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

Climate Summary for the month of June 2025

1. Monthly Rainfall Scenario (01 to 30 June 2025)

Rainfall over the country as a whole for the month of June 2025 was 180 mm which is 9% more than its Long Period Average (LPA) value 165.3 mm. Daily variation of the rainfall over the country as a whole during the month of June 2025 with normal based on data of 1971-2020 is presented in Fig 1 (a). The all India rainfall percentage departure from normal for June during 1901-2025 is presented in Fig 1(b). Rainfall over All India (180 mm) was the 41st highest since 1901 and the 9th highest since 2001, as presented in Figure 1(c). Rainfall over East & Northeast India (272.9 mm) was the 17th lowest since 1901 and the 8th lowest since 2001, as presented in Fig. 1(d).

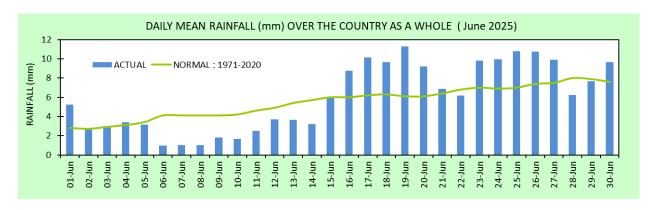


Fig.1 (a): Daily variation of rainfall over the country as a whole during June 2025.

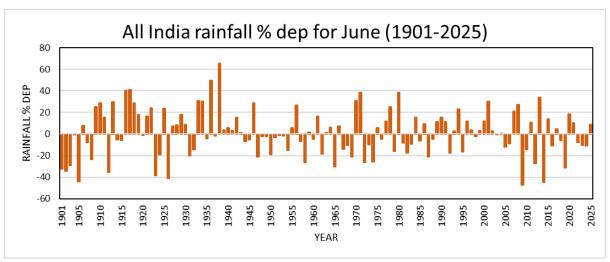


Fig 1(b). All India monthly rainfall percentage departure from normal (1971-2020) for June from 1901-2025.

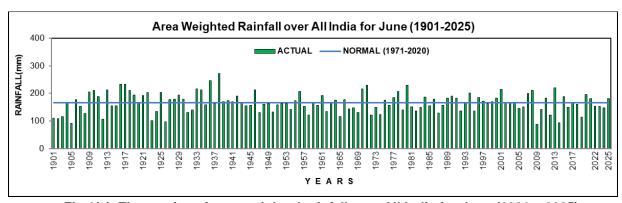


Fig 1(c). Time series of area weighted rainfall over All India for June (1901 – 2025).

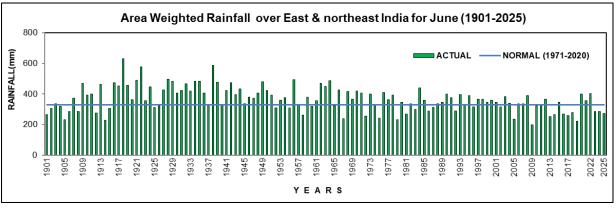


Fig 1(d). Time series of area weighted rainfall over East & Northeast India for June (1901 – 2025).

The monthly rainfall for All India and Homogeneous regions for June 2025 is given in the table below:

Regions	Actual	Normal	% Departure
	Rainfall	Rainfall	from
	(mm)	(mm)	LPA
Country as a whole	180.0	165.3	8.9
Northwest India	111.0	78.1	42.2
Central India	212.6	170.3	24.8
South Peninsula	156.7	161.0	-2.7
East & Northeast India	272.9	328.4	-16.9

During this month, 7 subdivisions received large excess rainfall, 8 subdivisions received excess rainfall, 11 subdivisions received normal rainfall, and 10 subdivisions received deficient rainfall. (Fig 2).

