



Saturday, September 23, 2023
Time of Issue: 0845 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

Significant Weather features:

❖ **Withdrawal of Southwest Monsoon:**

Due to anti-cyclonic flow developing over northwest India at lower tropospheric levels and dry weather prevailing over parts of southwest Rajasthan, conditions are becoming favorable for withdrawal of Southwest Monsoon from parts of West Rajasthan from around 25th September.

- ❖ A cyclonic circulation lies over west Jharkhand & neighbourhood in middle tropospheric levels.
- ❖ A trough runs Sikkim to Telangana across Bihar, cyclonic circulation over west Jharkhand, Chhattisgarh in lower & middle tropospheric levels.
- ❖ A cyclonic circulation lies over north Pakistan & neighbourhood in lower tropospheric levels.

Weather Forecast and Warnings:

East India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Sub-Himalayan West Bengal & Sikkim, Bihar during 23rd-24th; Jharkhand, Gangetic West Bengal on 23rd; Odisha on 23rd & 27th and Andaman & Nicobar Islands during 24th-27th September.

Isolated very heavy rainfall very likely over Sub-Himalayan West Bengal & Sikkim and Bihar on 23rd September.

Northeast India: Light/moderate scattered to fairly widespread rainfall/thunderstorm with isolated **heavy to very heavy rainfall** activity very likely over Arunachal Pradesh during 23rd-24th and over Assam & Meghalaya, Nagaland & Manipur during 23rd, 24th & 27th September.

Central India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Madhya Pradesh and Vidarbha during 23rd-27th; and Chhattisgarh on 23rd & 25th September.

Isolated very heavy rainfall very likely over Chhattisgarh and Vidarbha on 23rd September.

South India: Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** very likely over Tamil Nadu, Coastal Andhra Pradesh, Telangana and Rayalaseema on 23rd September.

Northwest India: Light/moderate scattered to fairly widespread rainfall/thunderstorm with isolated **heavy falls** very likely over Punjab and Uttarakhand on 22nd; over East Rajasthan on 22nd & 23rd; Jammu division and Uttar Pradesh on 22nd September.

West India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Konkan and Madhya Maharashtra during 22nd-27th; Marathwada during 23rd -24th & 27th and Gujarat Region on 23rd & 26th September.

Isolated to scattered light/moderate rainfall likely over rest parts of the country during next 5 days.



Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): **at many places over** Bihar and Andaman & Nicobar Islands; **at a few places over** East Rajasthan, Vidarbha, Chhattisgarh, Odisha, Jharkhand, Gangetic West Bengal and Arunachal Pradesh and **at isolated places over** East Uttar Pradesh, East Madhya Pradesh, Madhya Maharashtra, Coastal Karnataka, Kerala & Mahe, Telangana and Sub-Himalaya West Bengal & Sikkim.
- ❖ **Significant rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday): **(in cm)**: Samana, Mathabhanga-5; Khajuwala, Gharsana, Pitampura, Chilpi, Barishat, Kandukur, Jayanti, Nawryngkneng-4; Patiala, Hanumangarh, Pusa, Dharamjaigarh, Kozhikode-3 each.
- ❖ **Minimum Temperature Departures (as on 22-09-2023)**: Minimum temperatures were **above normal (1.6°C to 3.0°C)** at most places over Punjab, Haryana-Chandigarh-Delhi; at many places over Himachal Pradesh, Rajasthan; at a few places over Uttarakhand and at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Madhya Pradesh, Gujarat state, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 19.2°C** was reported at **Jalgaon (Madhya Maharashtra)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 22-09-2023)**: Maximum temperatures were **above normal (1.6°C to 3.0°C)** at isolated places over Himachal Pradesh, Punjab and Haryana-Chandigarh-Delhi. They are **below normal (-1.6°C to -3.0°C)** at most places over Bihar, Jharkhand; at many places over Chhattisgarh, Sub-Himalaya West Bengal & Sikkim; at a few places over Vidarbha, Gangetic West Bengal, Odisha, Telangana and at isolated places over Coastal Andhra Pradesh & Yanam, Assam & Meghalaya, Madhya Maharashtra, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura and **near normal** over rest parts of the country. Yesterday, **the highest maximum temperature of 38.3°C** was reported at **Ganganagar (West Rajasthan)**.



Meteorological Analysis (Based on 0530 hours IST)

- ❖ Conditions are becoming favourable for withdrawal of Southwest Monsoon from parts of West Rajasthan from around 25th September.
- ❖ The **Monsoon Trough** at mean sea level now passes through Jaisalmer, Kota, Guna, Satna, Daltonganj, Digha and thence east-southeastwards to Northeast Bay of Bengal.
- ❖ The cyclonic circulation over west Jharkhand & neighbourhood persists and now extends upto 5.8 km above mean sea level.
- ❖ The trough from above cyclonic circulation over west Jharkhand to southwest Uttar Pradesh now runs west Jharkhand to West Madhya Pradesh at 0.9 km above mean sea level.
- ❖ Another trough from Sikkim to south Madhya Maharashtra now runs from Sikkim to Telangana across Bihar, cyclonic circulation over west Jharkhand, Chhattisgarh between 1.5 & 4.5 km above mean sea level.
- ❖ A cyclonic circulation lies over north Pakistan & neighbourhood extends upto 1.5 km above mean sea level.
- ❖ The cyclonic circulation over south Pakistan and adjoining Kutch now lies over northeast Arabian sea and adjoining south Pakistan & Kutch between 1.5 & 4.5 km above mean sea level tilting southwards with height.
- ❖ The cyclonic circulation over south Tamil Nadu extending upto 4.5 km above mean sea level persists.

Weather Forecast for next 5 days (Upto 0830 hours IST of 28th September, 2023)

- ❖ Meteorological sub-division wise detailed 5 days rainfall forecast is given in Table-1.
- ❖ No significant change in maximum temperatures likely over most parts of country during next 5 days.

Weather Outlook for subsequent 2 days

- ❖ Scattered to fairly widespread light/moderate rainfall likely over parts of east, northeast & central India, Uttarakhand, Uttar Pradesh, Karnataka, Telangana, along the west coasts and islands.
- ❖ Isolated to scattered rainfall likely over rest parts of the country.



