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

भारत मौसम विज्ञान विभाग
**INDIA METEOROLOGICAL DEPARTMENT**
**Climate Research and Services (CRS)**

# Climate Summary for the month of August 2025

## 1. Monthly Rainfall Scenario August 2025

Rainfall over the country as a whole for the month of August 2025 was 268.1 mm which is 5% more than its Long Period Average (LPA) of 254.9 mm. Daily variation of the rainfall over the country as a whole during the month of August 2025 with normal based on data of 1971-2020 is presented in Fig. 1(a). The all India rainfall percentage departure from normal for August during 1901 - 2025 is presented in Fig. 1(b).

All-India rainfall during the period was 268.1 mm, ranking as the 46$^{th}$ highest since 1901 and the 7$^{th}$ highest since 2001 (Fig. 1(c)). Northwest India recorded 265.0 mm of rainfall, making it the 13$^{th}$ highest since 1901 and the highest since 2001 (Fig. 1(d)). The South Peninsula received 250.6 mm of rainfall, which ranks as the 8$^{th}$ highest since 1901 and the 3$^{rd}$ highest since 2001 (Fig. 1(e)).

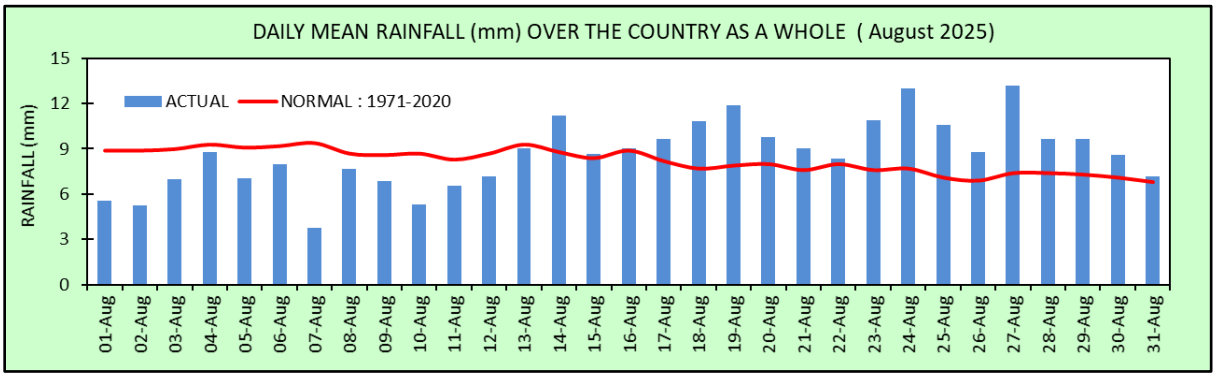



**Fig. 1(a): Daily variation of rainfall over the country as a whole during August 2025**.

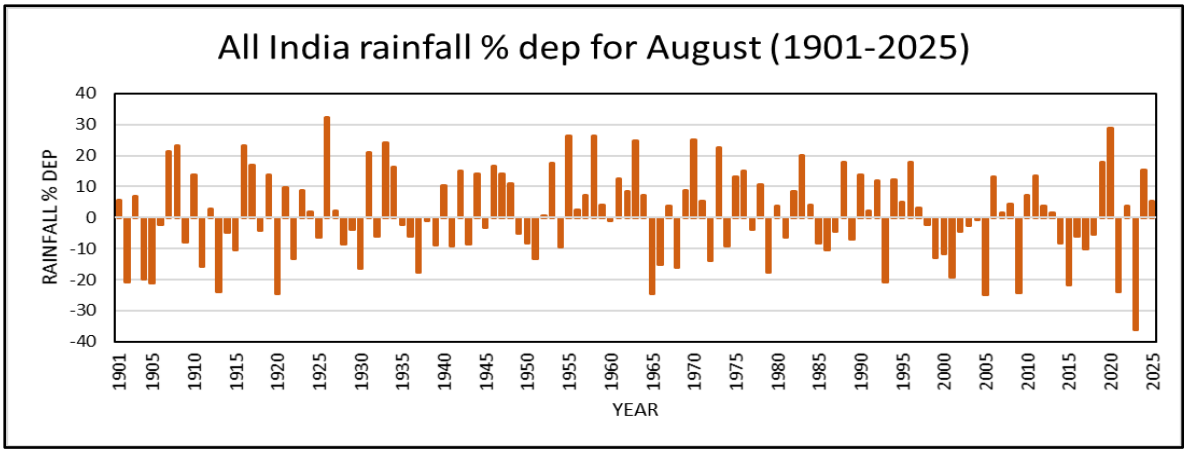



