



Thursday, October 05, 2023
Time of Issue: 2000 hours IST
(NIGHT)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

Withdrawal of Southwest Monsoon:

- ❖ Conditions are becoming favourable for further withdrawal of Southwest Monsoon from remaining parts of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, West Uttar Pradesh, West Madhya Pradesh, Gujarat state; some parts of East Uttar Pradesh, East Madhya Pradesh, Maharashtra during next 2 days.

Significant Weather features:

- ✓ A **Low Pressure Area** lies over western parts of Gangetic West Bengal & neighbourhood. It is very likely to move gradually northeastwards towards Northwest Bangladesh during next 48 hours and become less marked thereafter. Under its influence:
Isolated extremely heavy rainfall very likely over Sub-Himalayan West Bengal and Isolated very heavy rainfall over Sikkim during next 24 hours.
- ✓ A trough runs from the cyclonic circulation associated with the Low Pressure Area over western parts of Gangetic West Bengal & neighbourhood to East Uttar Pradesh in lower tropospheric levels.
- ✓ A fresh Western Disturbance likely to affect Northwest India from the night of 08th October, 2023.

Weather Forecast and Warnings:

East India: Rainfall warning: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Sub-Himalayan West Bengal & Sikkim on 05th & 06th; Jharkhand, Bihar, Gangetic West Bengal on 05th and over Andaman & Nicobar Islands during 05th to 09th October.

Isolated extremely heavy rainfall very likely over Sub-Himalaya West Bengal and Isolated very heavy rainfall over Sikkim on 05th October.

Northeast India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy to very heavy rainfall** very likely over Assam & Meghalaya during 05th-07th; Arunachal Pradesh and Nagaland, Manipur on 05th & 06th October.

Isolated extremely heavy rainfall very likely over Meghalaya on 05th October.

Northwest India: Light/moderate scattered rainfall/thunderstorm & lightning very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand on 09th October.

West & South India: No significant weather over the region during next 5 days.



Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of today): **at most places** over Arunachal Pradesh, Assam & Meghalaya; **at many places** over Bihar, Sub-Himalaya West Bengal & Sikkim; **at a few places** over Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Jharkhand, East Uttar Pradesh, Kerala & Mahe and **at isolated places** over Odisha, Tamil Nadu, Puducherry & Karaikal, Coastal Karnataka, Coastal Andhra Pradesh & Yanam, Telangana, Madhya Pradesh, Haryana, Uttarakhand, Gujarat state, Madhya Maharashtra.
- ❖ **Heavy Rainfall observed** (from 0830 hours IST to 1730 hours IST of today): **Heavy rainfall** at isolated places over Assam.
- ❖ **Significant rainfall recorded** (from 0830 hours IST to 1730 hours IST of today) (in cm): **Assam & Meghalaya:** Guwahati- 8, East Khasi Hilla-6, Golpara, Karbi Anglong-3 each; **Kerala & Mahe:** Pathanamthitta-5.
- ❖ **Minimum Temperature Departures (as on 05-10-2023):** Minimum temperatures are **above normal (1.6°C to 3.0°C)** at many places over Rayalaseema; at a few places over Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Jharkhand and Odisha; at isolated places over Himachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch and Madhya Maharashtra. They are **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over East Madhya Pradesh; **below normal (-1.6°C to -3.0°C)** at many places over Haryana-Chandigarh-Delhi; at a few places over Gujarat Region, West Madhya Pradesh, Vidarbha and Chhattisgarh and **near normal** over rest parts of the country. Today, **the lowest minimum temperature of 14.5°C** is reported at **Sikar (West Rajasthan)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 05-10-2023):** Maximum temperatures are **appreciably above normal (3.1°C to 5.0°C)** at a few places over Coastal Andhra Pradesh & Yanam; **above normal (1.6°C to 3.0°C)** at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Rayalaseema, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal; at a few places over Uttarakhand, Punjab, Chhattisgarh, Odisha, Kerala & Mahe; at isolated places over Haryana-Chandigarh-Delhi, Rayalaseema, East Madhya Pradesh, Telangana, Vidarbha. They are **below normal (-1.6°C to -3.0°C)** at a few places over Assam & Meghalaya, Arunachal Pradesh, Gangetic West Bengal; at isolated places over Nagaland, Manipur, Mizoram & Tripura and **near normal** over rest parts of the country. Today, **the highest maximum temperature of 40.0°C** is reported at **Jaisalmer (West Rajasthan)**.



Meteorological Analysis (Based on 1730 hours IST)