Table-1

7 Days Rainfall Forecast								
S. No.	Subdivision	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS	WS	WS	WS	WS	WS	WS
2	ARUNACHAL PRADESH	WS	FWS	FWS	SCT	SCT	SCT	SCT
3	ASSAM & MEGHALAYA	WS	FWS	FWS	FWS	SCT	SCT	SCT
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	FWS	FWS	FWS	FWS	FWS	FWS	FWS
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	WS	WS	FWS	FWS	FWS	FWS	FWS
6	GANGETIC WEST BENGAL	FWS	FWS	FWS	SCT	SCT	SCT	SCT
7	ODISHA	FWS	SCT	SCT	SCT	SCT	SCT	SCT
8	JHARKHAND	FWS	FWS	SCT	SCT	SCT	SCT	SCT
9	BIHAR	WS	FWS	SCT	SCT	SCT	SCT	FWS
10	EAST UTTAR PRADESH	SCT	SCT	ISOL	SCT	SCT	SCT	FWS
11	WEST UTTAR PRADESH	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
12	UTTARAKHAND	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	SCT
13	HARYANA CHANDIGARH & DELHI	SCT	ISOL	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	FWS	ISOL	DRY	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	SCT	ISOL	DRY	DRY	DRY	DRY	DRY
16	JAMMU & KASHMIR AND LADAKH	ISOL	ISOL	DRY	DRY	DRY	DRY	ISOL
17	WEST RAJASTHAN	ISOL	ISOL	ISOL	ISOL	DRY	DRY	DRY
18	EAST RAJASTHAN	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
19	WEST MADHYA PRADESH	FWS	FWS	SCT	SCT	SCT	SCT	SCT
20	EAST MADHYA PRADESH	WS	FWS	FWS	FWS	WS	WS	FWS
21	GUJARAT REGION	FWS	SCT	SCT	FWS	FWS	SCT	SCT
22	SAURASHTRA & KUTCH	SCT	FWS	SCT	ISOL	ISOL	ISOL	ISOL
23	KONKAN & GOA	WS	WS	WS	WS	WS	WS	WS
24	MADHYA MAHARASHTRA	FWS	FWS	FWS	FWS	FWS	FWS	FWS
25	MARATHAWADA	FWS	FWS	FWS	FWS	SCT	SCT	FWS
26	VIDARBHA	WS	FWS	FWS	FWS	FWS	FWS	FWS
27	CHHATTISGARH	FWS	FWS	FWS	FWS	FWS	FWS	FWS
28	COASTAL ANDHRA PRADESH & YANAM	FWS	FWS	SCT	SCT	FWS	FWS	FWS
29	TELANGANA	FWS	SCT	SCT	SCT	SCT	SCT	SCT
30	RAYALASEEMA	SCT	SCT	SCT	SCT	SCT	SCT	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	SCT	SCT	SCT	SCT	SCT	SCT	SCT
32	COASTAL KARNATAKA	WS	FWS	FWS	FWS	FWS	FWS	FWS
33	NORTH INTERIOR KARNATAKA	FWS	SCT	SCT	SCT	SCT	SCT	SCT
34	SOUTH INTERIOR KARNATAKA	FWS	SCT	SCT	SCT	SCT	SCT	SCT
35	KERALA & MAHE	FWS	FWS	FWS	FWS	FWS	FWS	FWS
36	LAKSHADWEEP	FWS	SCT	SCT	SCT	SCT	SCT	SCT

Legend	Category	% Stations
WS	Widespread/Most Places	76-100
FWS	Fairly Widespread/Many places	51-75
SCT	Scattered/ A Few Places	26-50
ISOL	Isolated Places	1-25

* Red color warning does not mean "Red Alert" Red color warning means "Take Action".
Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day For
more details kindly visit <https://mausam.imd.gov.in> or contact : 011-2434-4599
(Service to the Nation since 1875)

DRY	No Rain	0
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Fig. 1: Maximum Temperatures Dated 22.09.2023