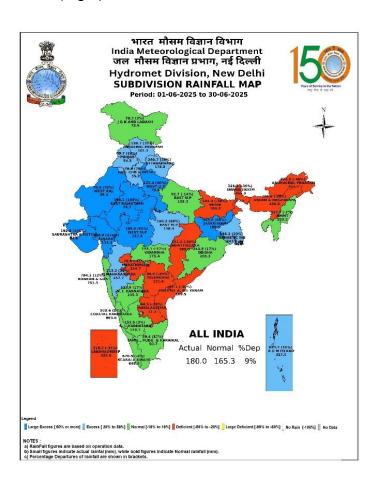


Fig 2: Subdivision-wise rainfall distribution for June 2025.

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

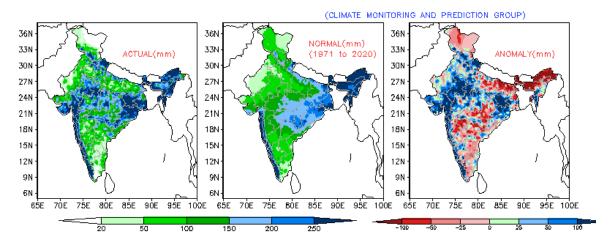


Fig 3: Observed spatial Rainfall pattern for the month June 2025 over India and their departure from normal (1971 to 2020 period).

Departure from normal is Anomaly = Actual rainfall - Normal rainfall.

2. Frequency of Heavy Rainfall Events

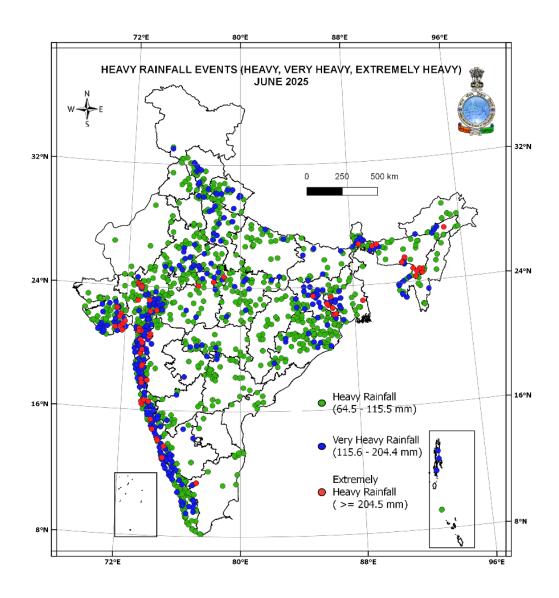
June 2025 witnessed Extremely heavy rainfall (> 204.4 mm) over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Gangetic West Bengal, Jharakhand, Gujarat state, Konkan & Goa, Madhya Maharashtra, Coastal Karnataka, Madhya Pradesh state and Tamilnadu, Puducherry & Karaikal, very heavy (115.6 – 204.4 mm) rainfall over Andaman & Nicobar islands, Arunachal Pradesh, Bihar, Chhattisgarh, East Rajasthan, Uttar Pradesh state, Haryana, Chandigarh & Delhi, Himachal Pradesh, Jammu & Kashmir & Ladakh, Kerala & Mahe, Marathawada, North and South Interior Karnataka, Telangana, Uttarakhand and Vidarbha, heavy rainfall events (64.5 – 115.5 mm) were observed over majority of the sub divisions.

The location of occurrences of heavy, very heavy rainfall and extremely heavy rainfall events is shown in the Figure 4. Out of total 1143 occasions, 67 were extremely heavy rainfall (>204.4 mm), 313 were very heavy rainfall (115.6 to 204.4 mm) and 763 were heavy rainfall (64.5 to 115.5 mm) categories during this month.