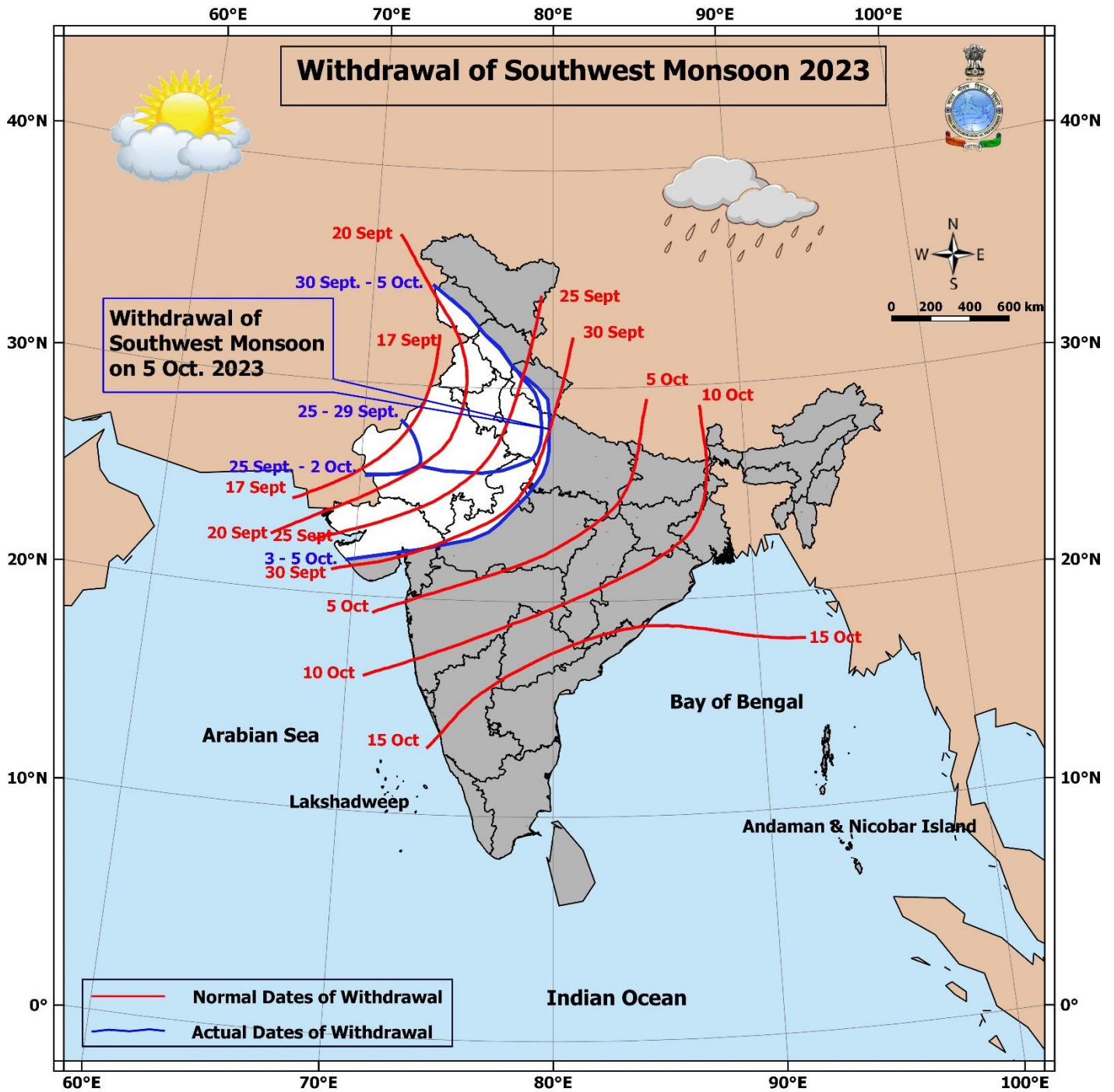
- ❖ The line of withdrawal of Southwest Monsoon continues to pass through Gulmarg, Dharamshala, Mukteshwar, Pilibhit, Orai, Ashoknagar, Indore, Baroda and Porbandar.
- ❖ Conditions are becoming favourable for further withdrawal of Southwest Monsoon from remaining parts of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, West Uttar Pradesh, West Madhya Pradesh, Gujarat state; some parts of East Uttar Pradesh, East Madhya Pradesh, Maharashtra during next 2 days.
- ❖ The **Low Pressure Area** over western parts of Gangetic West Bengal & neighbourhood with the associated cyclonic circulation extending upto 7.6 km above mean sea level persists.
- ❖ The **trough** from the cyclonic circulation associated with the Low Pressure Area over western parts of Gangetic West Bengal & neighbourhood to East Uttar Pradesh across Jharkhand extending upto 1.5 km above mean sea level persists.
- ❖ A fresh Western Disturbance likely to affect Northwest Indian region from the night of 08th October, 2023.

Weather Forecast for next 5 days (Upto 0830 hours IST of 10th October, 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 India and Islands.
- ❖ Isolated rainfall likely over parts of South peninsular India. Dry weather likely to prevail over rest parts of the country.



* 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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Table-1

7 Days Rainfall Forecast

S. No.	Subdivision	05-Oct	06-Oct	07-Oct	08-Oct	09-Oct	10-Oct	11-Oct
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS	WS	WS	WS	WS	WS	FWS
2	ARUNACHAL PRADESH	WS	WS	FWS	SCT	SCT	SCT	SCT
3	ASSAM & MEGHALAYA	WS	WS	FWS	FWS	SCT	SCT	SCT
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	WS	FWS	FWS	FWS	FWS	FWS	FWS
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	WS	WS	FWS	FWS	FWS	SCT	SCT
6	GANGETIC WEST BENGAL	WS	FWS	SCT	SCT	ISOL	ISOL	ISOL
7	ODISHA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
8	JHARKHAND	FWS	ISOL	ISOL	ISOL	ISOL	DRY	DRY
9	BIHAR	SCT	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
10	EAST UTTAR PRADESH	ISOL	DRY	DRY	DRY	DRY	ISOL	DRY
11	WEST UTTAR PRADESH	DRY	DRY	DRY	DRY	ISOL	ISOL	DRY
12	UTTARAKHAND	DRY	DRY	DRY	DRY	SCT	ISOL	DRY
13	HARYANA CHANDIGARH & DELHI	DRY	DRY	DRY	DRY	ISOL	DRY	DRY
14	PUNJAB	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
15	HIMACHAL PRADESH	DRY	DRY	DRY	DRY	SCT	ISOL	DRY
16	JAMMU & KASHMIR AND LADAKH	DRY	DRY	DRY	ISOL	SCT	DRY	DRY
17	WEST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
19	WEST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
20	EAST MADHYA PRADESH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
21	GUJARAT REGION	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASHTRA & KUTCH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
24	MADHYA MAHARASHTRA	ISOL	DRY	DRY	ISOL	ISOL	DRY	DRY
25	MARATHAWADA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
26	VIDARBHA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
27	CHHATTISGARH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
28	COASTAL ANDHRA PRADESH & YANAM	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL
30	RAYALASEEMA	ISOL	ISOL	ISOL	ISOL	SCT	SCT	SCT
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	ISOL	ISOL	SCT	SCT	SCT	SCT
32	COASTAL KARNATAKA	SCT	SCT	SCT	FWS	FWS	FWS	FWS
33	NORTH INTERIOR KARNATAKA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
34	SOUTH INTERIOR KARNATAKA	ISOL	ISOL	ISOL	ISOL	SCT	SCT	SCT
35	KERALA & MAHE	ISOL	ISOL	ISOL	SCT	SCT	SCT	SCT
36	LAKSHADWEEP	SCT	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
DRY	No Rain	0