Fig. 2: Departure of Maximum Temp. Dated 22.09.2023

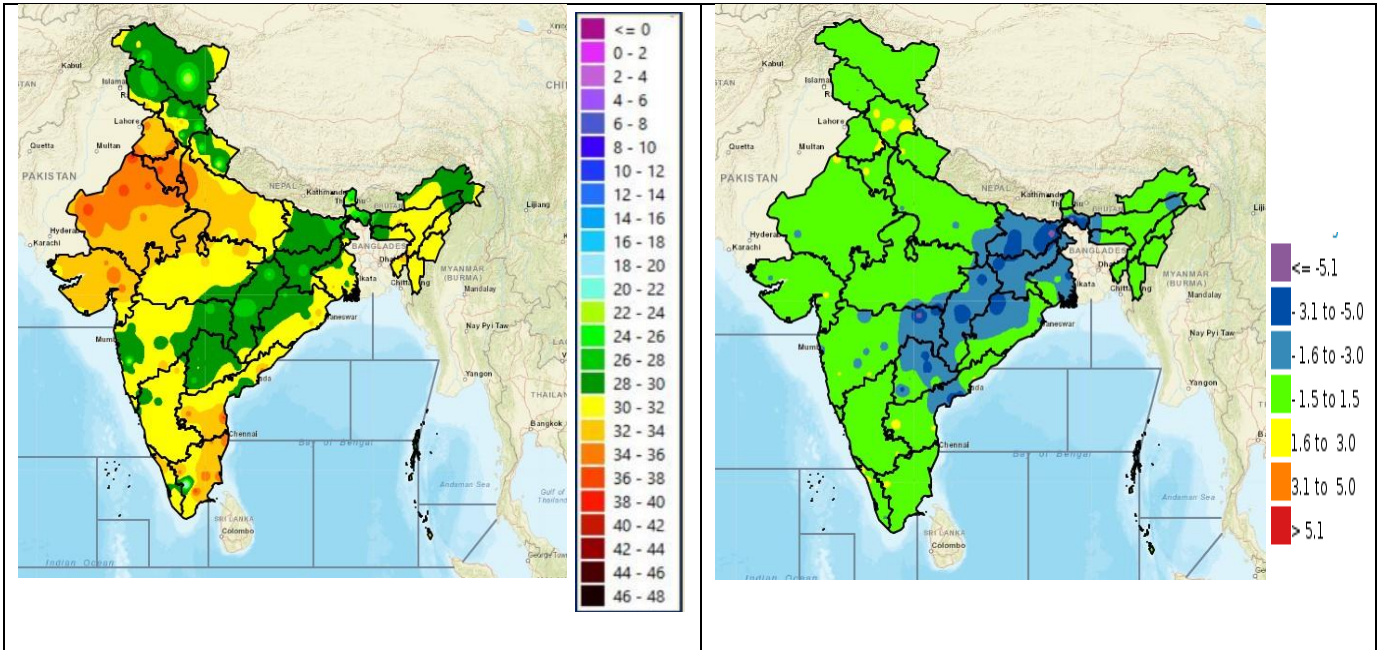


Fig. 3: Minimum Temperatures Dated 22.09.2023

Fig. 4: Departure of Minimum Temp. Dated 22.09.2023

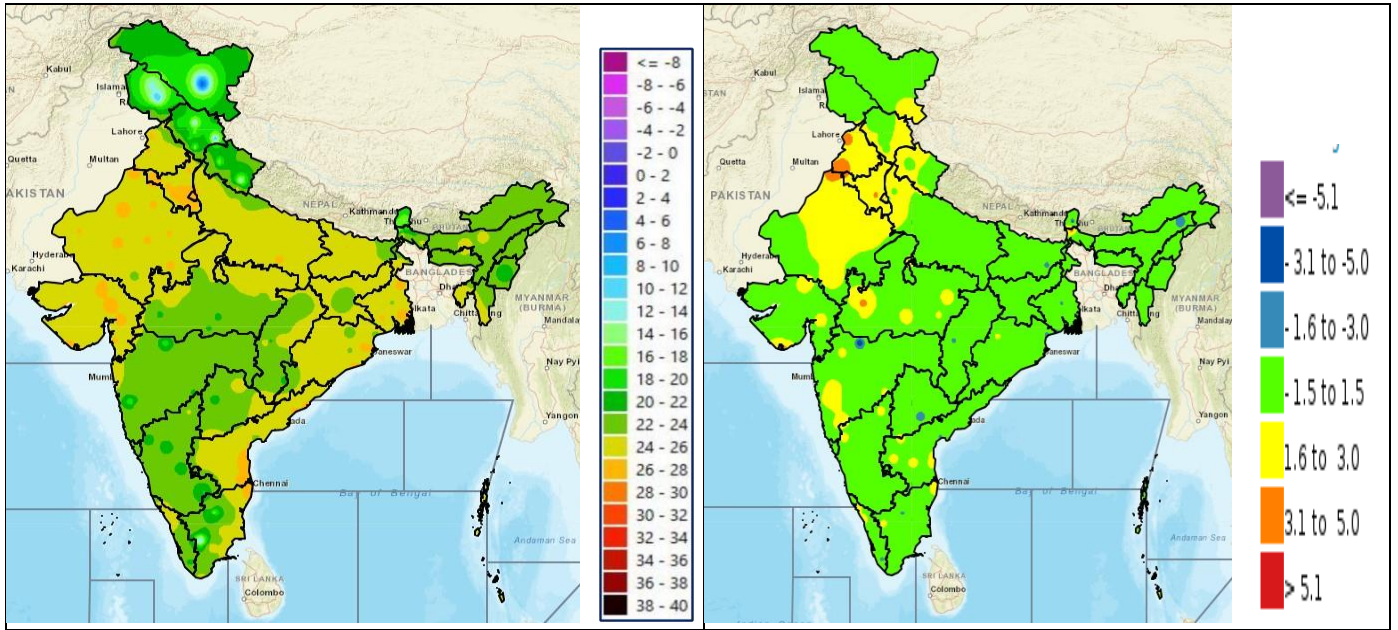
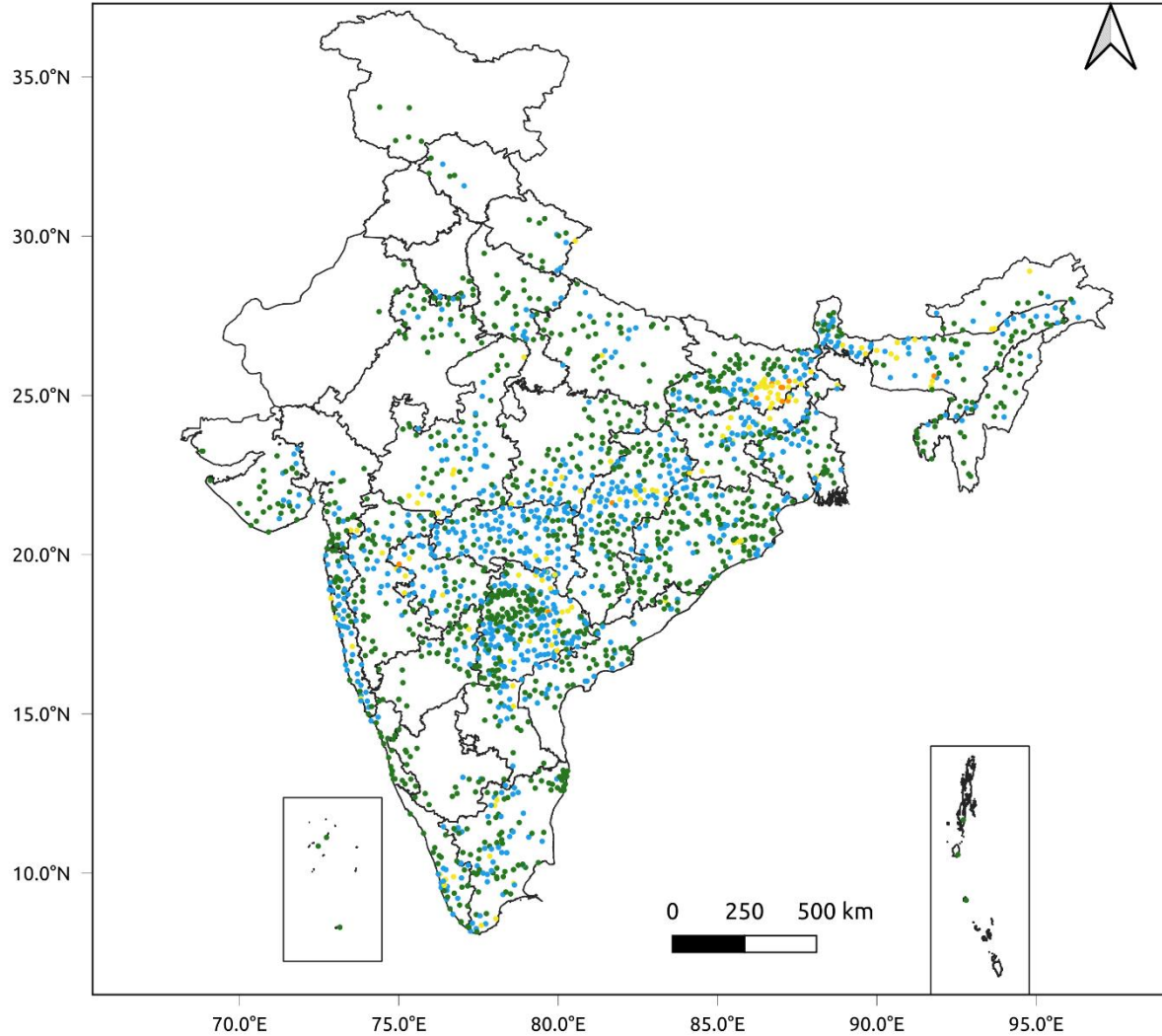


