

भारत सरकार
Government of India
पृथ्वी विज्ञान मंत्रालय (एम. ओ. ई. एस.)
Ministry of Earth Sciences (MoES)



भारत मौसम विज्ञान विभाग
INDIA METEOROLOGICAL DEPARTMENT

Monthly Outlook for Rainfall and Temperature during July 2026

Highlights

- a) Rainfall over India** — Monthly average rainfall over the country as a whole during July 2026 is most likely to be below normal (<94 % of long period average (LPA)). The LPA of rainfall over the country as a whole during July, based on data from 1971-2020, is about 280.4 mm. Regionally, below-normal rainfall is likely across most parts of the country except some areas of Northwest and Northeast India, Eastcentral India and the eastern peninsular region where normal to above-normal rainfall is likely.
- b) Temperature over India** – During July 2026, maximum temperatures are expected to remain above normal across most parts of India except a few isolated areas in Westcentral India where normal to below-normal maximum temperatures are likely. Meanwhile, the minimum temperatures are also expected to be above normal over most regions of the country except some isolated pockets of Central and Northeast India where normal minimum temperatures are likely.
- c) Sea Surface Temperature (SST)** - Weak El Niño–Southern Oscillation (ENSO) conditions are currently prevailing over the equatorial Pacific Ocean. The latest forecasts from the Monsoon Mission Climate Forecast System (MMCFs) and other global climate models indicate that these conditions are likely to strengthen further during the Southwest Monsoon season. Currently, neutral Indian Ocean Dipole (IOD) conditions are being observed over the Indian Ocean. The model forecast indicates that neutral IOD conditions are likely to persist during the Southwest Monsoon season.

IMD will issue the forecast for the rainfall during the second half of the season (August + September 2026) and for the month of August towards the end of July 2026.

Monthly Outlook for Rainfall and Temperature during July 2026

1. Background

Since 2021, the India Meteorological Department (IMD) has been using a new strategy for issuing operational long-range forecasts on a monthly and seasonal scale for rainfall and temperature across the country. For this, a newly developed Multi-Model Ensemble (MME) forecasting system is used. The MME system utilizes simulations from the coupled global climate models (CGCMs) sourced from various global climate prediction and research centers, including IMD's Monsoon Mission Climate Forecasting System (MMCFSS) model.

IMD had issued the first stage forecast for the 2026 southwest monsoon seasonal (June to September) rainfall over the country on 13th April and updated forecast on 29th May 2026. In addition, IMD also issued the forecast for rainfall during June on 29th May, 2026. The Monthly Outlook for Rainfall and Temperature over the country during July 2026 is given below.

2. Probabilistic Forecast of the Rainfall during July 2026

Monthly average rainfall over the country as a whole during July 2026 is most likely to be below normal (<94 % of long period average (LPA)). The LPA of rainfall over the country as a whole during July based on data from 1971-2020 is about 280.4 mm

The probabilistic forecast for the spatial distribution of tercile rainfall categories (above normal, normal and below normal) over the country for July 2026 is shown in Fig.1. Monthly average rainfall over the country as a whole in July 2026 is most likely to be below-normal across most parts of the country except, some areas of Northwest and Northeast India, East-Central India and the eastern peninsular region where normal to above-normal rainfall is likely. There is no signal by the model over the white shaded areas within the land region of the country.

Below-normal rainfall can pose significant challenges for agriculture, water resources, hydropower generation, ecosystem sustainability, and drinking water availability. Such conditions may increase the risk of heat stress, and pressure on available water resources in several regions. To reduce potential impacts, timely planning and preparedness measures, including water conservation, efficient management of available water resources, and suitable agricultural contingency measures, may be considered by the concerned agencies and stakeholders. Timely preparedness and coordinated actions by stakeholders can help enhance resilience to rainfall deficits. The IMD provides a range of weather and climate services, including seasonal monsoon forecasts, extended-range forecasts, district-level weather forecasts, agro-meteorological advisory services, and impact-based forecast and early warnings. These services support farmers, water resource managers, disaster management authorities, power sector planners, and other stakeholders in making informed decisions. Effective utilization of IMD's forecasts and early warning services can contribute significantly to mitigate risks associated with below-normal rainfall conditions.