Fig. 1: Maximum Temperatures Dated 05.10.2023

Fig. 2: Departure of Maximum Temp. Dated 05.10.2023

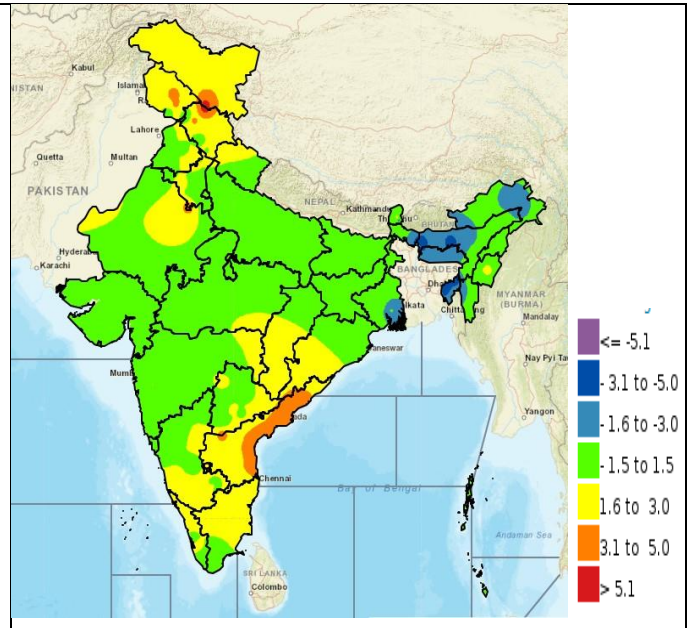
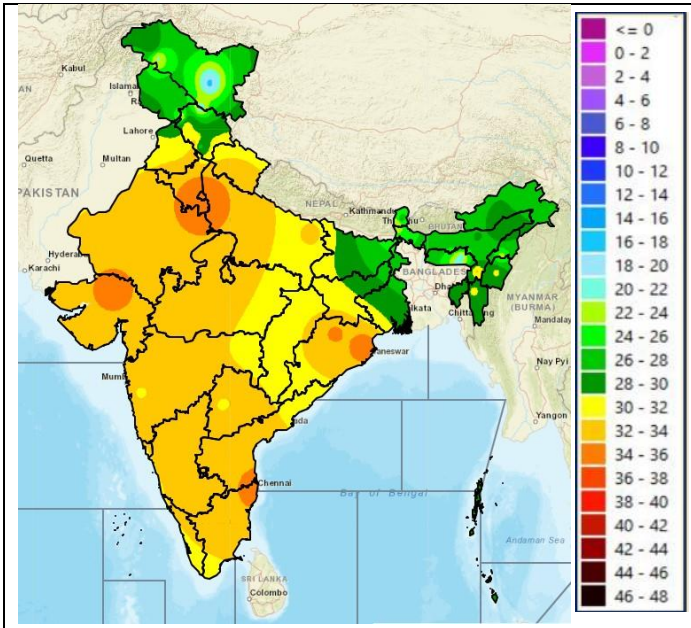