Fig. 5: Accumulated Rainfall (mm) during past 24 hours

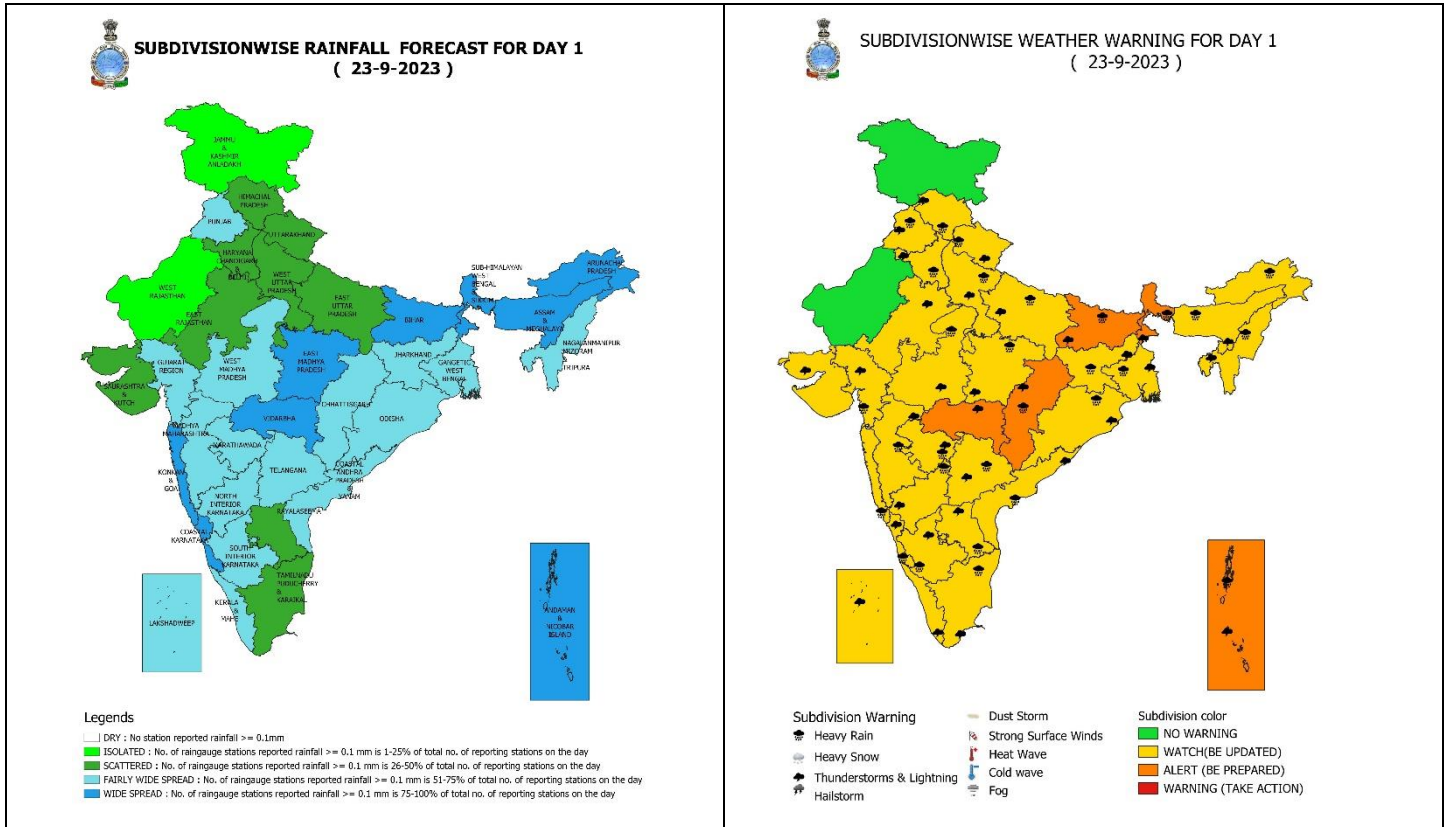


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 21-9-2023 to 0830 IST of 22-9-2023