**Fig. 1(b): All India monthly rainfall percentage departure from normal (1971 – 2020) for August from 1901 – 2025.**

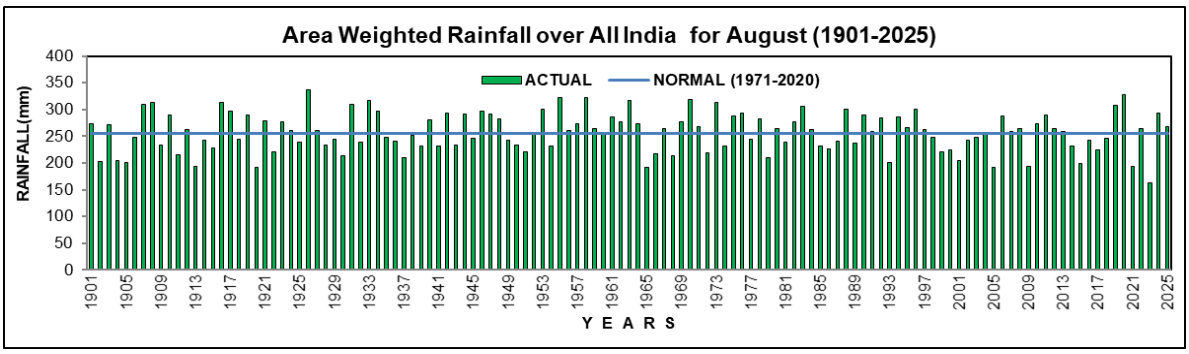



**Fig. 1(c): Time series of area weighted rainfall over All India for August (1901 – 2025).**

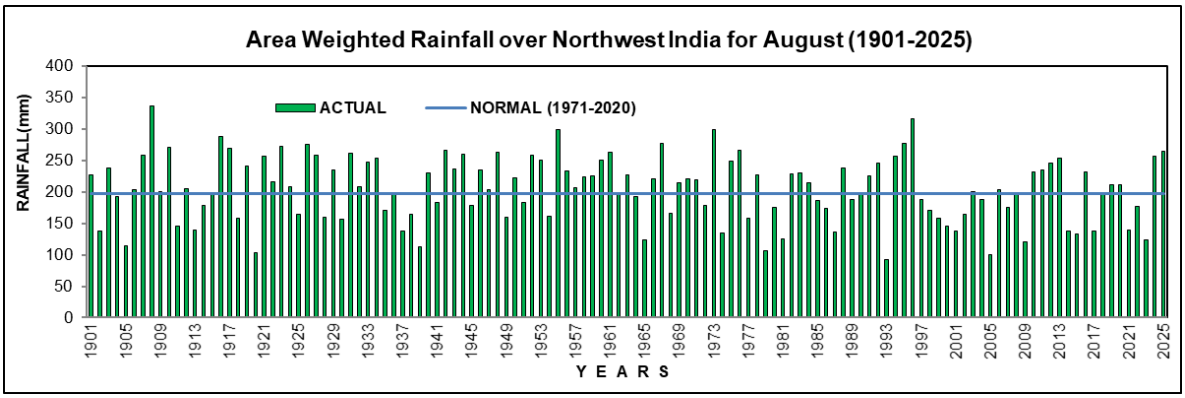



**Fig 1(d): Time series of area weighted rainfall over Northwest India for August (1901 – 2025).**

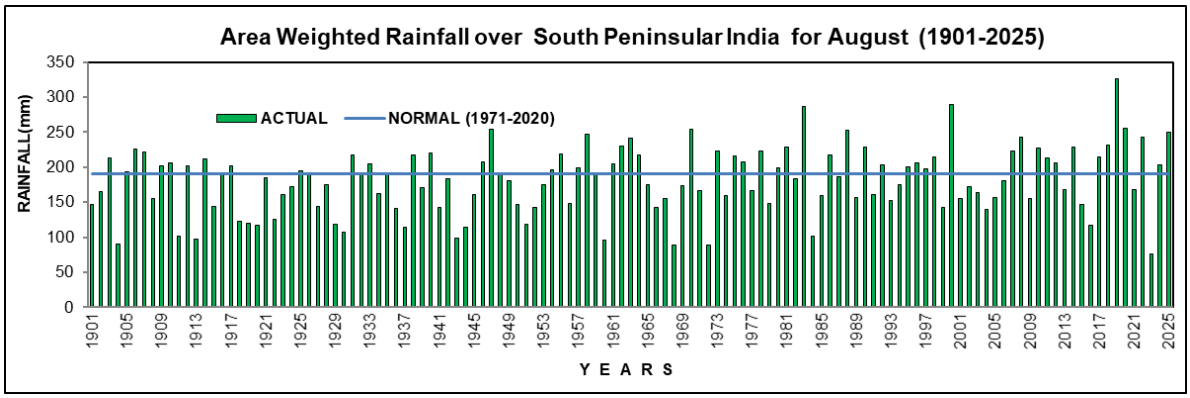



**Fig. 1(e): Time series of area weighted rainfall over South Peninsular India for August (1901 – 2025).**

The monthly rainfall for August 2025 is given in the table below:

| Regions | Actual Rainfall (mm) | Normal Rainfall (mm) | % Departure from LPA |
|---|---|---|---|
| **Country as a whole** | **268.1** | **254.9** | **5.2** |
| **Northwest India** | **265.0** | **197.1** | **34.4** |
| **Central India** | **265.0** | **308.8** | **-14.2** |
| **South Peninsula** | **250.6** | **190.7** | **31.4** |
| **East & Northeast India** | **302.3** | **332.0** | **-9.0** |

During this month, 7 sub-divisions received large excess rainfall, 7 sub-divisions received excess rainfall, 17 sub-divisions received normal rainfall and 5 sub-divisions received deficient rainfall. (Fig. 2).