Fig. 3: Minimum Temperatures Dated 05.10.2023

Fig. 4: Departure of Minimum Temp. Dated 05.10.2023

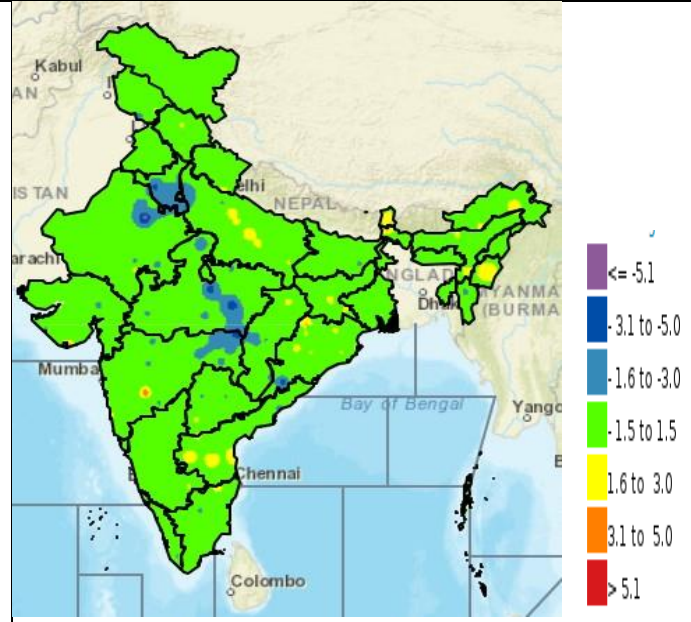
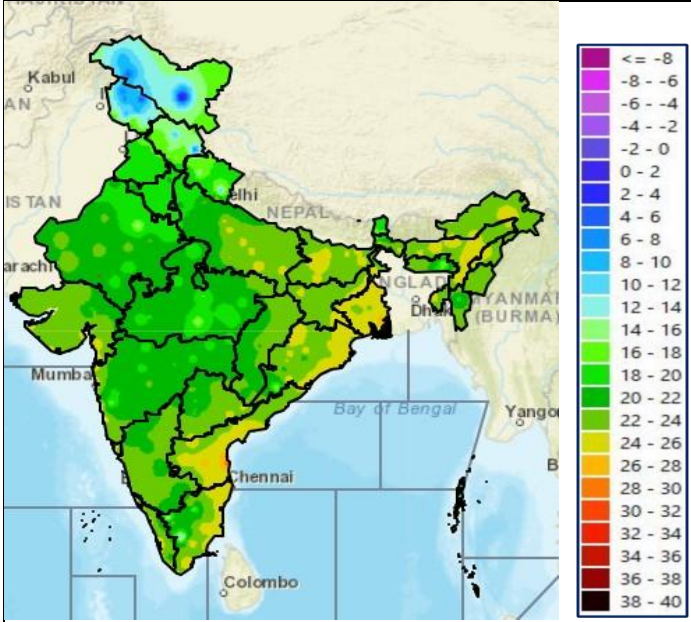
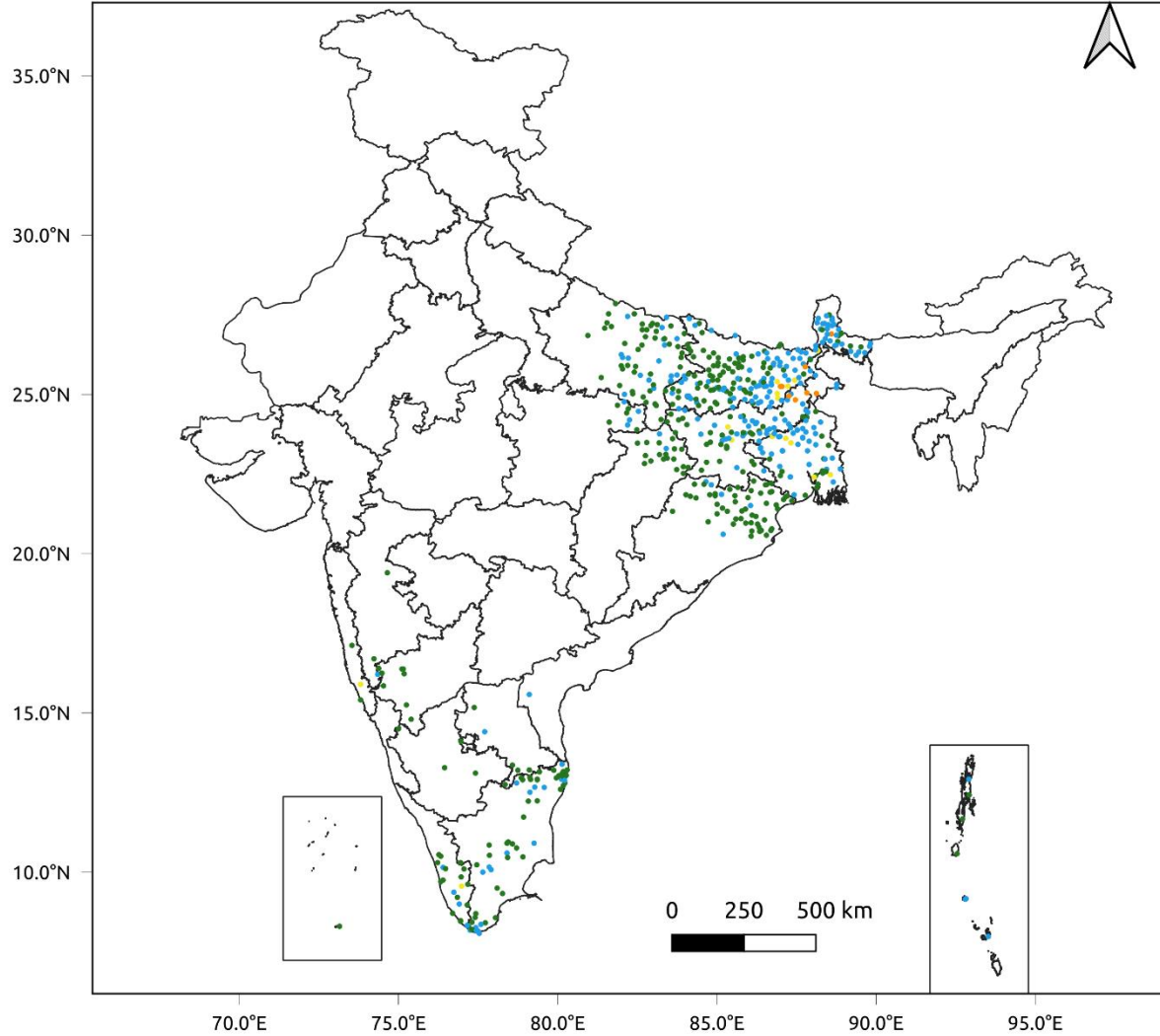