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				
	NEW	DATE	PREVIOUS	
STATION NAME	RECORD	(JUNE	RECORD	DATE
	(mm)#	2025)	(mm)	
BHILWARA	175	22-06-2025	81	28-06-2019
CHURU	85.1	30-06-2025	81.9	24-06-1988
MAHUVA	225.2	17-06-2025	179.6	30-06-1959
PURULIA	210	20-06-2025	147.6	23-06-1996
SOLAN (NAUNI)	85.6	29-06-2025	85.3	12-06-1983
TIKAMGARH	215	22-06-2025	136	30-06-2011
WASHIM	122.4	26-06-2025	121	15-06-2013

based on real-time available data



(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 June 2025.

3. Chief Synoptic weather features observed during June 2025

Onset of Southwest Monsoon: Southwest Monsoon set in over Kerala on 24th May against the normal date of 1st June. The earliest onset in 17 years after 2009 when it was on 23rd May. Followed rapid advance till 29 May and covered south India and NE India. Further progress started on from 16th June. With rapid advance, it covered most parts of the country except some parts of Northwest Rajasthan, West UP, South Punjab and south Haryana, Delhi by 26 June. SW Monsoon covered the entire country on 29th June 2025, 9 days ahead of its normal day 8th July. (Figure 5)

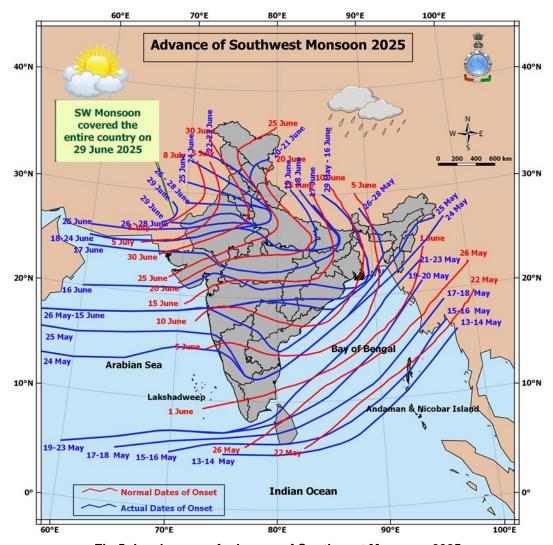


Fig 5: Isochrones of advance of Southwest Monsoon 2025

Western Disturbance: There were four Western Disturbances (WDs) observed over Indian region during 29 May to 9 June, 6-9 June, 8-11 and 11-19 June.

Low pressure systems: There were five low-pressure systems (LPS) formed during June. Three over the Head Bay of Bengal (17 to 23 June, 26 to 27 June and 29 June onwards). Out of these, one system (17th to 23rd June) intensified into a well-marked low-pressure system. Two systems formed over the Arabian Sea (17 to 19 June and 28 to 29 June). These low pressure systems helps to get good amount of rainfall over most part of country especially Northwest India, Central India and west coast of Peninsular India.

Heat wave: During June less number of heatwave days observed. Heat wave observed over some sub-divisions of northwest and central is given in Figure 6.

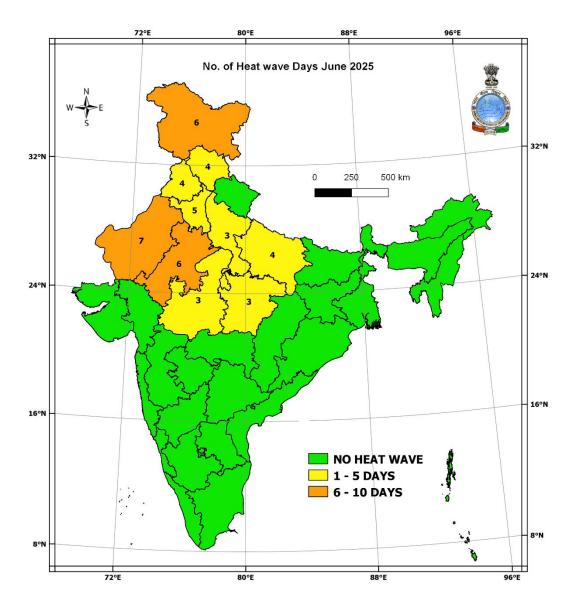


Fig 6: Subdivision-wise heat wave days during June 2025.