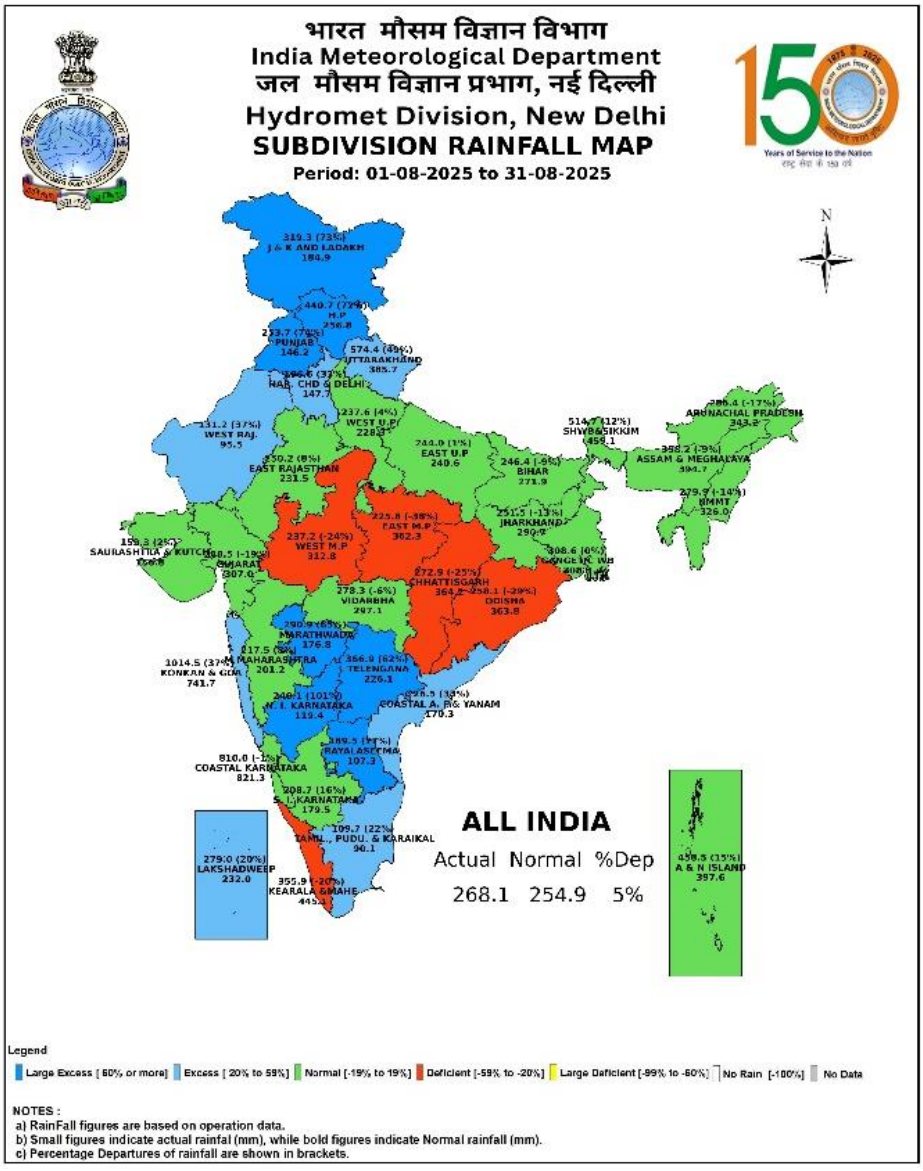



**Fig 2: Subdivision-wise rainfall distribution for August 2025.**

The observed spatial distribution of rainfall during August 2025, normal rainfall based on data of 1971 to 2020 and rainfall departures from normal during August 2025 are shown in Fig. 3.