Fig. 5: Accumulated Rainfall (mm) during past 24 hours

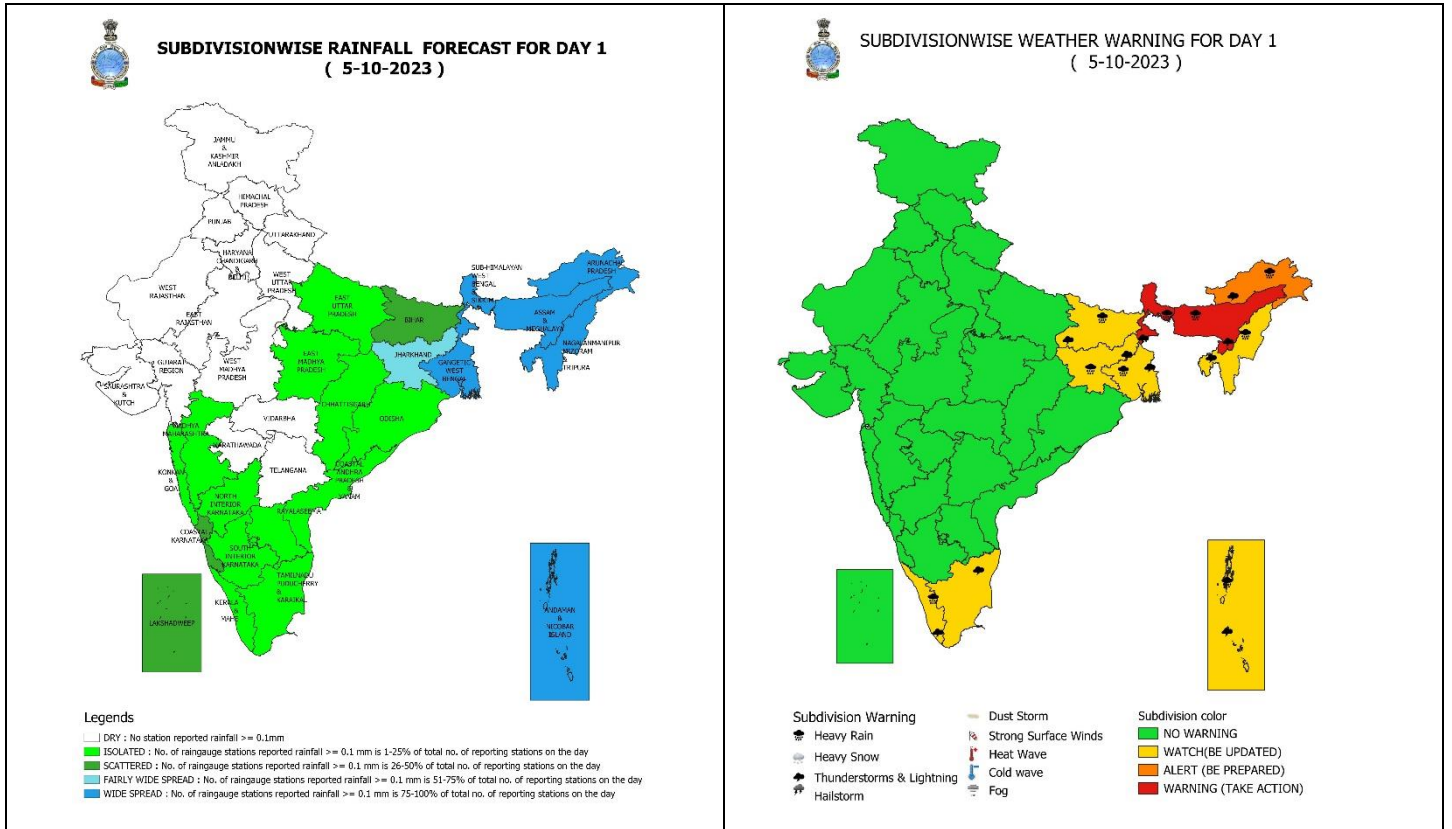


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 4-10-2023 to 0830 IST of 5-10-2023