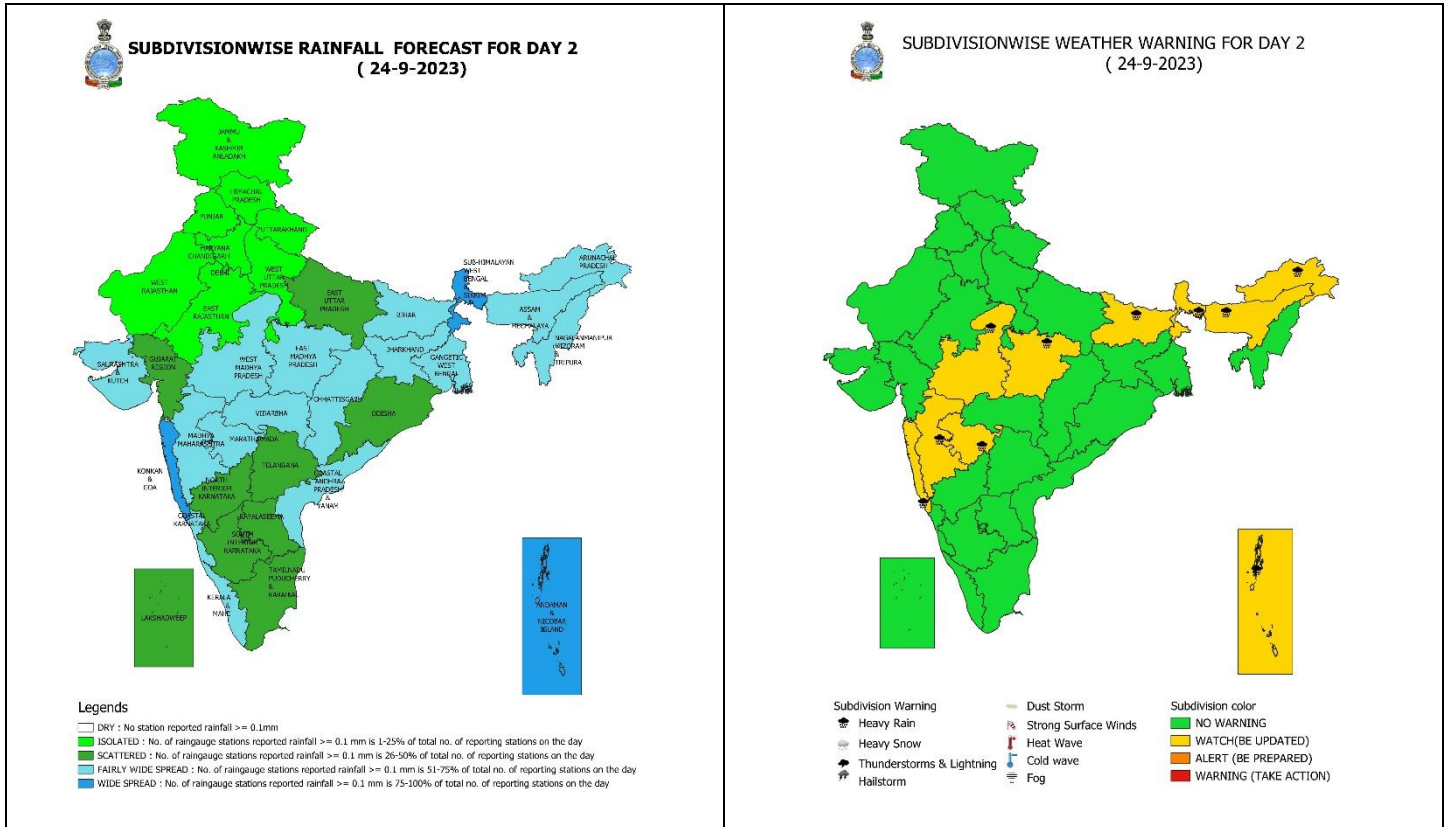
Legends

- Very Light to Light Rainfall (0.1 - 15.5 mm)
- Moderate Rainfall (15.6 - 64.4 mm)
- Heavy Rainfall (64.5 - 115.5 mm)
- Very Heavy Rainfall (115.6 - 204.4 mm)
- Extremely Heavy Rainfall (≥ 204.5 mm)