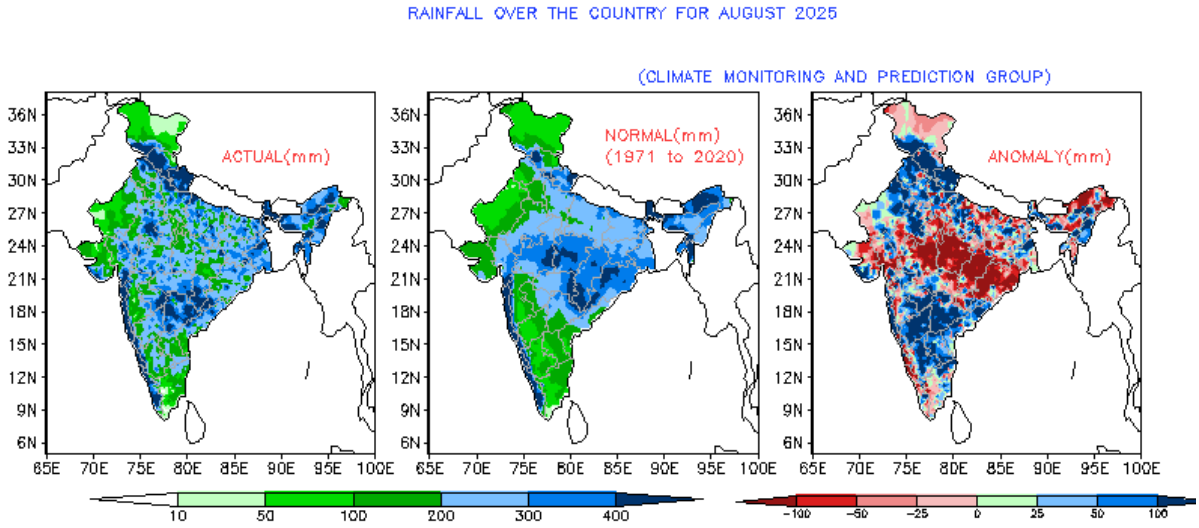


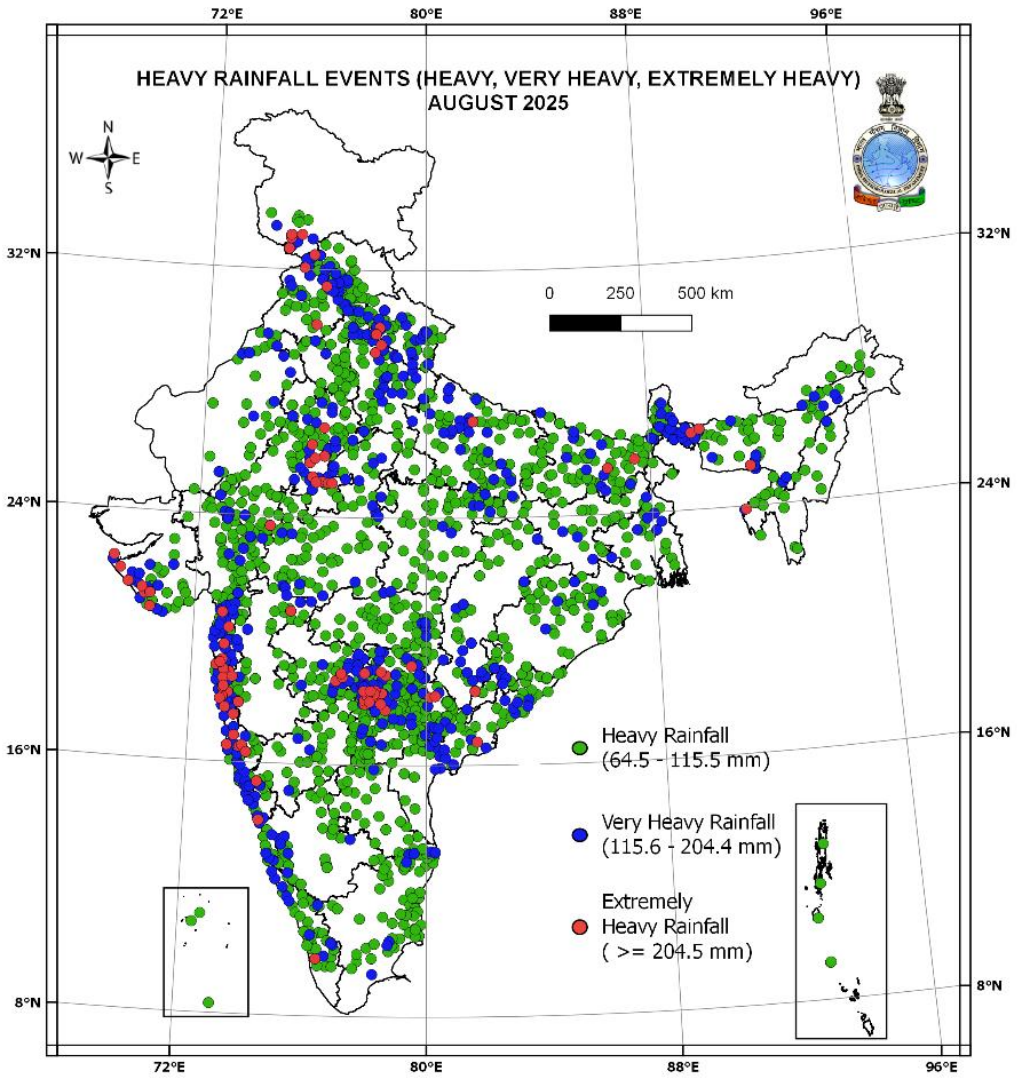

**Fig 3: Observed spatial rainfall pattern for the month August 2025 over India and their departure from normal (1971 to 2020 period).**
**Departure from normal is Anomaly = Actual Rainfall - Normal Rainfall.**

## 2. Frequency of Heavy Rainfall events

In August 2025, Heavy Rainfall events (64.5–115.5 mm) were observed across nearly all meteorological subdivisions, indicating widespread rainfall activity during the Month. Extremely Heavy Rainfall events (>204.4 mm) were recorded across several regions, including Assam & Meghalaya, Bihar, Chhattisgarh, Coastal Andhra Pradesh, Coastal Karnataka, East Rajasthan, Uttar Pradesh, Gujarat, Himachal Pradesh, Jammu & Kashmir & Ladakh, Kerala & Mahe, Konkan & Goa, Madhya Maharashtra, Marathwada, Nagaland, Manipur, Mizoram & Tripura, Punjab, Sub-Himalayan West Bengal & Sikkim, Telangana, and Uttarakhand. Very Heavy Rainfall (115.6–204.4 mm) was reported over Arunachal Pradesh, East Madhya Pradesh, Gangetic West Bengal, Haryana, Chandigarh & Delhi, Jharkhand, North Interior Karnataka, Odisha, Rayalaseema, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, Vidarbha, West Madhya Pradesh, and West Rajasthan.

The location of occurrences of heavy, very heavy rainfall and extremely heavy events is shown in the Fig. 4.

Out of total 1824 occasions, 93 were extremely heavy rainfall (>204.4 mm), 453 were very heavy rainfall (115.6 to 204.4 mm) and 1278 were heavy rainfall (64.5 to 115.5 mm) categories during this month.




**(Only highest category of rainfall event considered for a station)**

**Fig. 4: The location of occurrences of heavy, very heavy and extremely heavy rainfall events in the month of August 2025.**

There were many stations received record rainfall (24 hours). The table below shows stations that received 24-hour record rainfall and their previous record.

| | 24 Hours Record Rainfall | | | | |
|---|---|---|---|---|---|
| **STATION NAME** | **STATE (UNION TERRITORY)** | **NEW RECORD (mm)#** | **DATE (AUG 2025)** | **PREVIOUS RECORD (mm)** | **DATE** |
| BAPATLA | ANDHRA PRADESH | 135.0 | 13-08-2025 | 132.5 | 23-08-2000 |
| BIJAPUR | KARNATAKA | 151.2 | 06-08-2025 | 121.2 | 31-08-1954 |
| GANNAVARAM | ANDHRA PRADESH | 129.6 | 14-08-2025 | 122.7 | 31-08-2024 |
| JAMMU | JAMMU KASHMIR & LADAKH | 380.0 | 27-08-2025 | 282.2 | 16-08-2006 |
| KARAIKAL | TAMIL NADU | 110.1 | 11-08-2025 | 92.2 | 31-08-2010 |
| MANALI | HIMACHAL PRADESH | 102.0 | 26-08-2025 | 88.3 | 14-08-1970 |
| NANDIGAMA | ANDHRA PRADESH | 191.4 | 14-08-2025 | 136.5 | 09-08-2008 |

# based on real-time available data

## 3. Chief Synoptic weather features observed during August 2025.

**Low pressure systems:** In August 2025, four low-pressure systems developed—slightly below the climatological normal of 5.38. These included one depression over the Bay of Bengal that formed during 18–19 August, a well-marked low-pressure area from 26–29 August, and two low-pressure areas that developed during 13–17 August and 22–25 August. The total number of low-pressure system (LPS) days was 15, compared to the normal of approximately 16.3 days. The track of the depression is shown in Fig. 5.


**Fig 5: Observed track of the depression formed during August 2025.**

**Western Disturbance:** During August 2025, five Western Disturbances affected the country in the periods: 28 July–5 August, 5–10 August, 10–13 August, 18–22 August, and 24–31 August.

## 4. Characteristics of Temperatures for the month of August 2025

The average maximum, average minimum and mean temperature for the country as a whole during August 2025 were 31.07ºC, 23.94ºC and 27.51ºC respectively, against the normal of 31.01ºC, 23.68ºC and 27.34ºC based on data of 1991-2020. Thus, the average minimum and mean temperature were above normal with departure from normal of 0.27ºC, 0.16ºC respectively except the average maximum temperature was near normal/normal by 0.06ºC for the country as a whole. The daily variation of maximum and minimum temperature departure from normal over the country as a whole for August 2025 is shown in the Fig. 6(a) and (b) respectively.