3. Probabilistic Forecast of Temperature for July 2026

Fig.2a and Fig.2b show forecast probabilities of the maximum and minimum temperatures, respectively, for July 2026. During July 2026 (2a), above-normal monthly maximum temperatures are most likely over most parts of the country, except a few isolated areas in west-Central India which are likely to experience normal to below-normal maximum temperatures. There is no signal by the model over the white shaded areas within the land region of the country. During July 2026, above-normal monthly minimum temperatures are likely across most parts of the country(Fig.2b) except some isolated pockets of central and northeast India where normal minimum temperatures are likely. There is no signal by the model over the white shaded areas within the land region of the country.

4. SST conditions in the Pacific and the Indian Oceans

Weak El Niño conditions are currently prevailing over the equatorial Pacific Ocean. The latest forecasts from the Monsoon Mission Climate Forecast System (MMCFS) and other global climate models indicate that El Nino conditions are likely to strengthen further during the Southwest Monsoon season.

Currently, neutral Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean. The MMCFS and other global climate model forecast indicate that neutral IOD conditions are likely to continue during the Southwest Monsoon season.

5. Extended Range Forecast and Short to Medium Range Forecasting Services

IMD also regularly prepares and provides extended range forecasts (7–day averaged forecasts for the next four weeks) for rainfall, maximum temperatures, and minimum temperatures over the country. These forecasts are updated every week on Thursday. These forecasts are based on the Multi-model Ensemble Dynamical Extended Range Forecasting System, which is currently operational at IMD. The forecasts are available through IMD website https://mausam.imd.gov.in/imd_latest/contents/extendedrangeforecast.php.

The extended range forecast is followed by short to medium range forecasts issued daily based on various very high resolution Global and Regional Models. The forecasts are available through IMD website https://nwp.imd.gov.in/gfsproducts_cycle00_mausam.php.