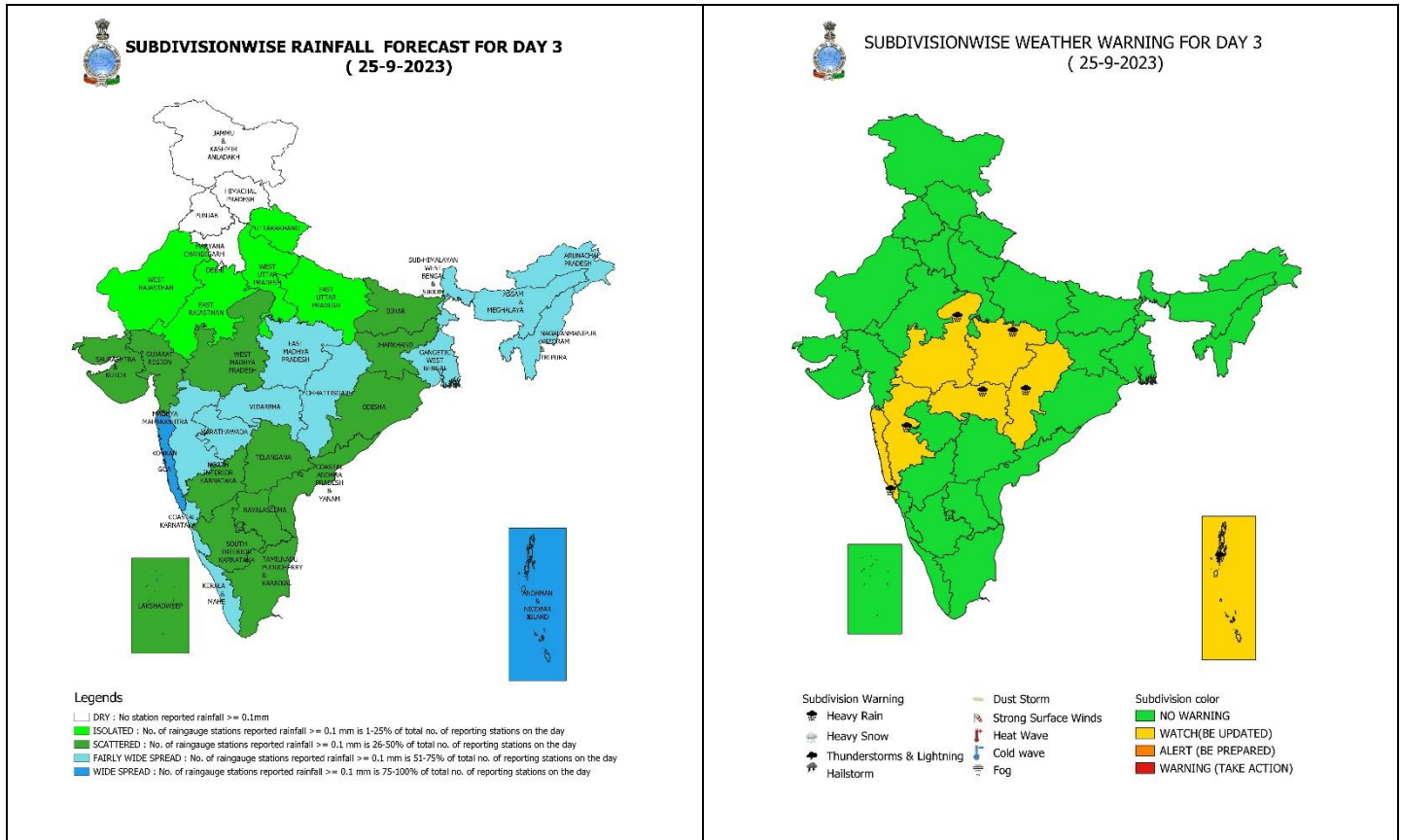
23 September (Day 1): -

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Bihar and Assam & Meghalaya and **heavy rainfall** at isolated places over Punjab, Himachal Pradesh, north Haryana & Chandigarh, Uttarakhand, northwest Uttar Pradesh, Madhya Pradesh, Jharkhand, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Gujarat Region, Karnataka, Gangetic West Bengal, Odisha, Chhattisgarh, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Tamil Nadu, Puducherry & Karaikal.
- ❖ **Thunderstorm with lightning & gusty winds (speed 30-40 kmph)** very likely at isolated places over Kerala & Mahe and **with lightning** at isolated places over Uttarakhand, Punjab, north Haryana & Chandigarh, Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, West Bengal & Sikkim, Bihar, Jharkhand, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Gujarat state, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** likely over Southwest and adjoining Westcentral Arabian Sea. **Fishermen are advised not to venture into these areas.**



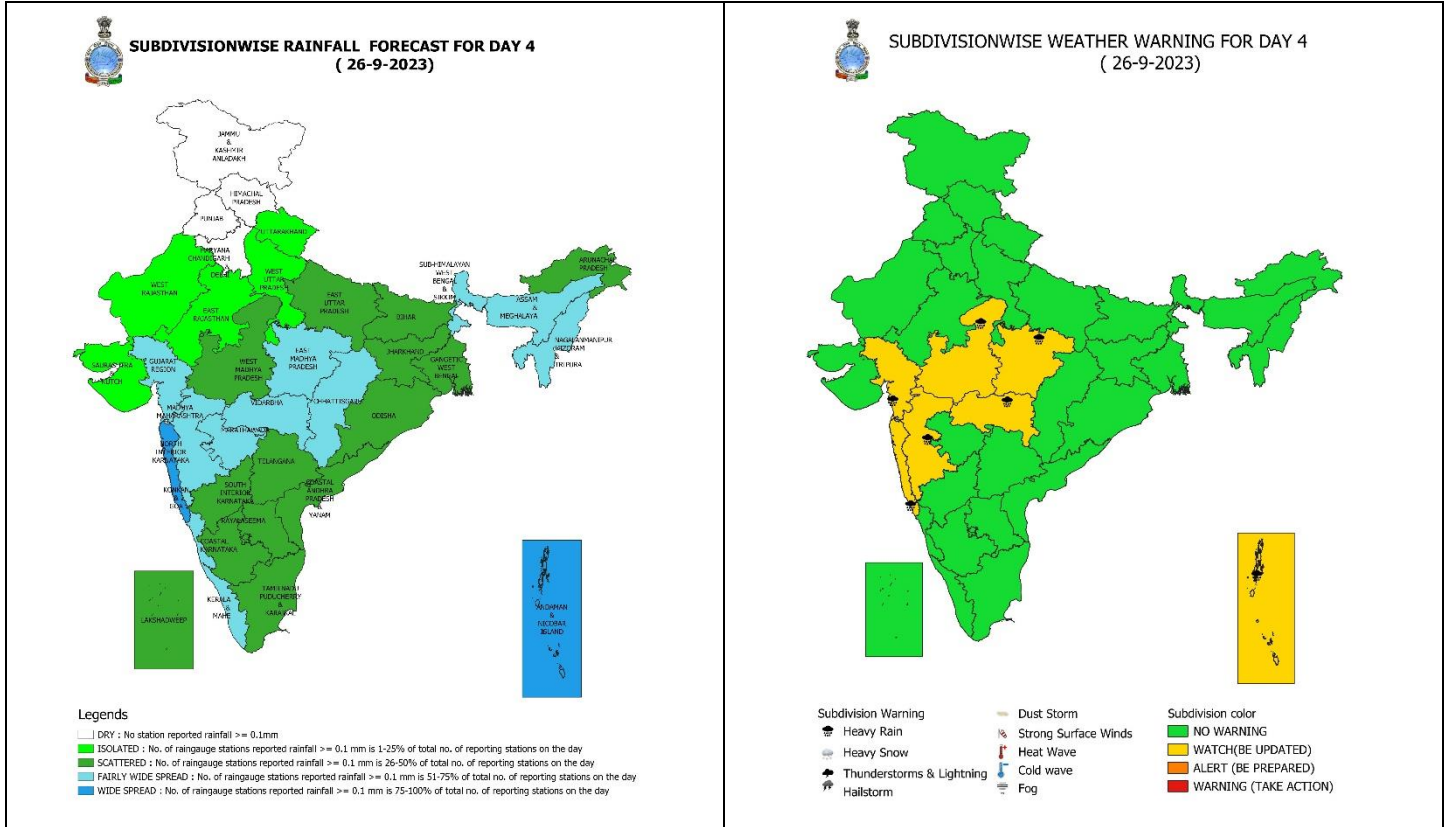
24 September (Day 2): -

- ❖ **Heavy rainfall** very likely at isolated places over Madhya Pradesh, Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Madhya Maharashtra, Marathwada, Bihar, Arunachal Pradesh, Assam & Meghalaya.
- ❖ **Thunderstorm with lightning** very likely at isolated places over Uttarakhand, Uttar Pradesh, Rajasthan, East Madhya Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Gangetic West Bengal, Jharkhand, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** likely over Southwest and adjoining Westcentral Arabian Sea. **Fishermen are advised not to venture into these areas.**