The stations recorded the highest maximum and lowest minimum temperature for August 2025 is given in table below. A list of stations is given below with their previous record and date.

| Highest Maximum | | | | | |
|---|---|---|---|---|---|
| **STATION NAME** | **STATE (UNION TERRITORY)** | **NEW RECORD ($^0$C) #** | **DATE (AUGUST 2025)** | **PREVIOUS RECORD ($^0$C)** | **DATE** |
| JHARSUGUDA | ODISHA | 36.5 | 12-08-2025 | 36.2 | 03-08-1972 |
| KORAPUT | ODISHA | 35.5 | 30-08-2025 | 31.6 | 30-08-2016 |
| PALAYAMKOTTAI | TAMIL NADU | 39.5 @ | 25-08-2025 | 39.5 | 13-08-1976 |
| **Lowest Minimum** | | | | | |
| **STATION NAME** | **STATE (UNION TERRITORY)** | **NEW RECORD ($^0$C) #** | **DATE (AUGUST 2025)** | **PREVIOUS RECORD ($^0$C)** | **DATE** |
| CHINTAMANI | KARNATAKA | 17.3 | 19-08-2025 | 18.2 | 27-08-2008 |
| DURG | CHATTISGARH | 17.8 | 27-08-2025 | 19 | 03-08-2024 |
| GADAG | KARNATAKA | 16.2 | 19-08-2025 | 18.3 | 15-08-1965 |
| KARUR PARAMATHI | TAMIL NADU | 18.5 | 07-08-2025 | 19.5 | 15-08-2024 |
| NALGONDA | TELANGANA | 20.4 | 28-08-2025 | 20.8 | 01-08-2009 |
| TEHRI | UTTARAKHAND | 14 | 26-08-2025 | 14.6 | 21-08-2013 |

@ equals previous record # based on real-time available data

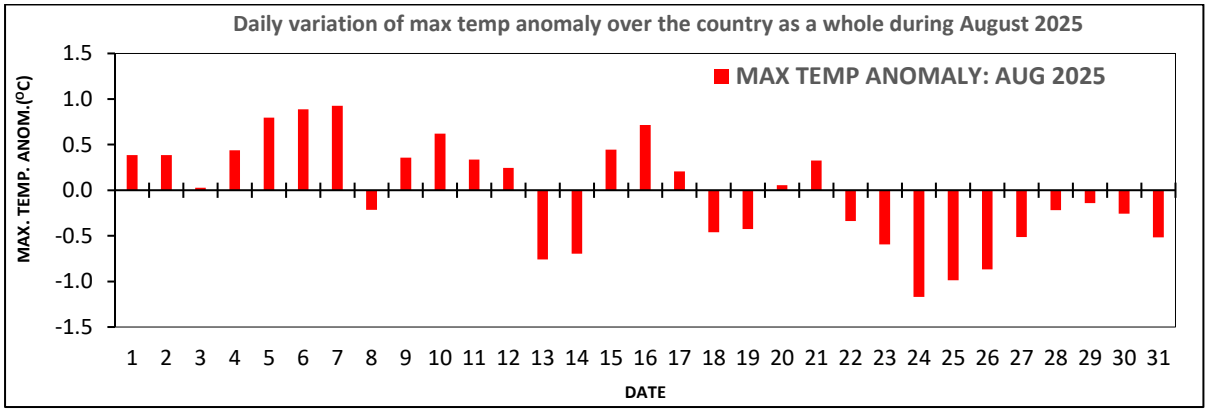



**Fig 6(a): Daily variation of maximum temperature anomaly (departure from normal) over the country as a whole for August 2025**

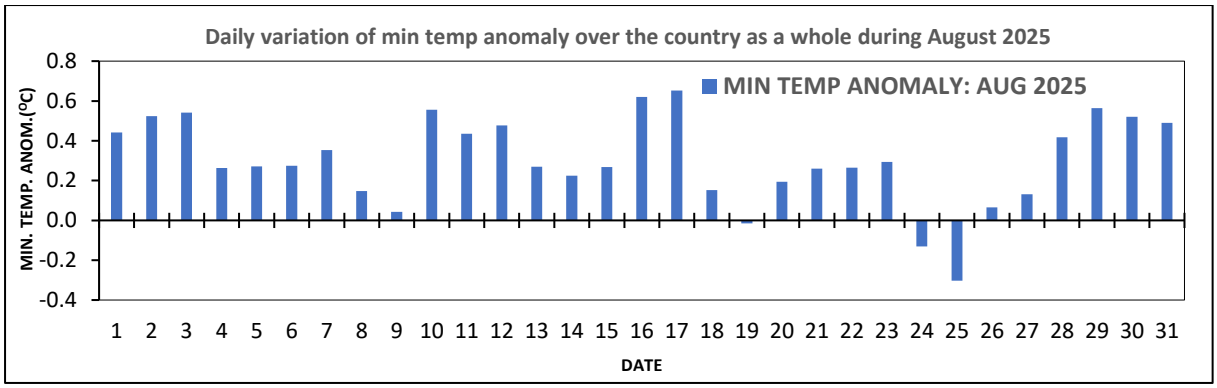



**Fig 6(b): Daily variation of minimum temperature anomaly (departure from normal) over the country as a whole for August 2025**

Fig.7 shows the time series of monthly average maximum, average minimum and mean temperature over the country as a whole for the month of August 1901-2025. Over the country during August 2025, the average maximum temperature was the 22nd highest and average minimum temperature was the 7th highest since 1901. The mean temperature was the 15th highest since 1901.

