Years of Service to the Nation

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)

Monthly Climate Summary for October 2025

1. Monthly Rainfall Scenario (01 to 31 October, 2025)

In October 2025, the country recorded 112.2 mm of rainfall, which is 49% above the Long Period Average (LPA) of 75.4 mm (based on data of 1971-2020). The daily variation of rainfall across India during October 2025, compared with the 1971–2020 climatological normal, is shown in Figure 1(a). The all-India percentage departure from normal rainfall for October during 1901–2025 is depicted in Figure 1(b). At the national scale, rainfall over India (112.2 mm) was the second highest since 2001 and the sixteenth highest since 1901 (Figure 1(c)). Regionally, Northwest India (56.3 mm) experienced its third highest rainfall since 2001 and tenth highest since 1901 (Figure 1(d)). Over Central India (95.0 mm) recorded its third highest rainfall since 2001 and twenty-first highest since 1901 (Figure 1(e)). Meanwhile, South Peninsular India (212.8 mm) registered its third highest rainfall since 2001 and thirteenth highest since 1901 (Figure 1(f)).

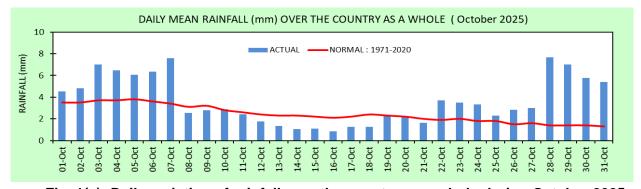


Fig. 1(a): Daily variation of rainfall over the country as a whole during October 2025.

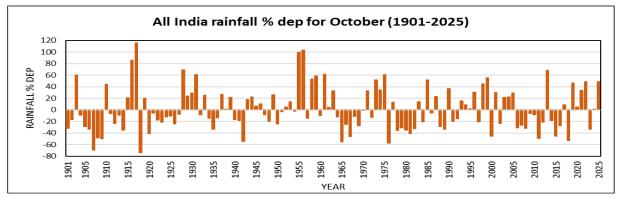


Fig. 1(b): All India monthly rainfall percentage departure from normal (1971-2020) for October from 1901-2025.

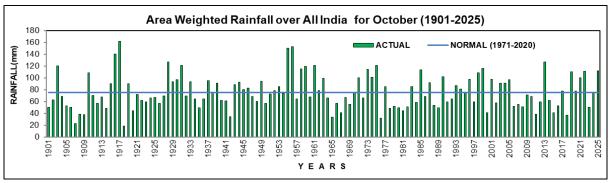


Fig. 1(c): Time series of area weighted rainfall over All India for October (1901 - 2025).

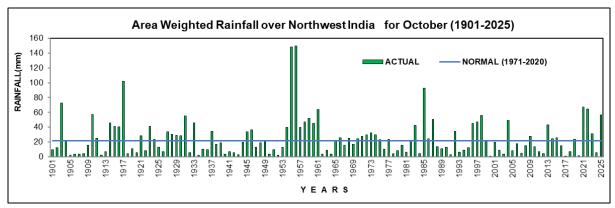


Fig. 1(d): Time series of area weighted rainfall over Northwest India for October (1901 – 2025).

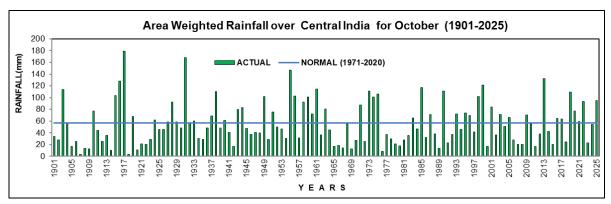


Fig. 1(e): Time series of area weighted rainfall over Central India for October (1901 – 2025).

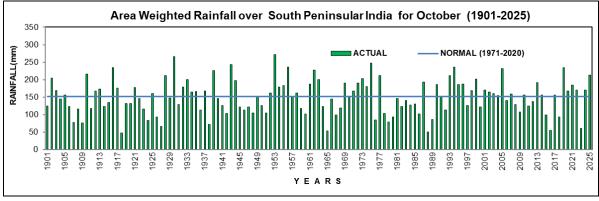


Fig. 1(f): Time series of area weighted rainfall over South Peninsular India for October (1901 – 2025).