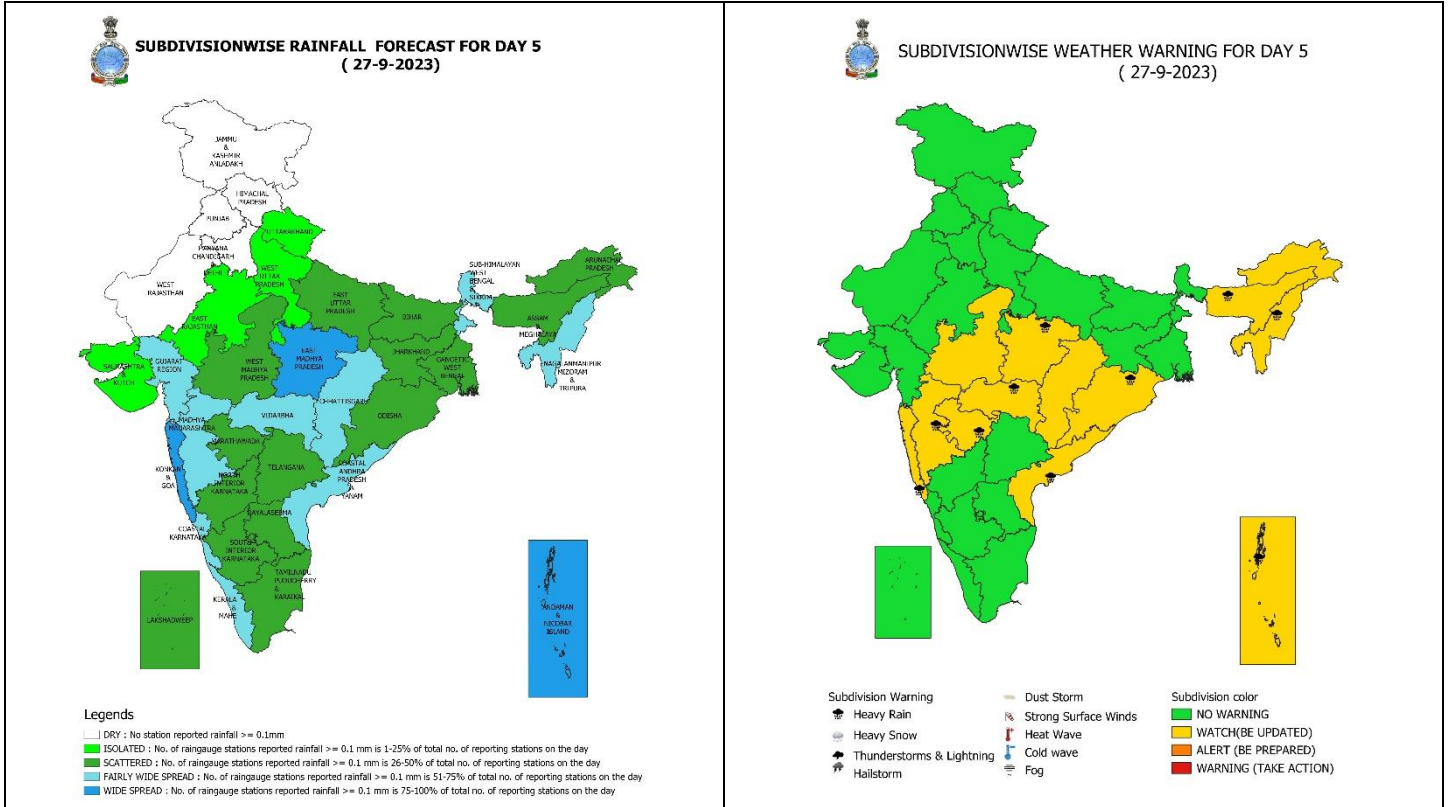
25 September (Day 3): -

- ❖ **Heavy rainfall** likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Konkan & Goa, Madhya Maharashtra and Andaman & Nicobar Islands.
- ❖ **Thunderstorm with lightning** likely at isolated places over Uttarakhand, East Uttar Pradesh, Andaman & Nicobar Islands and Konkan & Goa, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** likely over Southwest and adjoining Westcentral Arabian Sea. **Fishermen are advised not to venture into these areas.**



26 September (Day 4): -

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Andaman & Nicobar Islands and **heavy rainfall** at isolated places over Madhya Pradesh, Vidarbha, Gujarat Region, Konkan & Goa and Madhya Maharashtra.
- ❖ **Thunderstorm with lightning** likely at isolated places over Konkan & Goa, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** likely over Southwest and adjoining Westcentral Arabian Sea. **Fishermen are advised not to venture into these areas.**



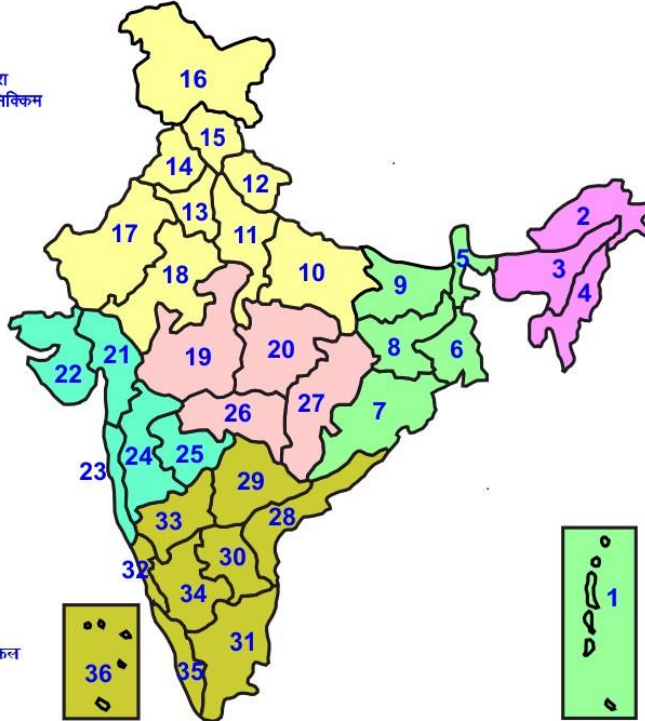
27 September (Day 5): -

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Andaman & Nicobar Islands and **heavy rainfall** at isolated places over East Madhya Pradesh, Vidarbha, Marathwada, Odisha, Coastal Andhra Pradesh & Yanam, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Madhya Maharashtra.
- ❖ **Thunderstorm with lightning** likely at isolated places over Konkan & Goa, Madhya Maharashtra, Madhya Pradesh, Odisha, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Arunachal Pradesh, Marathwada, Tamil Nadu, Puducherry & Karaikal.
- ❖ **Squally wind speed of 45-55 kmph gusting to 65 kmph** likely over Southwest and adjoining Westcentral Arabian Sea. **Fishermen are advised not to venture into these areas.**