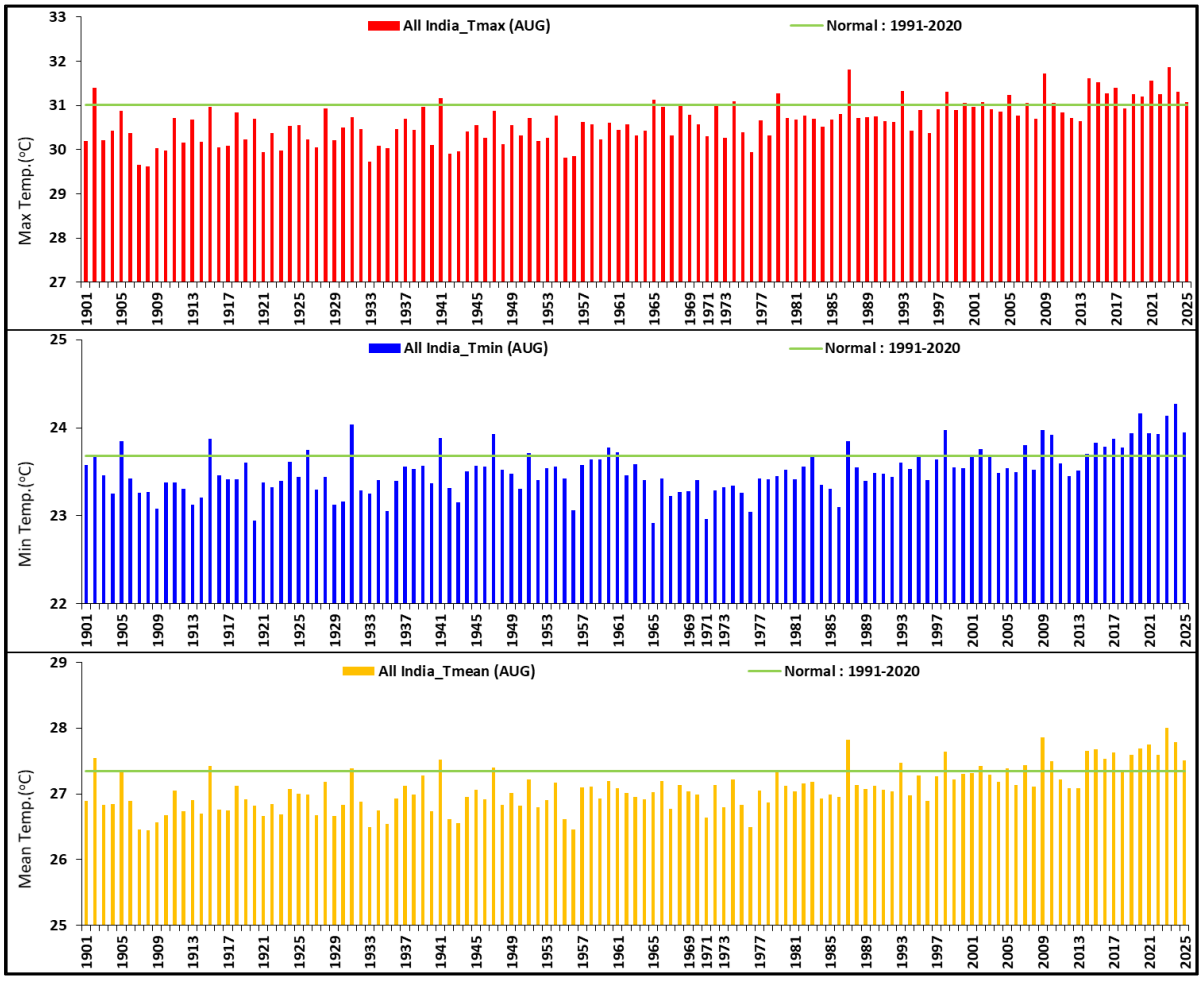



**Fig 7: Time series of monthly average maximum, average minimum and mean temperature over the country as a whole for the month of August 1901-2025**

Fig.8 shows the time series of average minimum temperature over Central India

for the month of August 1901-2025. Over Central India during August 2025, the average minimum temperature was the 5th highest (24.07ºC with departure from normal of 0.36ºC) after the years 2024(24.26ºC), 2009(24.21ºC), 1998(24.18ºC) and 1958(24.10ºC) since 1901.

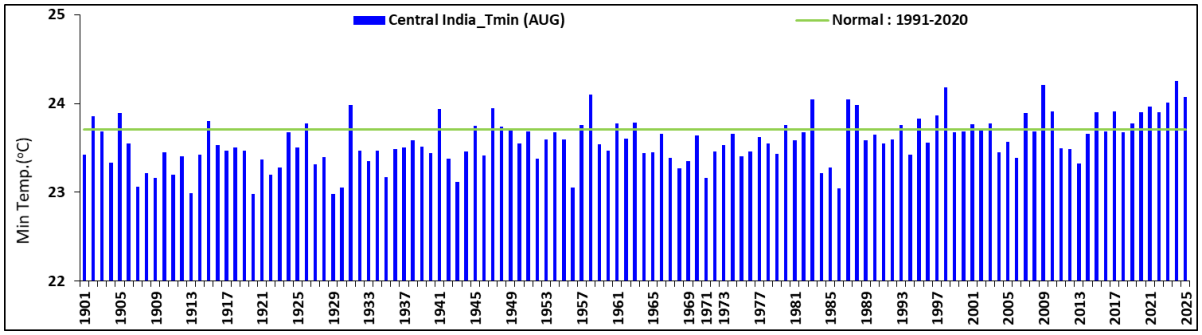



**Fig 8: Time series of monthly average minimum temperature over Central India for the month of August 1901-2025**

Fig. 9 shows the time series of average minimum temperature over Northwest India for the month of August 1901-2025. Over Northwest India during August 2025, the average minimum temperature was the 8th highest (23.822ºC with departure from normal of 0.459ºC) since 1901.

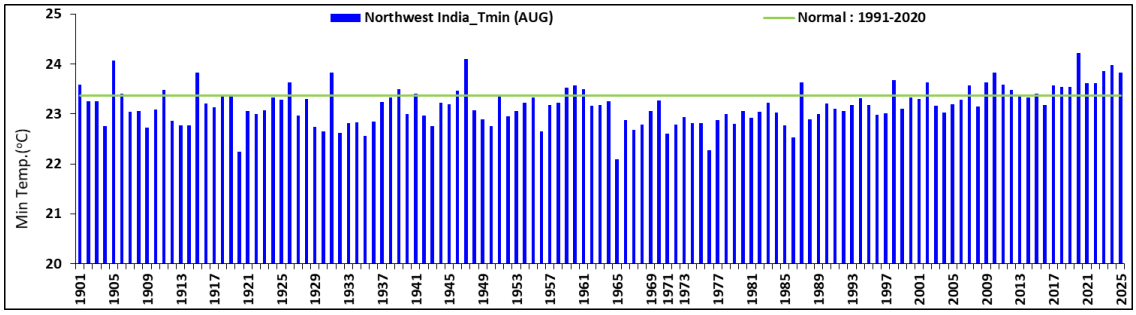



**Fig. 9: Time series of monthly average minimum temperature over Northwest India for the month of August 1901-2025**

The temperatures during August 2025 for all India and homogeneous regions with its ranks since 1901 are given below:

| AUGUST 2025 | | Max Temp (°C) | Min Temp (°C) | Mean Temp (°C) |
|---|---|---|---|---|
| ALL INDIA | **ACTUAL** | **31.07** | **23.94** | **27.51** |
| | NORMAL | 31.01 | 23.68 | 27.34 |
| | ANOMALY | 0.06 | 0.27 | 0.16 |
| | **Rank since 1901** | **22** | **7** | **15** |
| NORTHWEST INDIA | **ACTUAL** | **31.46** | **23.82** | **27.64** |
| | NORMAL | 31.68 | 23.36 | 27.52 |
| | ANOMALY | -0.22 | 0.46 | 0.12 |
| | **Rank since 1901** | **51** | **8** | **25** |
| EAST & NORTHEAST INDIA | **ACTUAL** | **31.11** | **24.48** | **27.80** |
| | NORMAL | 31.06 | 24.45 | 27.76 |
| | ANOMALY | 0.05 | 0.03 | 0.040 |
| | **Rank since 1901** | **21** | **34** | **19** |
| CENTRAL INDIA | **ACTUAL** | **30.93** | **24.07** | **27.50** |
| | NORMAL | 30.33 | 23.71 | 27.02 |
| | ANOMALY | 0.60 | 0.36 | 0.48 |
| | **Rank since 1901** | **12** | **5** | **9** |
| SOUTH PENINSULAR INDIA | **ACTUAL** | **30.71** | **23.49** | **27.10** |
| | NORMAL | 30.99 | 23.41 | 27.20 |
| | ANOMALY | -0.28 | 0.08 | -0.10 |
| | **Rank since 1901** | **61** | **18** | **42** |

. Note: Values are rounded off to the nearest two decimals

The five highest temperature records with corresponding top ranks since 1901 along with year of occurrence for Central India (TMin) are given in the table below:

| Central India (August 2025) | | | | |
|---|---|---|---|---|
| Year | **TMin** | Normal | Anomaly | Rank |
| 2024 | 24.26 | 23.71 | 0.55 | 1 |
| 2009 | 24.21 | | 0.50 | 2 |
| 1998 | 24.18 | | 0.47 | 3 |
| 1958 | 24.10 | | 0.39 | 4 |
| **2025** | **24.07** | | **0.36** | **5** |

The observed spatial temperature pattern of monthly average maximum, average minimum and mean temperature over India and their departures from normal (1991 to 2020 period) for the month of August 2025 is given in Fig.10.

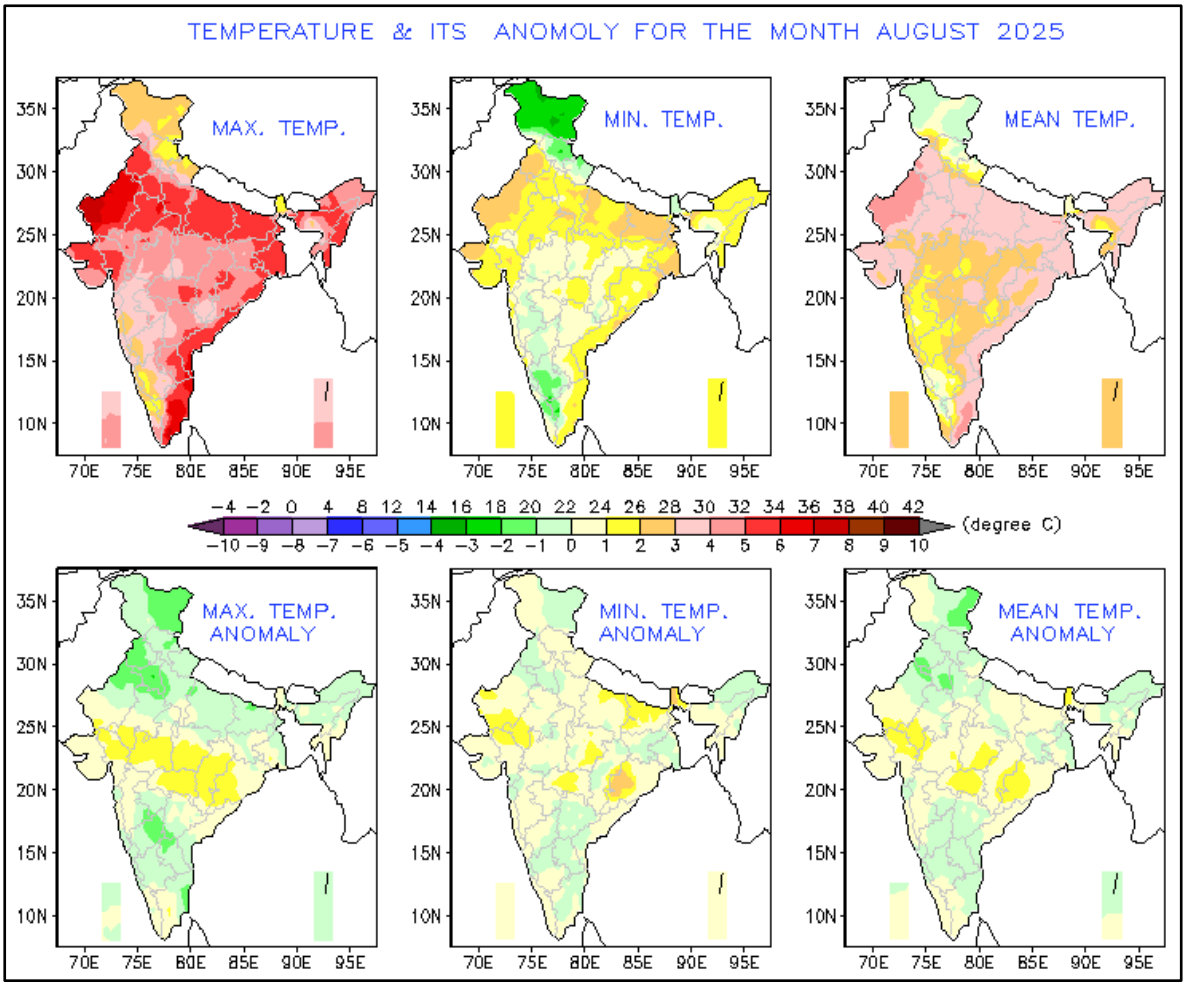



**Fig. 10: Observed spatial temperature pattern of monthly average maximum, average minimum, and mean temperature over India (top three from left to right) and their departure from normal (1991 to 2020 period) for August 2025 (lower three from left to right)**