4. Characteristics of Temperatures for the month of June 2025

The average maximum, average minimum and mean temperature for the country as a whole during June 2025 were 34.01°C, 24.88°C and 29.45°C respectively, against the normal of 34.60°C, 24.66°C and 29.63°C based on data of 1991-2020. Thus, the, average minimum and mean temperature were above normal to normal with departure from normal of 0.22°C, -0.18°C respectively, except the average maximum temperature was below normal by -0.59°C for the country as a whole. The daily variation of maximum and minimum temperature departure from normal over the country as a whole for June 2025 is shown in the figure 7(a) and (b) respectively.

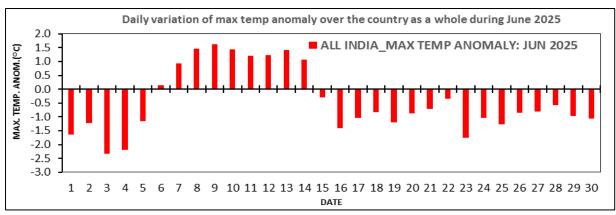


Fig 7(a): Daily variation of maximum temperature anomaly (departure from normal) over the country as a whole for June 2025

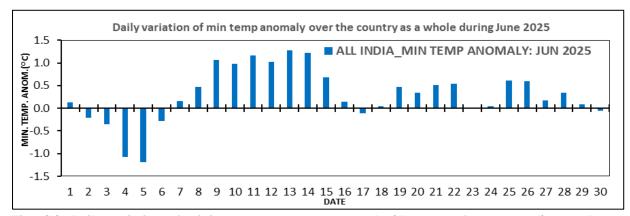


Fig 7(b): Daily variation of minimum temperature anomaly (departure from normal) over the country as a whole for June 2025

Figure 8 shows the time series of monthly average maximum, average minimum and mean temperature over the country as a whole for the month of June 1901-2025. Over the country during June, the average maximum temperature was the 31st lowest and average minimum temperature was the 86th lowest since 1901. The mean temperature was the 54th lowest since 1901.

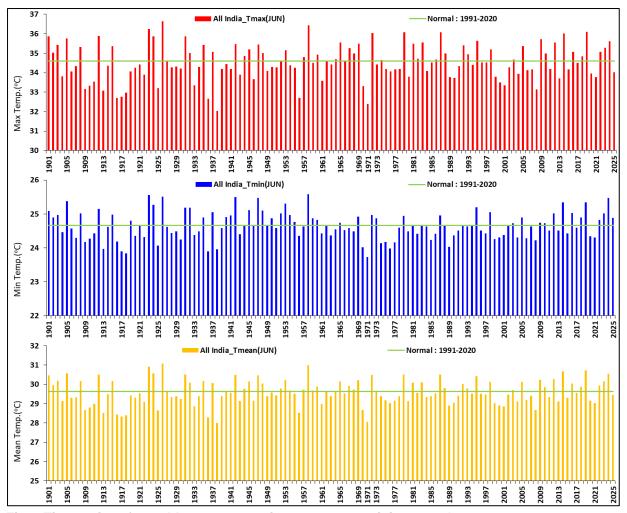


Fig 8: Time series of monthly average maximum, average minimum and mean temperature over the country as a whole for the month of June 1901-2025

Figure 9 shows the time series of average maximum, average minimum and mean temperature over East & Northeast India for the month of June 1901-2025. Over East & Northeast India during June, the average maximum temperature was 32.77°C with departure from normal of 0.83°C (19th highest since 1901). The average minimum temperature was the 7th highest (24.90°C with departure from normal of 0.71°C) and mean temperature was the 9th highest (28.84°C with departure from normal of 0.77°C) since 1901.

