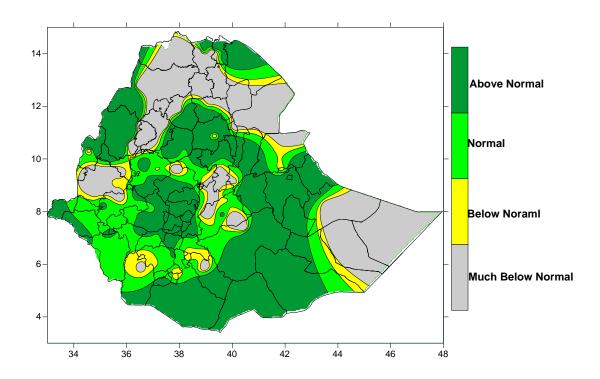


Fig. 2 Percent of normal rainfall distribution (21 – 31 March 2025)

Explanatory notes for the Legend

< 50-Much below normal 50-75%-Below normal 75-125%- Normal

> 125% - Above normal

1.3. <u>.</u> Moisture status (21 – 31 March 2025)

During third dekad March 2025 most parts of eastern half except south-eastern and north eastern including south-western parts of the country experienced Moist to Hyper Moist moisture condition. The rest parts of the countries exhibited moderately Dry too Very Dry

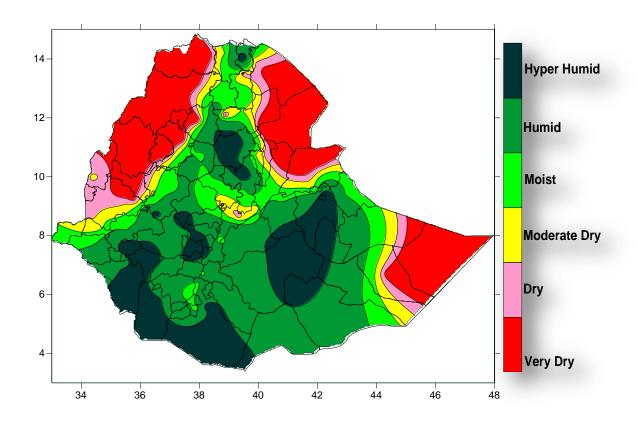


Fig. 3 Moisture Status (21-31 March 2025)

1.4. Rainfall amount on the month of March 2025

During the Month of March 2025 the rain fall distribution was most part of the county particularly Belg Rain Benefiting areas received high amount of rain fall. Specifically Alaba zones are received >200 mm rain fall and South Gonder, South Wello Oromia Zone, East GojjamAfar Zone 3&5,North and West Shewa Addis Ababa Zone Gurage, Illibabur Jimma, Siliti Alaba Hadiya, Sheka Godere Keffa, Dawero, Woliyta, Sidama, Bench maji, Basketo, Gofa, Gedo, Konso, Amaro Borena, Guji, Bale, Borna, Liben, Afder,Gode, Fik, West and East Hararge, Jijiga, Tip areas of West &East Tigray and Metkel Zones are received 50 – 200mm rain fall. The rest part of the country was received 0-50mm rai fall.

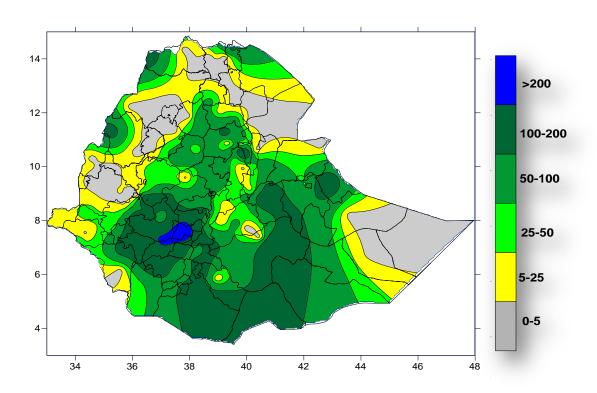


Fig. 4 Rainfall amount in mm for the month of March 2025

1.5. Rainfall Anomaly on the month of March 2025

During the month of March 2025 percent of Normal rain fall was most part of Belg Benefiting areas including Western South Western, Southern, Eastern, Central, and some areas of North Western, and North Eastern part of the country was exhibits Normal to Above Normal Rain fall. The rest part of the country was exhibited Much below Normal Rain fall