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

Regions	Actual Rainfall (mm)	Normal Rainfall (mm)	% Departure from LPA
Country as a whole	112.2	75.4	48.8
Northwest India	56.3	21.6	160.7
Central India	95.0	57.0	66.6
South Peninsula	212.8	152.3	39.8
East & Northeast India	132.0	123.2	7.2

During the month, 18 sub-divisions received large excess rainfall, 9 sub-divisions received excess rainfall, 5 sub-division received normal rainfall and 4 sub-division received deficient rainfall (Fig. 2).



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

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

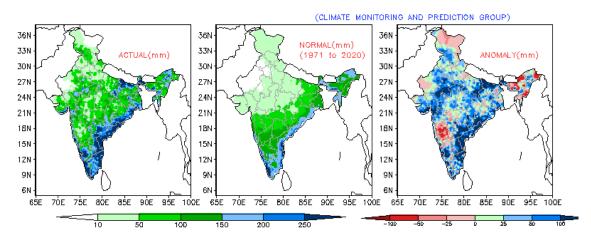
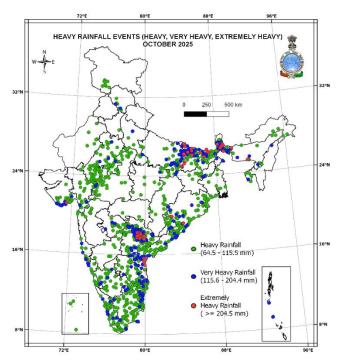


Fig. 3: Observed spatial Rainfall pattern for the month October 2025 over India and their departure from normal (1971 to 2020 period).

Departure from normal is anomaly = actual rainfall - normal rainfall.

2. Frequency of Heavy Rainfall events

During October 2025, several regions across India experienced intense rainfall activity. Extremely Heavy Rainfall events (>204.4 mm) occurred over Assam & Meghalaya, Bihar, Coastal Andhra Pradesh, Odisha, Saurashtra & Kutch, and Telangana. Very Heavy Rainfall events (115.6–204.4 mm) were reported over the Andaman & Nicobar Islands, Coastal Karnataka, Madhya Pradesh, Uttar Pradesh, Gujarat Region, Himachal Pradesh, Jharkhand, Kerala & Mahe, Konkan & Goa, Marathwada, Nagaland, Tripura, Rayalaseema, South Interior Karnataka, Tamil Nadu, Puducherry, and Karaikal. Heavy Rainfall events (64.5–115.5 mm) were observed across almost all meteorological sub-divisions of the country. The spatial distribution of Heavy, Very Heavy, and Extremely Heavy Rainfall events is illustrated in Figure 4.



(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 October 2025.

Out of a total of 1,000 recorded rainfall events during the month, 44 were classified as Extremely Heavy Rainfall (>204.4 mm), 225 as Very Heavy Rainfall (115.6–204.4 mm), and 731 as Heavy Rainfall (64.5–115.5 mm).

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	STATION NAME RECORD (Oct. 2025)	RECORD (mm)	DATE	
BANIHAL	75.8	07-10-2025	63.7	20-10-2015
BATOTE	98.2	07-10-2025	77.2	17-10-1998
BHADERWAH	77.1	07-10-2025	68.8	19-10-1987
BHILWARA	88	28-10-2025	47.6	01-10-1970
CHITTORGARH	68	28-10-2025	57.2	11-10-1974
GANDHINAGAR	61	31-10-2025	33.0	09-10-2013
HANAMKONDA	225.6	30-10-2025	146.0	18-10-1995
KOKERNAG	68.9	07-10-2025	61.1	28-10-1982
NEW DELHI (PALAM)	52.6	08-10-2025	52.0	03-10-2004
RAISEN	93.2	06-10-2025	77.0	12-10-1999
SHIMLA (A)	36	08-10-2025	21.5	01-10-2013
SIKAR	55	07-10-2025	32.0	24-10-1997
SOLAN (NAUNI)	119.6	08-10-2025	85.0	10-10-1985
SUPAUL	156.7	05-10-2025	123.8	06-10-1978
VARANASI	187	04-10-2025	138.9	09-10-1900

based on real-time available data

3. Withdrawal of Southwest Monsoon: Southwest monsoon withdrew from the entire country on 16th October. Simultaneously, the Northeast Monsoon rainfall activity commenced over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh, Rayalaseema, South Interior Karnataka and Kerala-Mahe on the same day (Fig. 5).