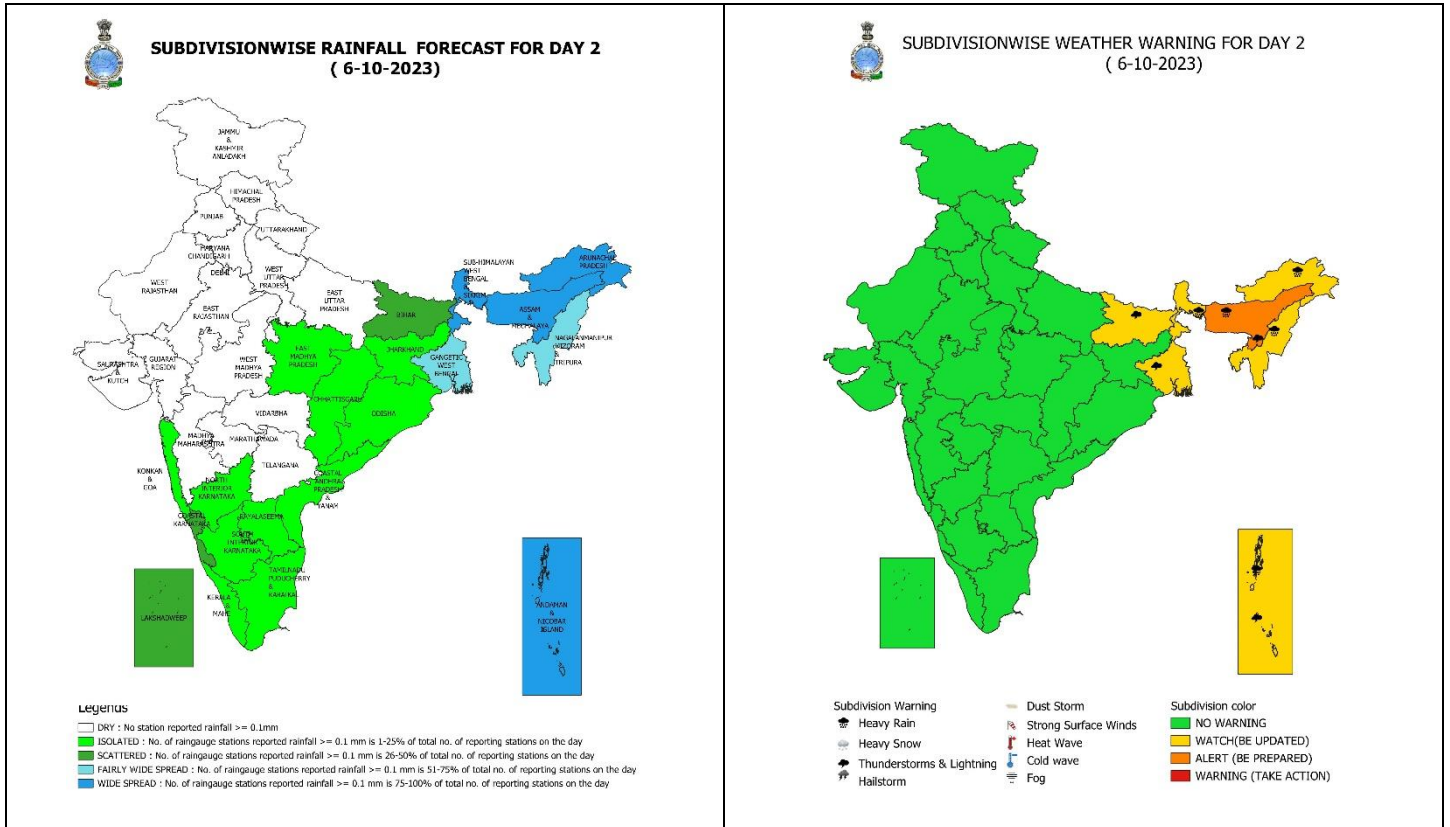
Legends

- 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)



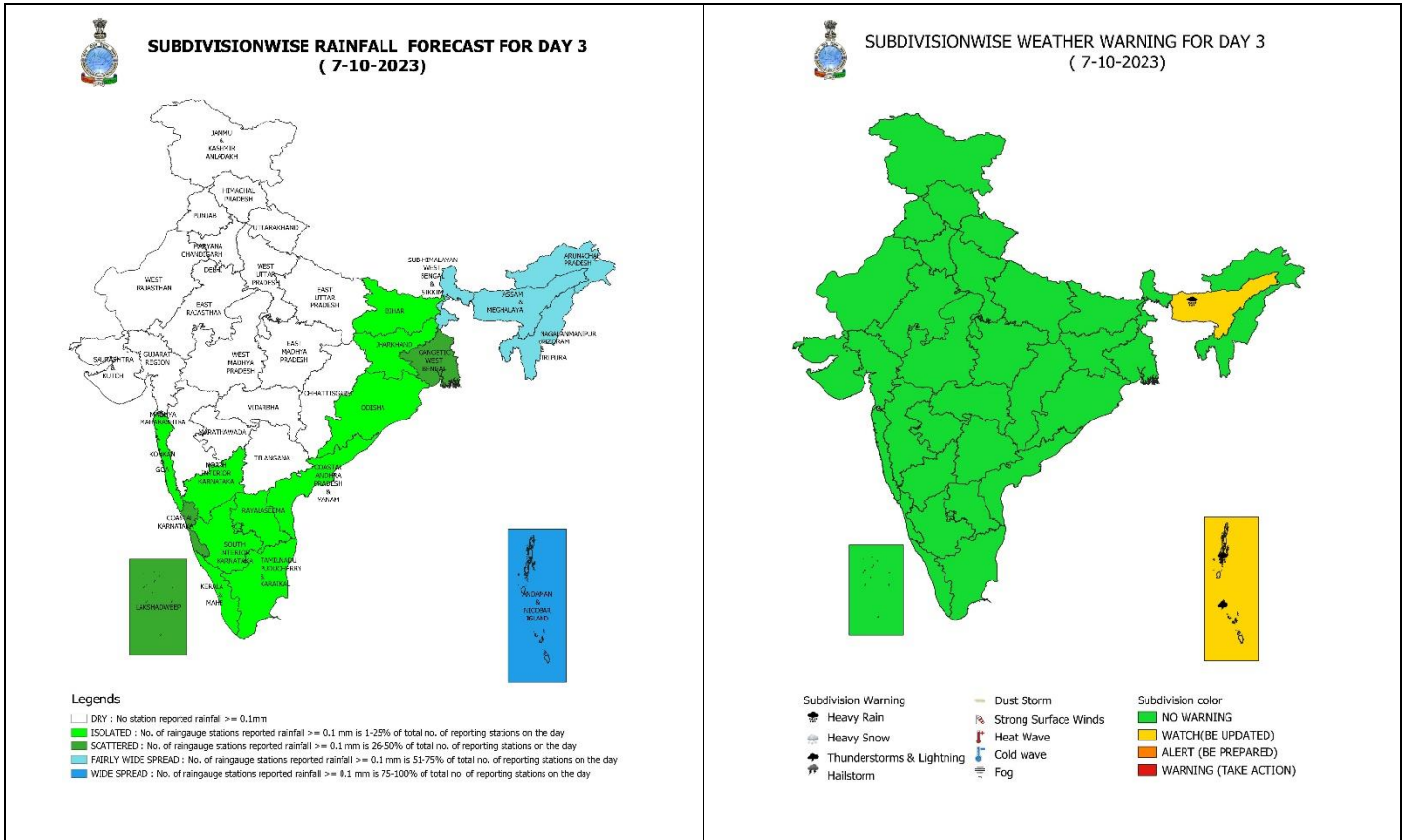
05 October (Day 1):

- ❖ **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Meghalaya, Sub-Himalayan West Bengal; **Heavy to very heavy rainfall** at isolated places over Sikkim, Assam and Arunachal Pradesh; **Heavy rainfall** at isolated places over Andaman & Nicobar Islands, East Bihar, Northeast Jharkhand, Gangetic West Bengal and Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe.
- ❖ **Thunderstorm with lightning** very likely at isolated places over Andaman & Nicobar Islands, Bihar, Jharkhand, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.