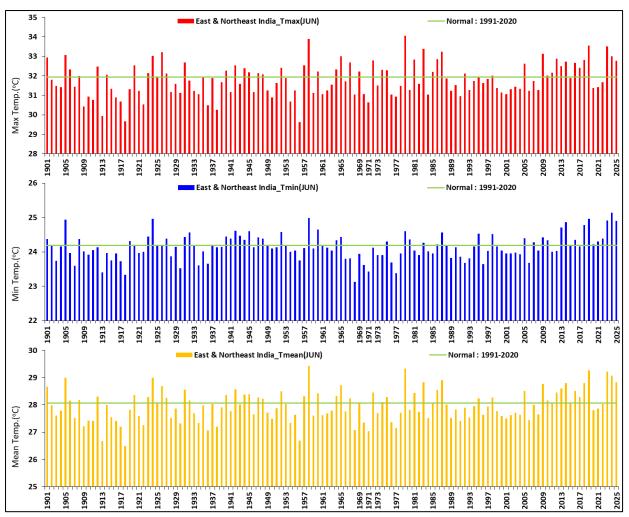


Fig 9: Time series of monthly average maximum, average minimum and mean temperature over East & Northeast India for the month of June 1901-2025

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

JUNE 2025		Max Temp (°C)	Min Temp (°C)	Mean Temp (°C)
ALL INDIA	ACTUAL	34.01	24.88	29.45
	NORMAL	34.60	24.66	29.63
ALL INDIA	ANOMALY	-0.59	0.22	-0.18
	Rank since 1901	94	39	71
	ACTUAL	35.62	24.77	30.19
NORTHWEST INDIA	NORMAL	36.06	24.10	30.08
NONTHWEST INDIA	ANOMALY	-0.44	0.67	0.12
	Rank since 1901	85	21	62
EAST & NORTHEAST INDIA	ACTUAL	32.77	24.90	28.84
	NORMAL	31.94	24.19	28.06
	ANOMALY	0.83	0.71	0.77
	Rank since 1901	19	7	9
CENTRAL INDIA	ACTUAL	33.94	25.22	29.58
	NORMAL	35.69	25.63	30.66
	ANOMALY	-1.75	-0.42	-1.08
	Rank since 1901	110	95	107
SOUTH PENNINSULAR INDIA	ACTUAL	32.99	24.57	28.78
	NORMAL	33.40	24.49	28.94
	ANOMALY	-0.40	0.07	-0.16
	Rank since 1901	72	34	60

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

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 June 2025 is given in Figure 10.

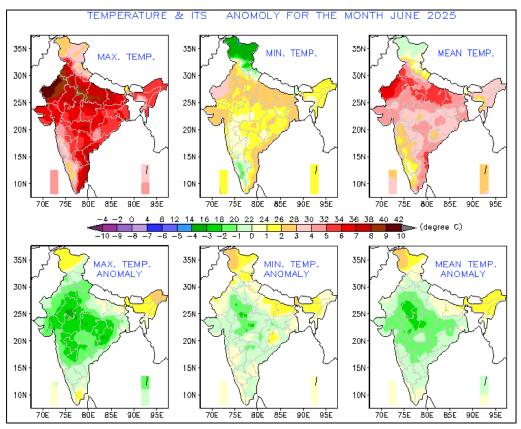


Fig 10: Observed spatial temperature pattern of monthly average maximum, average minimum, and mean temperature over India (top three from left to right) and their departure from normal (1991 to 2020 period) for June 2025 (lower three from left to right)

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

Highest Maximum				
STATION NAME	NEW RECORD (°C) #	DATE (JUNE 2025)	PREVIOUS RECORD (°C)	DATE
GOALPARA	37.0 @	13-06-2025	37.0	27-06-1961
ITANAGAR	39.7	12-06-2025	39.5	26-06-2015
JORHAT	38.2	12-06-2025	37.3	27-06-1961
MOHANBARI	38.7	12-06-2025	38.2	26-06-2015
PASSIGHAT	38.8	13-06-2025	38.6	21-06-1996
SOHRA (CHERRAPUNJEE)	30.5	13-06-2025	29.9	09-06-2023
TADONG	32.7	13-06-2025	32.5	09-06-2023
Lowest Minimum				
STATION NAME	NEW RECORD (°C) #	DATE (JUNE 2025)	PREVIOUS RECORD (°C)	DATE