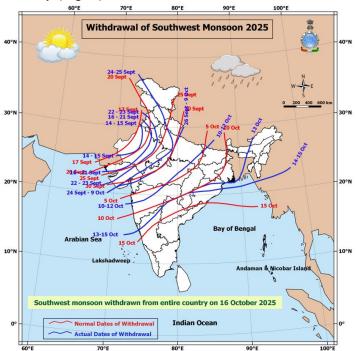


Fig. 5: Isochrones of withdrawal of Southwest Monsoon 2025.

The Monsoon onset and withdrawal and Onset of NE Monsoon since 2000 is given in the table below;

Year	Onset date of SW Monsoon over Kerala	SW Monsoon cover Entire Country	Withdrawal date of SW Monsoon	Onset of NE Monsoon
2000	01-Jun	02-Jul	13-Sep	19-Nov
2001	26-May	03-Jul	10-Sep	26-Oct
2002	09-Jun	15-Aug	16-Sep	30-Oct
2003	13-Jun	5-Jul	17-Sep	19-Oct
2004	03-Jun	18-Jul	24-Sep	26-Oct
2005	07-Jun	30-Jun	02-Sep	11-Oct
2006	26-May	24-Jul	21-Sep	19-Oct
2007	28-May	04-Jul	30-Sep	20-Oct
2008	31-May	10-Jul	29-Sep	12-Oct
2009	23-May	03-Jul	25-Sep	29-Oct
2010	31-May	06-Jul	27-Sep	29-Oct
2011	29-May	09-Jul	23-Sep	25-Oct
2012	05-Jun	11-Jul	24-Sep	19-Oct
2013	01-Jun	16-Jun	09-Sep	21-Oct
2014	06-Jun	17-Jul	23-Sep	18-Oct
2015	05-Jun	26-Jun	04-Sep	28-Oct
2016	08-Jun	13-Jul	15-Sep	01-Nov
2017	30-May	19-Jul	27-Sep	30-Oct
2018	29-May	29-Jun	29-Sep	02-Nov
2019	08-Jun	17-Jul	09-Oct	20-Oct
2020	01-Jun	26-Jun	28-Sep	03-Nov
2021	03-Jun	13 Jul	6-Oct	25-Oct
2022	29-May	02-Jul	20-Sep	29-Oct
2023	08-Jun	02-Jul	25-Sep	16-Oct
2024	30-May	02-Jul	23-Sep	15-Oct
2025	24-May	29-Jun	14-Sep	16-Oct

4. Chief Synoptic weather features observed during October 2025.

Low pressure systems: In the month of October, one Severe Cyclonic Storm namely "Montha" (25 - 30 October) and one Deep Depression (1 - 3 October) formed over Bay of Bengal. Over Arabian sea, one Severe Cyclonic Storm namely "Shakhti" (1 - 7 October) and one Depression (22 Oct - 1 Nov) formed. Tracks of these system are shown in Fig. 6.

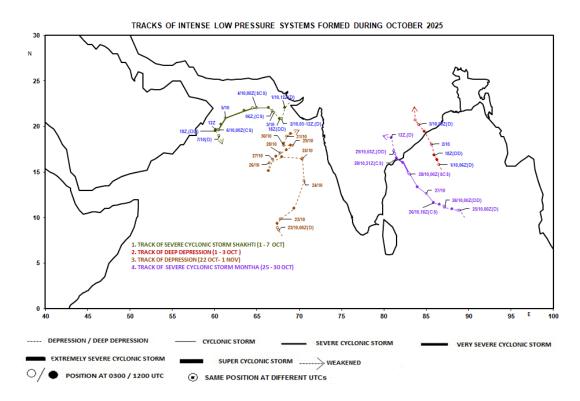


Fig. 6: Observed tracks of intense low-pressure systems formed during October 2025.

Western Disturbance: During October 2025 there were five western disturbances affected the country during 3-5 Oct, 6-9 Oct, 10 - 12 Oct, 22- 23 Oct and 27- 30 Oct.

5. Characteristics of Temperatures for the month of October 2025

The average maximum, average minimum and mean temperature for the country as a whole during October 2025 were 30.68°C, 20.83°C and 25.76°C respectively, against the normal of 31.37°C, 20.01°C and 25.69°C based on data of 1991-2020. Thus, the average minimum temperature was above normal with departure from normal of 0.82°C, while maximum temperature was below normal with departure from normal of -0.68°C and mean temperature was near normal with departure from normal of 0.07°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 October 2025 is shown in the Fig. 7(a) and (b) respectively.