## 5. Significant Weather Events

During August, media reports and situation reports of the State Disaster Management Authority (SDMA)/National Disaster Management Authority (NDMA) indicated that over 280 people lost their lives, more than 200 were injured, and over 290 were reported missing due to the aforementioned hazards. Additionally, more than 700 livestock perished, and significant damage to property and infrastructure was reported. Event-wise details of casualties are provided below. However, the actual figures on casualties and damages may be available with the respective State Governments.

| Event | Number of human deaths |
|---|---|
| **Heavy Rains, Floods and Landslides:** | **227** (Uttar Pradesh, Maharashtra, Uttarakhand, Chhattisgarh, Jharkhand, Himachal Pradesh, Telangana, Karnataka, Rajasthan, Andhra Pradesh, Assam, Odisha, Jammu and Kashmir, Delhi) |
| **Lightning associated with Thunderstorm:** | **54** (Jharkhand, Uttar Pradesh, Chhattisgarh, Odisha, Rajasthan, Bihar, Madhya Pradesh, Tamil Nadu, Gujarat, Uttarakhand) |

In addition to this extreme weather events are impacted in many districts in West Godavari (Andhra Pradesh); Khagaria, Purnea (Bihar); Sukma (Chhattisgarh); Devbhoomi Dwarka, Gir somnath, Junagadh, Navsari, Porbandar, Valsad (Gujarat); Una (Himachal Pradesh); Jammu, Ramban, Reasi, Udhampur (Jammu and Kashmir); Uttara Kannada (Karnataka); Ernakulam (Kerala); Jalgaon, Kolhapur, Latur, Mumbai Suburban, Nanded, Palghar, Pune, Raigad, Ratnagiri, Satara, Sindhudurg, Thane (Maharashtra); East Khasi Hills (Meghalaya); Gurdaspur, Pathankot, Sangrur (Punjab); Banswara, Baran, Bundi, Dausa, Kota, Sawai Madhopur, Tonk (Rajasthan); Kamareddy, Karimnagar, Mancherial, Medak, Mulugu, Nirmal, Siddipet (Telangana); West Tripura (Tripura); Hardwar, Tehri Garhwal (Uttarakhand); Bijnor, Gonda (Uttar Pradesh); Jalpaiguri (West Bengal).

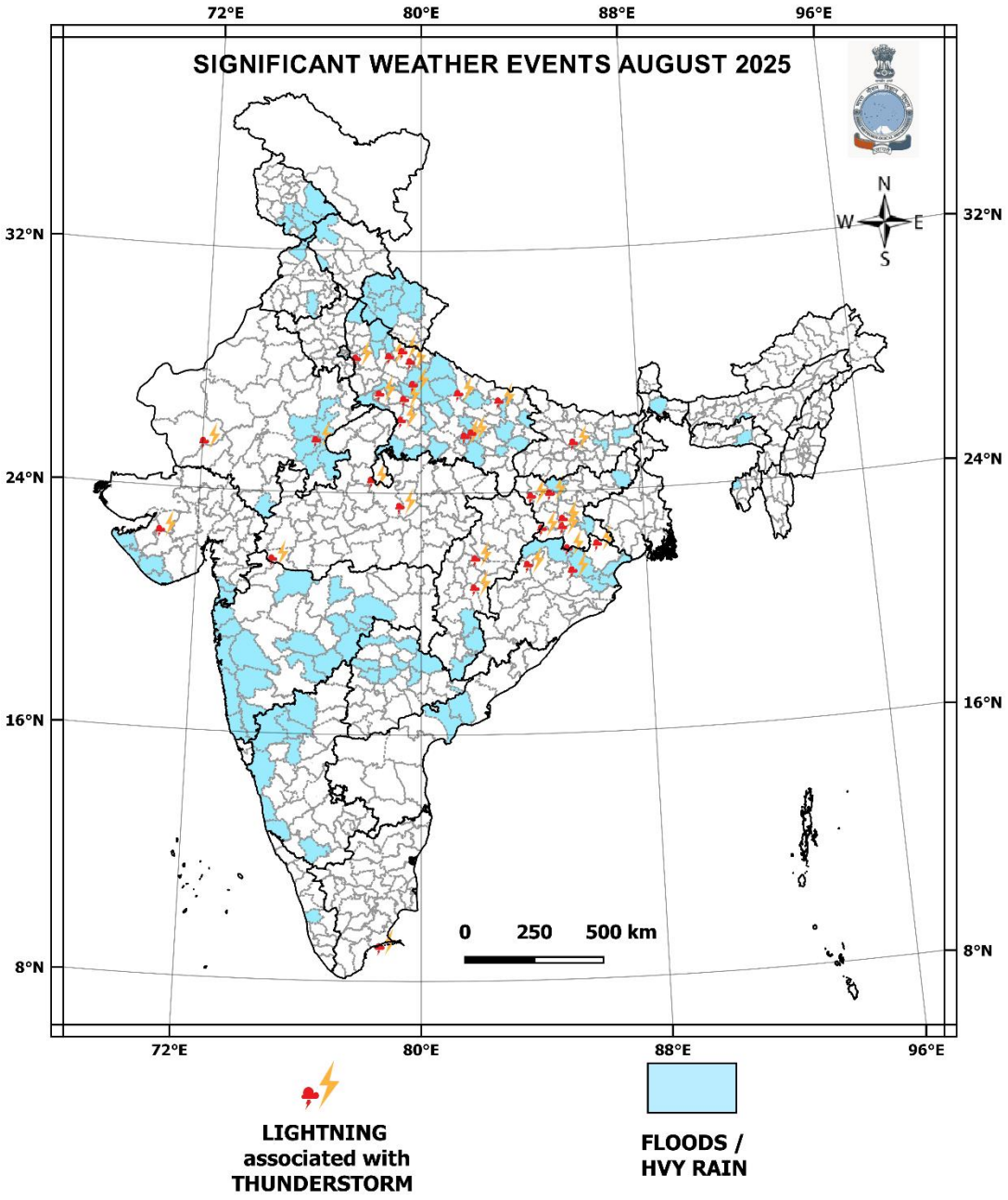



**Fig. 11: Causalities and damages due to significant weather events during August 2025 (Based on real time media reports and other state government agencies)**