ALIBAG	19.9	24-06-2025	20.5	08-06-2020
ALWAR	19.5	05-06-2025	20.7	08-06-1974
MATHERAN	18.0 @	29-06-2025	18.0	05-06-1976
PACHMARHI	14.8	24-06-2025	15.2	11-06-1992
PILANI	17.4 @	05-06-2025	17.4	06-06-1996
SHIMLA (A)	11.8	04-06-2025	12.2	02-06-2011
TEHRI	9.4	04-06-2025	10.2	17-06-2013

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

5. Significant Weather Events

During June, more than 130 people reportedly died, more than 100 people injured, more than 10 persons missing and about 9000 livestock perished and damage reported because of the extreme weather events, as per the media report and situation reports of Disaster Management Authority. The details of event-wises casualties are given below. However, the actual data on casualties and damages may be available to concerned state governments.

Event	Number of human deaths
Lightning associated with Thunderstorm	78 (Uttar Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Telangana, Rajasthan, Odisha, Uttarakhand, Bihar, Himachal Pradesh, Karnataka, Kerala)
Heavy Rains, Floods and Landslides	55 (Assam, Gujarat, Kerala, Sikkim, Himachal Pradesh, Uttarakhand, Maharashtra, Karnataka, Jharkhand, Jammu and Kashmir)

In addition to this casualties associated with extreme rainfall event also reported in the following districts; Cachar, Dibrugarh, Hailakandi, Sribhumi/Karimganj (Assam); North Goa (Goa); Amreli, Banaskantha, Bhavnagar, Botad, Dangs, Mahisagar, Mehsana, Narmada, Panchmahal, Sabarkantha, Surat, Valsad (Gujarat); East Singbhum, Ranchi, Seraikela-Kharsawan (Jharkhand); Dakshina Kannada, Udupi, Uttara Kannada (Karnataka); Alirajpur, Ashoknagar, Guna, Tikamgarh (Madhya Pradesh); Kolhapur, Palghar, Raigad, Ratnagiri, Satara, Sindhudurg (Maharashtra); East Khasi Hills, South West Khasi Hills (Meghalaya); Mayurbhanj (Odisha); Nilgiris (Tamil Nadu); Jalpaiguri and Purulia (West Bengal).

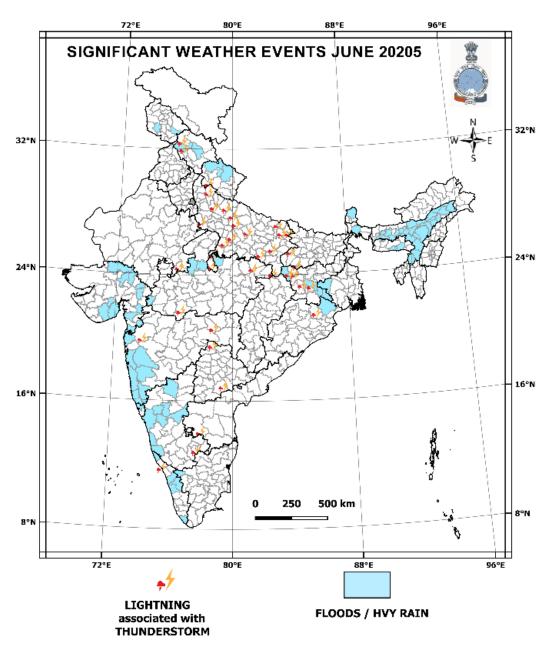


Fig. 11: Deaths and damages due to significant weather events during June 2025 (Based on real time media reports)