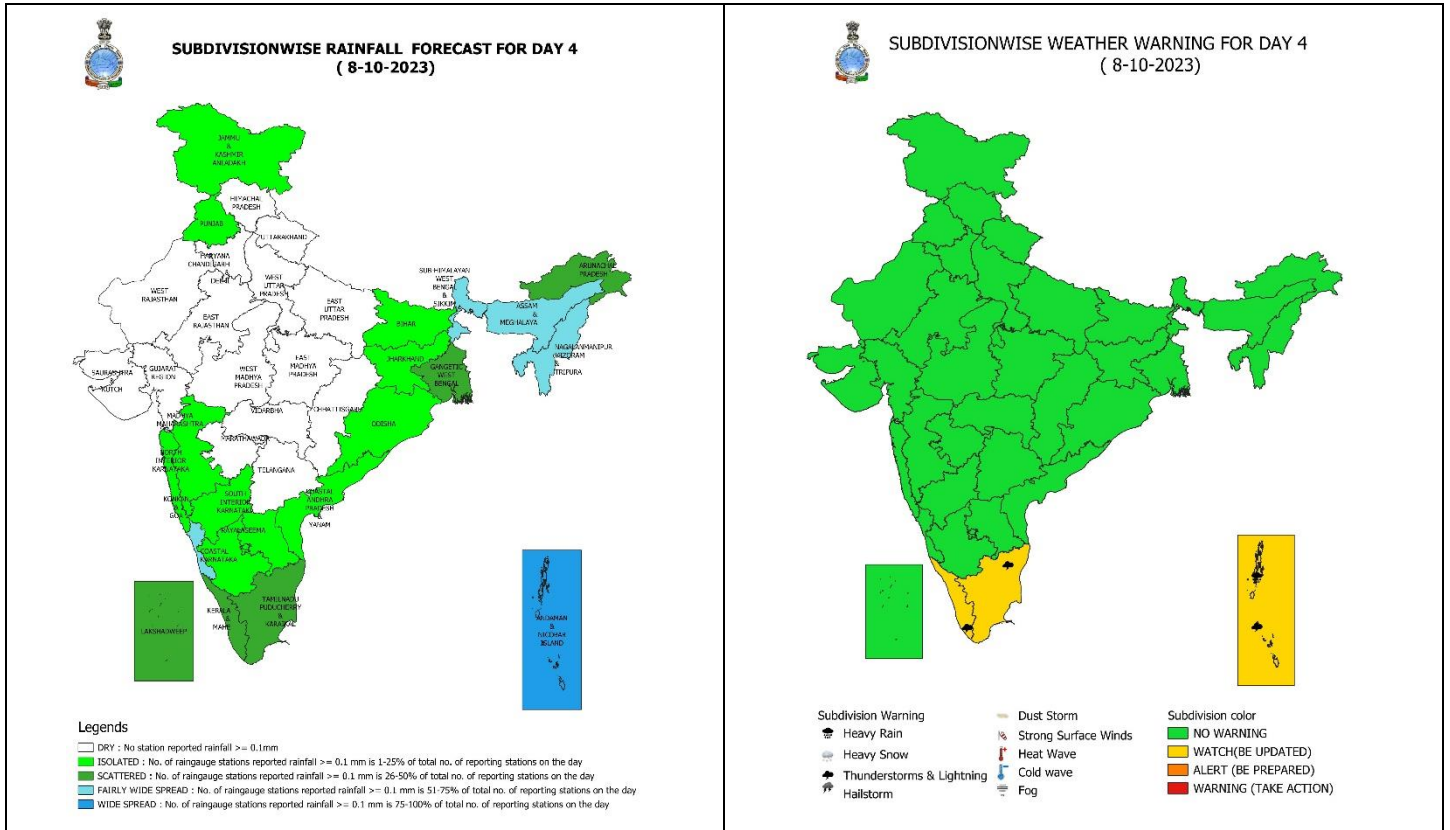
06 October (Day 2):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Assam & Meghalaya; **Heavy rainfall** at isolated places over Andaman & Nicobar Islands, Sub-Himalaya West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura and Arunachal Pradesh.
- ❖ **Thunderstorm with lightning & gusty winds (speed 30-40 kmph)** very likely at isolated places over Andaman & Nicobar Islands; **with lightning** likely at isolated places over Gangetic West Bengal, Bihar, Assam & Meghalaya.