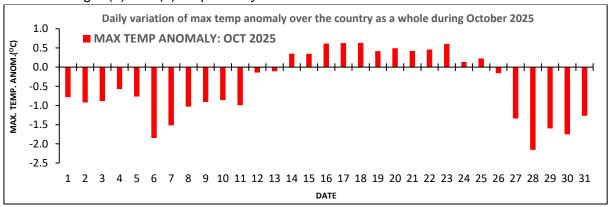


Fig. 7(a): Daily variation of maximum temperature anomaly (departure from normal) over the country as a whole for October 2025.

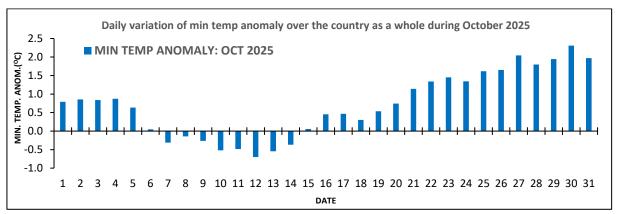


Fig. 7(b): Daily variation of minimum temperature anomaly (departure from normal) over the country as a whole for October 2025.

Fig. 8 shows the time series of monthly average maximum, average minimum and mean temperature over the country as a whole for the month of October 1901-2025. Over the country during October, the average maximum temperature was the 80th highest and average minimum temperature was the 5th highest since 1901. The mean temperature was the 29th highest since 1901.

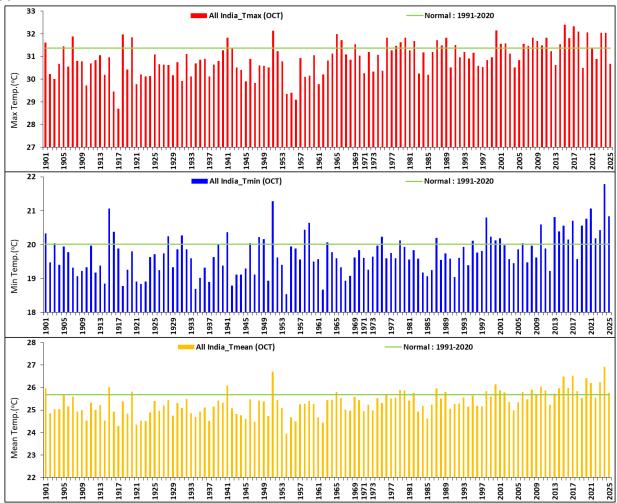


Fig. 8: Time series of monthly average maximum, average minimum and mean temperature over the country as a whole for the month of October 1901-2025.

Fig. 9 shows the time series of average maximum, average minimum and mean temperature over East & Northeast India for the month of October 1901-2025. Over East & Northeast India during October, the average maximum temperature was the 7th highest (30.78°C with departure

from normal of 0.68°C) and average minimum temperature was the 6th highest (21.99°C with departure from normal of 1.20°C) since 1901. The mean temperature was the 3rd highest (26.39°C with departure from normal of 0.94°C) after the years 2020(27.17°C), 2021(26.91°C) since 1901.

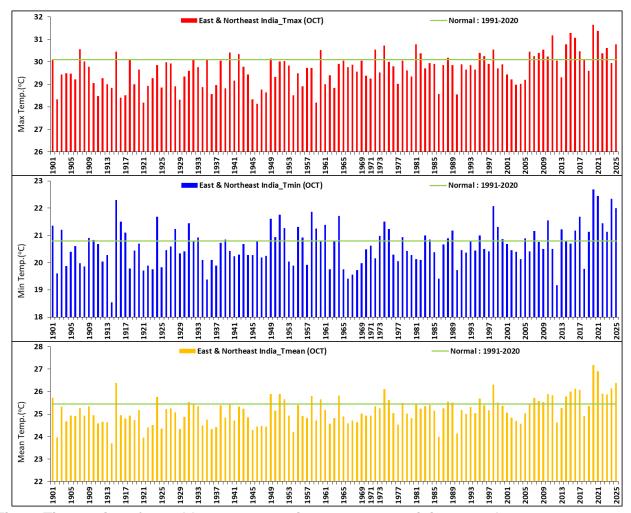


Fig. 9: Time series of monthly average maximum, average minimum and mean temperature over East & Northeast India for the month of October 1901-2025.