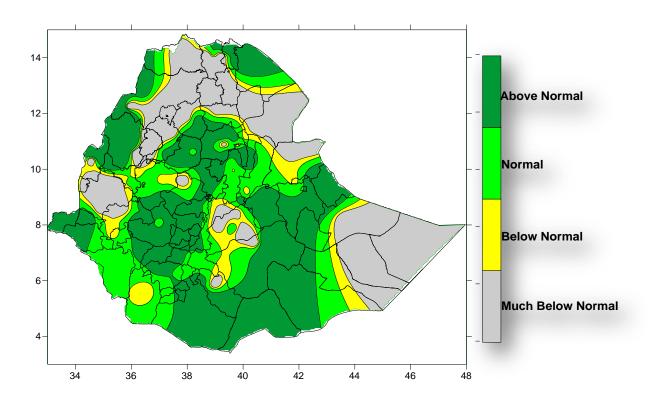


Fig. 5 Percent of Normal Rainfall for the month of March 2025

Explanatory notes for the Legend

< 50-Much below normal 50-75%-Below normal 75-125%- Normal

> 125% - Above normal

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1.6. Moisture status on the month of March 2025

In accordance with the moisture status map indicated below, during the month of March 2025 in most parts of eastern half except south-eastern and north eastern including south-western parts of the country experienced Moist to Hyper Moist moisture condition. The rest parts of the countries exhibited moderately Dry too Very Dry

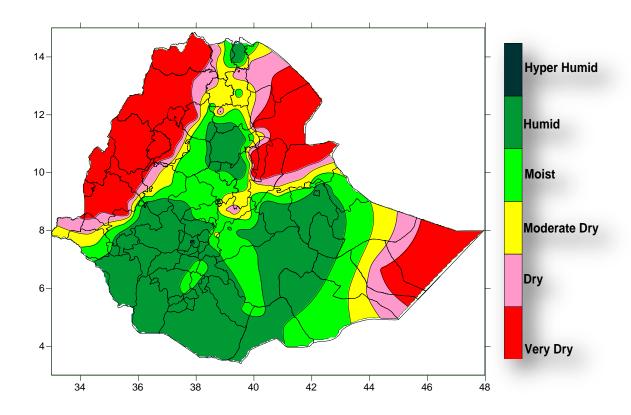
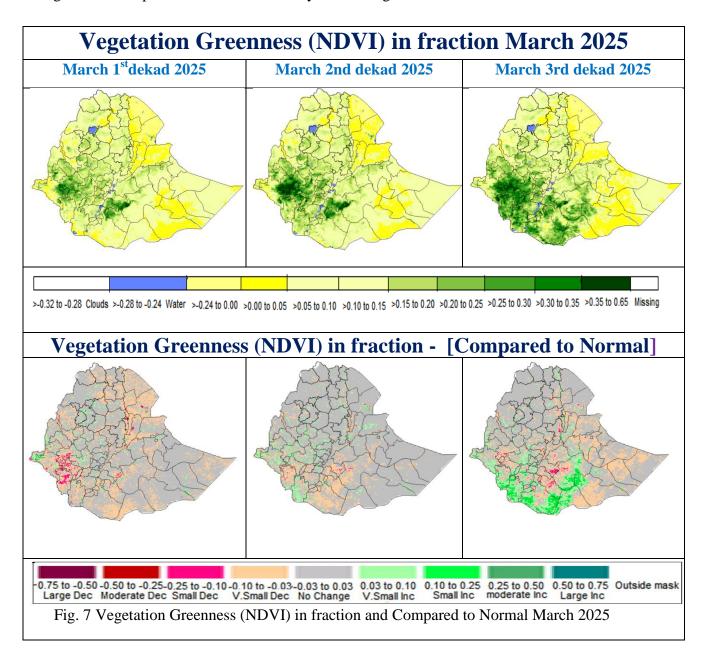


Fig. 6 moisture status for the month of March 2025

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE ON THE MONTH OF MARCH 2025

During the month of March, better moisture has been steadily improved, after the first dekad of the month over Belg rain benefiting areas particularly the south-western, north-eastern and central parts of the country including southern and south-eastern pastoral and agro-pastoral areas due to increment of moisture the vegetation condition across the country indicated average and above average vegetation condition (Fig.7. NDVI and Fig.8.Rangeland WRSI in %) which condition was satisfy the Belg crops and water need of perennial plants. the generation of pasture and the availability of drinking water as well as.



2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING MONTH OF APRIL 2025

In the normal condition, the month of April rain producing systems are expected to be strength over Belg rain benefiting and growing areas of the country. Hence, the situation is very important for moisture requirement of different Belg and sowing of long cycle Meher crops, perennial plants, improve pasture and drinking water availability over pastoral and agro pastoral areas.