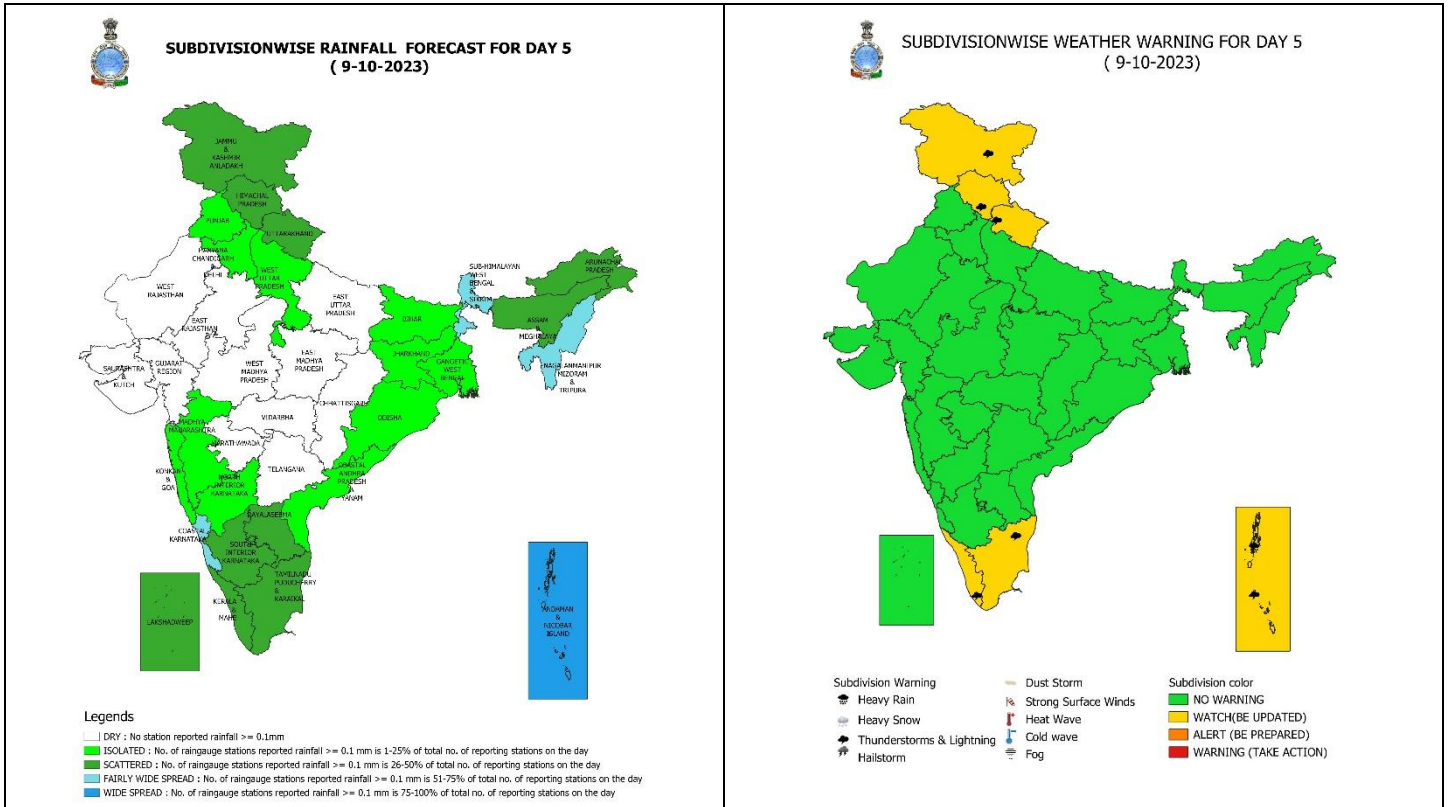
07 October (Day 3):

- ❖ Heavy rainfall likely at isolated places over Andaman & Nicobar Islands and Assam & Meghalaya.
- ❖ Thunderstorm with lightning & gusty winds (speed 30-40 kmph) likely at isolated places over Andaman & Nicobar Islands.



08 October (Day 4):

- ❖ **Heavy rainfall** likely at isolated places over Andaman & Nicobar Islands.
- ❖ **Thunderstorm with lightning & gusty winds (speed 30-40 kmph)** likely at isolated places over Andaman & Nicobar Islands, Kerala & Mahe; with lightning at isolated places over Tamil Nadu, Puducherry & Karaikal.



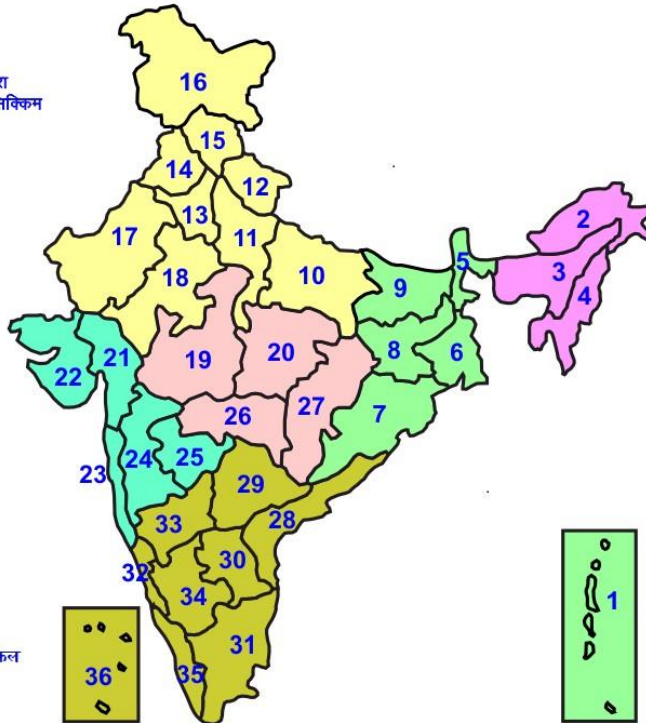
09 October (Day 5):

- ❖ **Heavy rainfall** likely at isolated places over Andaman & Nicobar Islands.
- ❖ **Thunderstorm with lightning & gusty winds (speed 30-40 kmph)** likely at isolated places over Andaman & Nicobar Islands, Kerala & Mahe; with lightning at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Tamil Nadu, Puducherry & Karaikal.



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 गंगोय 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 मराठावाडा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 तटीय आंध्र प्रदेश एवं यनम
- 29 तेलंगाना
- 30 रायलसीमा
- 31 तमिलनाडु, पुदुचेरी एवं कराईकल
- 32 तटिय कर्नाटक
- 33 आंतरिक उत्तरी कर्नाटक
- 34 आंतरिक दक्षिणी कर्नाटक
- 35 केरल एवं माहे
- 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

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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 $< 1\text{km}$

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)

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