Fig. 10 shows the time series of average minimum temperature over Central India for the month of October 1901-2025. Over Central India during October, the average minimum temperature was the 5th highest (21.85°C with departure from normal of 0.94°C) after the years 2024(22.98°C), 1951(22.11°C), 1998(22.0°C) and 2020(21.92°C) since 1901.

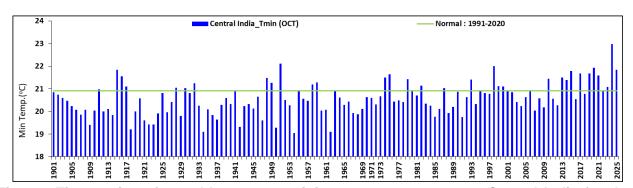


Fig. 10: Time series of monthly average minimum temperature over Central India for the month of October 1901-2025.

Fig. 11 shows the time series of average minimum temperature over South Peninsular India for the month of October 1901-2025. Over South Peninsular India during October, the average minimum temperature was the 6th highest (23.01°C with departure from normal of 0.48°C) since 1901.

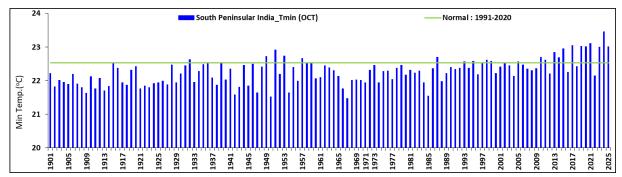


Fig. 11: Time series of monthly average minimum temperature over South Peninsular India for the month of October 1901-2025.

The Temperatures during October 2025 for all India and homogeneous regions with its top ranks since 1901 are given below:

OCTOBER	2025	Max Temp (°C)	Min Temp (°C)	Mean Temp (°C)
	ACTUAL	30.68	20.83	25.76
411 191514	NORMAL	31.37	20.01	25.69
ALL INDIA	ANOMALY	-0.68	0.82	0.07
	Rank since 1901	80	5	29
	ACTUAL	29.66	17.44	23.55
NORTHWEST INDIA	NORMAL	30.72	16.73	23.73
NORTHWEST INDIA	ANOMALY	-1.07	0.71	-0.18
	Rank since 1901	96	14	51
EAST & NORTHEAST INDIA	ACTUAL	30.78	21.99	26.39
	NORMAL	30.10	20.80	25.45
	ANOMALY	0.68	1.20	0.94
	Rank since 1901	7	6	3
	ACTUAL	31.52	21.85	26.68
CENTRAL INDIA	NORMAL	32.93	20.91	26.92
CENTRAL INDIA	ANOMALY	-1.41	0.94	-0.23
	Rank since 1901	99	5	48
	ACTUAL	30.84	23.01	26.93
SOUTH PENINSULAR INDIA	NORMAL	31.18	22.53	26.85
	ANOMALY	-0.34	0.48	0.07
	Rank since 1901	52	6	23

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

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

Highest Maximum				
STATION NAME	NEW	DATE	PREVIOUS	DATE
STATION NAME	RECORD (°C) #	(OCT. 2025)	RECORD (°C)	
BASTI	38	08-10-2025	37.3	16-10-1995
KOCHI (CIAL)	35.5	12-10-2025	35.4	18-10-2006
KORAPUT	36.6	30-10-2025	33.5	21-10-2009
PALAYAMKOTTAI	39.5 @	02-10-2025	39.5	10-10-2011
Lowest Minimum				
	NEW	DATE	PREVIOUS	DATE
STATION NAME	RECORD (°C) #	(OCT. 2025)	RECORD (°C)	
KANYAKUMARI	20	24-10-2025	20.2	23-10-2007

@ equals previous record

based on real-time available data

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

	All India (October 2025)				
Year	TMin	Normal	Anomaly	Rank	
2024	21.79	20.01	1.78	1	
1951	21.28		1.28	2	
1915	21.063		1.06	3	
2021	21.061		1.05	4	
2025	20.83		0.82	5	

East & Northeast India (October 2025)				
Year	TMean	Normal	Anomaly	Rank
2020	27.17	25.45	1.72	1
2021	26.91		1.46	2
2025	26.39		0.94	3
1915	26.37		0.92	4
1998	26.30		0.85	5

	Central India (October 2025)				
Year	TMin	Normal	Anomaly	Rank	
2024	22.98	20.91	2.07	1	
1951	22.11		1.21	2	
1998	22.00		1.09	3	
2020	21.92		1.02	4	
2025	21.85		0.94	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 October 2025 is given in Fig. 12.