In the coming month of April 2025, Moist conditions are expected to be better in quantity and distribution in most areas of the country receiving Belg rainfall than in the previous two Belg months, which is expected to develop favorable conditions for agricultural activities in Belg growing and rain benefiting areas. In particular, since the beginning of March, the areas that have been receiving moisture on consecutive days will available the water needs of earlysown Belg crops and perennial plants that are in different stages of growth, and the expected moist conditions in the south and southeastern parts of the country will be beneficial for semi-pastoral areas such as Borena and Guji, for sowing seeds, and for providing pasture and drinking water for animals. In addition, it is recommended that those who have started agricultural activities late in the Belg season for various reasons and who are considering the expected moisture conditions for sowing long-term crops should make preparations in advance to use sufficient resources. On the other hand, due to the erratic nature of Belg rainfall, consecutive dry days may occur in some areas with short rainfall periods, so it is necessary to prepare for the storage of available moisture and the implementation of measures to retain moisture in the fields. On the other hand, since there will be heavy rainfall in some areas and flash floods may occur in cause with this, farmers should pay due attention to the activities of ensuring that floods follow their normal flow and, especially in areas where some water bodies and soil characteristics do not easily absorb water, which can cause excess moisture in the soil and cause water to stagnate in the fields, and methods that can easily drain and remove excess water should be implemented immediately.

3. <u>DEFNITION OF TERMS</u>

ABOVE NORMAL RAINFALL: - Rainfall in excess of 125% of the long termmean

BELOW NORMAL RAINFALL: - Rainfall below 75 % of the long term mean.

NORMAL RAINFALL: - Rainfall amount between 75 % and 125 % of the long term mean.

BEGA: - It is characterized with sunny and dry weather situation with occasional falls. It extends from October to January. On the other hand, it is a small rainy season for the southern and south eastern lowlands under normal condition. During the season, morning and night times are colder and daytime is warmer.

BELG: - Small Rainy season that extends from February to May and cover s southern, central, eastern and north-eastern parts of the country.

CROP WATER REQUIREMENTS: - the amount of water needed to meet the water loss through evapotranspiration of a disease free crop, growing under non-restricting soil conditions including soil water and fertility.

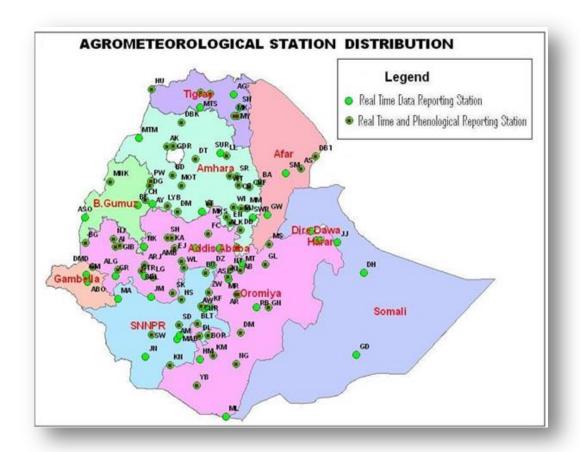
DEKAD: - First or second ten days or the remaining days of a month.

EXTREME TEMPERATURE:- The highest or the lowest temperature among the recorded maximum or minimum temperatures respectively.

ITCZ:- Inter-tropical convergence zone (narrow zone where trade winds of the two hemispheres meet.

KIREMT: - Main rainy season that extends from June to September for most parts of the country with the exception of the south-eastern lowlands of the country.

RAINY DAY: - A day with 1 or more mm of rainfall amount



Station	Code	Station	Code	Station	Code	Station	Code
A. Robe	AR	D. Zeit	DZ	Humera	HU	Nazereth	NT
A.A. Bole	AA	D/Dawa	DD	Jijiga	JJ	Nedjo	NJ
Adigrat	AG	D/Mena	DOM	Jimma	JM	Negelle	NG
Adwa	AD	D/Odo	DO	Jinka	JN	Nekemte	NK
Aira	AI	D/Tabor	DT	K.Dehar	KD	Pawe	PW
Alemaya	AL	Dangla	DG	K/Mingist	KM	Robe	RB
AlemKetema	ALK	Dilla	DL	Kachise	KA	Sawla	SW
Alge	ALG	Dm.Dolo	DMD	Koffele	KF	Sekoru	SK
Ambo	AMB	Dubti	DBT	Konso	KN	Senkata	SN
Arba Minch	AM	Ejaji	EJ	Kulumsa	KL	Shambu	SH
Asaita	AS	Enwary	EN	Lalibela	LL	Shire	SHR
Asela	ASL	Fiche	FC	M.Meda	MM	Shola Gebeya	SG
Assosa	ASO	Filtu	FL	M/Abaya	MAB	Sirinka	SR
Awassa	AW	Gambela	GM	Maichew	MY	Sodo	SD
Aykel	AK	Gelemso	GL	Majete	MJ	WegelTena	WT
B. Dar	BD	Ginir	GN	Masha	MA	Woliso	WL
Bati	BA	Gode	GD	Mekele	MK	Woreilu	WI
Bedelle	BDL	Gonder	GDR	Merraro	MR	Yabello	YB
BUI	BU	Gore	GR	Metehara	MT	Ziway	ZW
Combolcha	CB	H/Mariam	HM	Metema	MTM		
D. Berehan	DB	Harer	HR	Mieso	MS		
D. Habour	DH	Holleta	HL	Moyale	ML		
D. Markos	DM	Hossaina	HS	M/Selam	MSL		