probability rainfall forecast for 2026 July

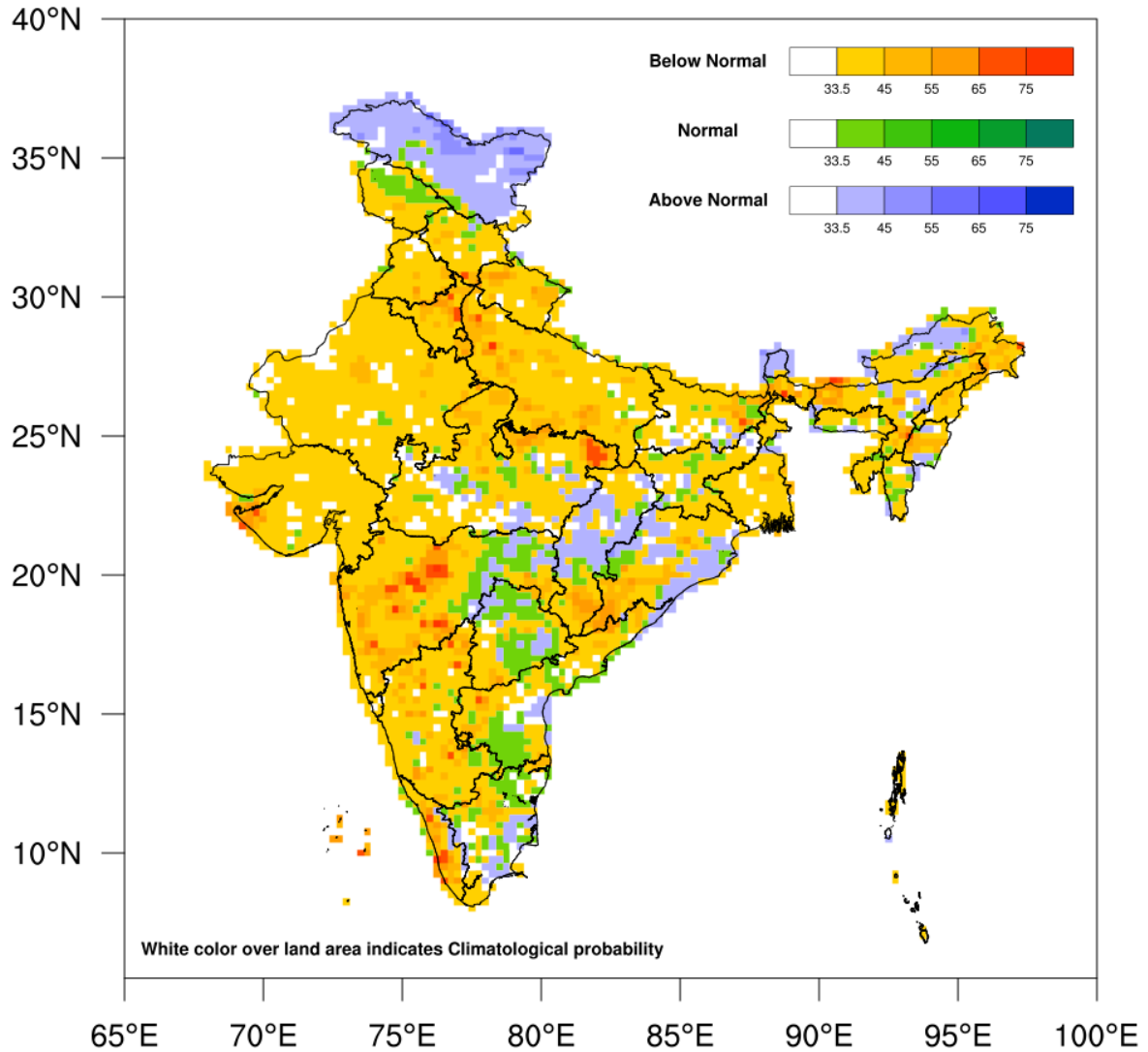


Fig.1. Probability forecast of tercile categories* (below normal, normal, and above normal) of rainfall over India during July 2026. There is no signal by the model over the white shaded areas within the land region of the country.*Tercile categories have equal climatological probabilities, of 33.33% each.

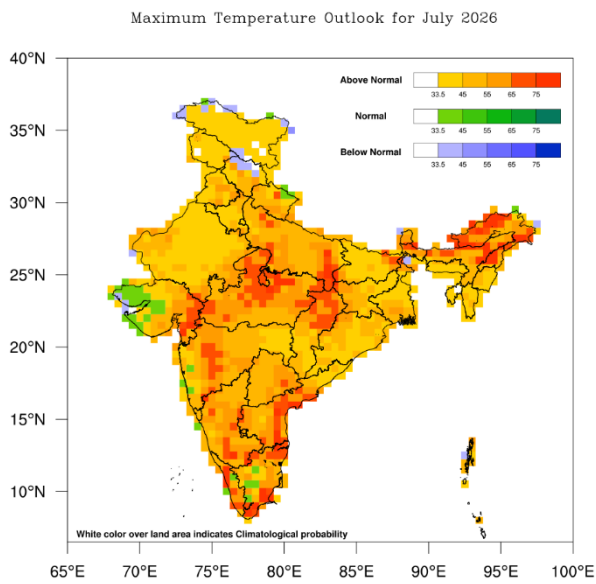


Fig.2a. Probability forecast of Maximum Temperature for July 2026.

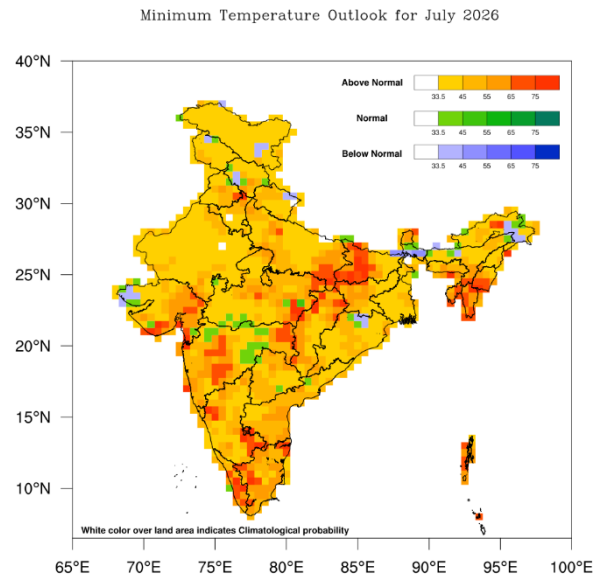


Fig.2b. Probability forecast of Minimum Temperature for July 2026.