LEGENDS

- 1 अंडमान और निकोबार द्वीप समुह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड मनीपुर मीजोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम गंगेय बंगाल
- 7 ओडिसा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा चंडिगढ़ एवं दिल्ली
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एवं कश्मीर एवं लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात क्षेत्र
- 22 सौराष्ट्र एवं कच्छ
- 23 कोंकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठावाड़ा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 तटीय आंध्र प्रदेश एवं यनम
- 29 तेलंगाना
- 30 रायलसेमा
- 31 तमिलनाडु, पुदुचेरी एवं कराईकल
- 32 तटिय कर्नाटक
- 33 आंतरिक उत्तरी कर्नाटक
- 34 आंतरिक दक्षिणी कर्नाटक
- 35 केरल एवं माले
- 36 लक्षद्वीप



1. Andaman & Nicobar Islands
2. Arunachal Pradesh
3. Assam & Meghalaya
4. Nagaland, Manipur, Mizoram & Tripura
5. Sub-Himalayan West Bengal & Sikkim
6. Gangetic West Bengal
7. Orissa
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chd & Delhi
14. Punjab
15. Himachal Pradesh
16. Jammu & Kashmir and Ladakh
17. West Rajasthan
18. East Rajasthan
19. West Madhya Pradesh
20. East Madhya Pradesh
21. Gujarat
22. Saurashtra
23. Konkan & Goa
24. Madhya Maharashtra
25. Marathwada
26. Vidharbha
27. Chhattisgarh
28. Coastal Andhra Pradesh & Yanam
29. Telangana
30. Rayalaseema
31. Tamilnadu, Puducherry & Karaikal
32. Coastal Karnataka
33. North Interior Karnataka
34. South Interior Karnataka
35. Kerala & Mahe
36. Lakshadweep

SPATIAL DISTRIBUTION (% of Stations reporting)

% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)

WARNING

WARNING (TAKE ACTION)
ALERT (BE PREPARED)
WATCH (BE UPDATED)
NO WARNING (NO ACTION)

Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75



Heavy Rain



Heavy Snow



Thunderstorm



Dust Storm



Strong Winds



Visibility



Cyclone



Squall/ Hail



Frost



Cold Wave



Heat Wave



Sea State

* Red color warning does not mean "Red Alert" Red color warning means "Take Action".

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LEGENDS

WARNING

WARNING (TAKE ACTION)
ALERT (BE PREPARED)
WATCH (BE UPDATED)
NO WARNING (NO ACTION)

Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75



Rain/ Snow *

Heavy: 64.5 to 115.5 mm/cm *
Very Heavy: 115.6 to 204.4 mm/cm*
Extremely Heavy: > 204.4 mm/cm *



Heat Wave

When maximum temperature of a station reaches $\geq 40^{\circ}\text{C}$ for plains and $\geq 30^{\circ}\text{C}$ for hilly regions
(a) Based on Departure from normal

Heat Wave: Maximum Temperature Departure from normal 4.5°C to 6.4°C .

Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^{\circ}\text{C}$

(b). Based on Actual maximum temperature

Heat Wave: When actual maximum temperature $\geq 45^{\circ}\text{C}$.

Severe Heat Wave: When actual maximum temperature $\geq 47^{\circ}\text{C}$

(c). Criteria for heat wave for coastal stations

When maximum temperature departure is $> 4.5^{\circ}\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^{\circ}\text{C}$



Warm Night

When maximum temperature remains 40°C

Warm Night: When minimum temperature departure 4.5°C to 6.4°C .

Severe Warm Night: When minimum temperature departure $> 6.4^{\circ}\text{C}$.



Cold Wave

When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions.

(a). Based on departure

Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C .

Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$

(b) Based on actual Minimum Temperature (for Plains only)

Cold Wave : When Minimum Temperature is $\leq 4.0^{\circ}\text{C}$

Severe Cold Wave: When Minimum Temperature is $\leq 2.0^{\circ}\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is $\leq -4.5^{\circ}\text{C}$ & actual Minimum Temperature is $\leq 15^{\circ}\text{C}$



Cold Day

When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions
Based on departure

Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C .

Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$



Fog

Phenomenon of small droplets suspended in air and the horizontal visibility < 1km

Moderate Fog: When the visibility between 500-200 metres

Dense Fog: when the visibility between 50- 200 metres

Very Dense Fog: when the visibility < 50 metres



Thunderstorm

Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)



Dust/Sand Storm

An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.



Frost

Ice deposits on ground

Air temperature $\leq 4^{\circ}\text{C}$ (over Plains)



Squall

A strong wind that rises suddenly, lasts for atleast 1 minute.

Moderate: Wind speed 52-61 kmph

Severe: Wind speed 62-87 kmph

Very Severe: Wind speed > 87 kmph



Sea State

Effect of various waves in the sea over specific area

Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre

High to very high: Wind speed 63-117 kmph (34-63 knots) & Wave height 6-14 metre

Phenomenal: Wind speed > 117 kmph (> 63 knots) & Wave height > 14 metre



Cyclone

Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)

Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)

Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)

Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)

Super Cyclone Storm: Wind speed > 220 kmph (> 119 knots)

* Red color warning does not mean "Red Alert" Red color warning means "Take Action".

Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day For more details kindly visit <https://mausam.imd.gov.in> or contact : 011-2434-4599

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