TEMPERATURE & ITS ANOMOLY FOR THE MONTH OCTOBER 2025

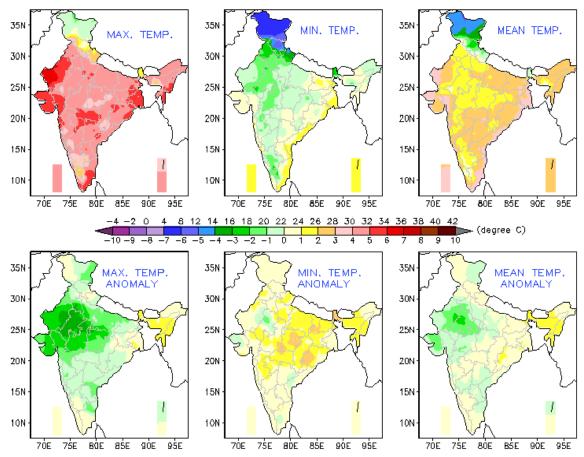


Fig. 12: Observed spatial temperature pattern of monthly average maximum, average minimum, and mean temperature over India (top three from left to right) and their departure

from normal (1991 to 2020 period) for October 2025 (lower three from left to right).

6. Significant Weather Events:

During October 2025, over 100 fatalities and more than 30 injuries were reported across the country, with several persons missing, particularly in West Bengal, due to heavy rains, floods, and landslides. Additionally, over 70 livestock perished, and widespread damage to property and infrastructure was reported, according to media reports and real-time situation report of SDMA/NDMA. The significant weather events that impacted various regions during October 2025 are illustrated in Figure 13. A summary of event-wise casualties is provided below. It may be noted that the official data on casualties and damages will be available from the respective state governments.

Event	Number of human deaths
Heavy Rains, Floods,	64 (Bihar, Himachal Pradesh, Karnataka, Kerala, Odisha,
Cloudbursts and Landslides	Tamil Nadu, Telangana, West Bengal)
Lightning associated with	32 (Bihar, Chhattisgarh, Tamil Nadu, Kerala, Uttar Pradesh,
Thunderstorm	Andhra Pradesh, Maharashtra, Himachal Pradesh, Assam)
Severe Cyclonic Storm	9 (Andhra Pradesh, Telangana)
MONTHA	
Gale	1 (Kerala)

Also, Nellore, Prakasam (Andhra Pradesh); Araria, Bhojpur, East Champaran/Purba Champaran, Madhubani, Rohtas, Saharsa, Sheohar, Sitamarhi, Siwan, Supaul, West Champaran/Pachim Champaran (Bihar); Amreli (Gujarat); East Khasi Hills (Meghalaya); Gajapati, Kalahandi (Odisha); Jangaon, Karimnagar, Mahabubabad, Warangal Urban/Hanumakonda, Warangal Rural (Telangana); Cooch Behar, Darjeeling, Jalpaiguri (West Bengal) districts were affected due to Extremely Heavy Rains.

While, Prakasam (Andhra Pradesh); Muzzafarpur, Supaul (Bihar); Yadari-Bhuvanagiri (Telangana); Cooch Behar, Jalpaiguri (West Bengal) districts were reported by Central Water Commission of India as Extreme Flood Situation for Forecasting and/or Monitoring Stations.

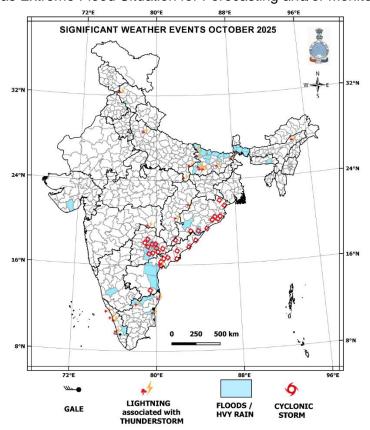


Fig. 13: Deaths and damages due to significant weather events during October 2025.

(Based on real time media reports and other state government agencies)