



Sunday, October 15, 2023
Time of Issue: 1945 hours IST
(NIGHT)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

Withdrawal of Southwest Monsoon:

- ❖ The line of withdrawal of Southwest Monsoon continues to pass through Forbesganj, Malda, 24.0°N/89.0°E, 20.0°N/89.0°E, Vishakhapatnam, Nalgonda, Raichur, Vengurla & 16.0°N/70.0°E.

Significant Weather features:

- ❖ A **Western Disturbance** as a cyclonic circulation lies over Jammu division & adjoining Pakistan in lower tropospheric levels and its induced cyclonic circulation lies over Punjab in lower levels. Another, Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 60°E to the north of Lat. 26°N.
- ❖ In addition, there is moisture feeding from Arabian Sea to northwest India in lower tropospheric levels.
- ❖ A cyclonic circulation lies over coastal Tamil Nadu & neighbourhood in lower tropospheric levels.
- ❖ Another **cyclonic circulation** lies over Lakshadweep area and adjoining Southeast Arabian sea & Kerala coast and extends upto 3.1 km above mean sea level. Under its influence, a **Low Pressure Area** is likely to develop over Southeast & adjoining Eastcentral Arabian Sea around 17th October. It is likely to move west-northwestwards and intensify further during subsequent 48 hours.

Weather warnings for next 5 days:

Northwest India: Light to moderate rainfall at many places accompanied with isolated thunderstorm & lightning very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Haryana, Chandigarh, Punjab on 15th & 16th, a few places over Uttar Pradesh and Rajasthan on 15th & 16th October, 2023 and isolated rainfall on 17th over the above areas.

Isolated **heavy rainfall** also likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Punjab on 16th and over Himachal Pradesh on 15th & 16th October, 2023.

South India: Light to moderate rainfall at many places with isolated heavy rainfall, thunderstorm, gusty wind (30-40 kmph) & lightning very likely over Tamilnadu, Puducherry & Karaikal and Kerala & Mahe during 15th -17th; over Lakshadweep area on 15th & 16th and over South Interior Karnataka on 16th October, 2023.

Isolated **very heavy rainfall** also likely over Kerala on 15th & 16th October, 2023.

East India: Light to moderate rainfall at most places with isolated **heavy rainfall** accompanied with thunderstorm & lightning very likely over Andaman & Nicobar Islands during 15th to 19th October.

No significant weather over rest parts of the country during next 5 days.



Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of today): **at many places** over Kerala & Mahe; **at a few places over** Himachal Pradesh, Uttarakhand, Konkan & Goa, Lakshadweep, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura **and at isolated places over** Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Haryana-Chandigarh-Delhi, Sub-Himalayan West Bengal & Sikkim, Gujarat Region, Madhya Maharashtra, Coastal Karnataka, North Interior Karnataka, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Significant rainfall recorded** (from 0830 hours IST to 1730 hours IST of today): (in cm): **Kerala & Mahe:** Kollam-2, **Nagaland:** Sakshi-2; **Ladakh:** Upshi-4; **Uttarakhand:** Jhulaghat-2, Nainbagh, Mana, Thal, Didihat & Kanalichhina-1 each; **Konkan & Goa:** Chiplun-4, Mulde-2, Savarde & Valpoi-1 each; **Coastal Karnataka:** Nilkund-1; **Lakshadweep:** Kavaratti-1.
- ❖ **Minimum Temperature Departures (as on 15-10-2023):** Minimum temperatures are **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Jharkhand, Marathwada and Haryana-Chandigarh-Delhi; **above normal (1.6°C to 3.0°C)** at many places over Rayalaseema and Gujarat Region; at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, West Uttar Pradesh, Saurashtra & Kutch and at isolated places over East Uttar Pradesh, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Madhya Maharashtra, Madhya Pradesh and Assam & Meghalaya. They are **below normal (-1.6°C to -3.0°C)** at isolated places over Nagaland, Manipur, Mizoram & Tripura and Bihar and **near normal** over rest parts of the country. Today, **the lowest minimum temperature of 18.6°C** is reported at **Dhar (West Madhya Pradesh)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 15-10-2023):** Maximum temperatures are **above normal (1.6°C to 3.0°C)** at most places over East Madhya Pradesh, Vidarbha, Coastal Andhra Pradesh & Yanam and Rayalaseema; at many places over East Uttar Pradesh, Chhattisgarh, Madhya Maharashtra, Telangana and Interior Karnataka; at a few places over Jharkhand, Gangetic West Bengal, Odisha, Coastal Karnataka and Tamil Nadu, Puducherry & Karaikal and at isolated places over East Rajasthan, Bihar, West Uttar Pradesh, West Madhya Pradesh and Konkan & Goa. They are **below normal (-1.6°C to -3.0°C)** at a few places over Himachal Pradesh; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, West Rajasthan, Uttarakhand, Saurashtra & Kutch and Nagaland, Manipur, Mizoram & Tripura and **near normal** over rest parts of the country. Today, **the highest maximum temperature of 37.4°C** is reported at **Kurnool (Rayalaseema)**.

Meteorological Analysis (Based on 1730 hours IST)

- ❖ The line of withdrawal of Southwest Monsoon continues to pass through Forbesganj, Malda, 24.0°N/89.0°E, 20.0°N/89.0°E, Vishakhapatnam, Nalgonda, Raichur, Vengurla & 16.0°N/70.0°E.
- ❖ The **Western Disturbance** as a cyclonic circulation over Jammu division & adjoining Pakistan at 3.1 km above mean sea level with trough aloft in middle tropospheric westerlies with its axis at 5.8 km above mean sea level now runs roughly along Long. 70°E to the north of Lat. 30°N.
- ❖ The **induced cyclonic circulation** over Punjab & neighbourhood at 0.9 km above mean sea level persists.
- ❖ The other **Western Disturbance** as a trough in westerlies between 3.1 km & 4.5 km above mean sea level now runs roughly along Long. 60°E to the north of Lat. 26°N.
- ❖ The **cyclonic circulation** over Lakshadweep area and adjoining Southeast Arabian sea & Kerala coast extending upto 3.1 km above mean sea level persists. Under its influence, a **Low Pressure Area** is likely to develop over Southeast & adjoining Eastcentral Arabian Sea around 17th October. It is likely to move west-northwestwards and intensify further during subsequent 48 hours.
- ❖ The trough from east Bihar to south Bangladesh across West Bengal extending upto 1.5 km above mean sea level persists.
- ❖ The **cyclonic circulation** over coastal Tamil Nadu & neighbourhood extending upto 2.1 km above mean sea level persists.

Weather Forecast for next 5 days (Upto 0830 hours IST of 20th 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 Kerala, coastal & South Interior Karnataka, Tamil Nadu and Islands.
- ❖ Isolated to scattered rainfall likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, west Rajasthan Coastal Andhra Pradesh & Yanam. Mainly dry weather likely to prevail over rest parts of the country.

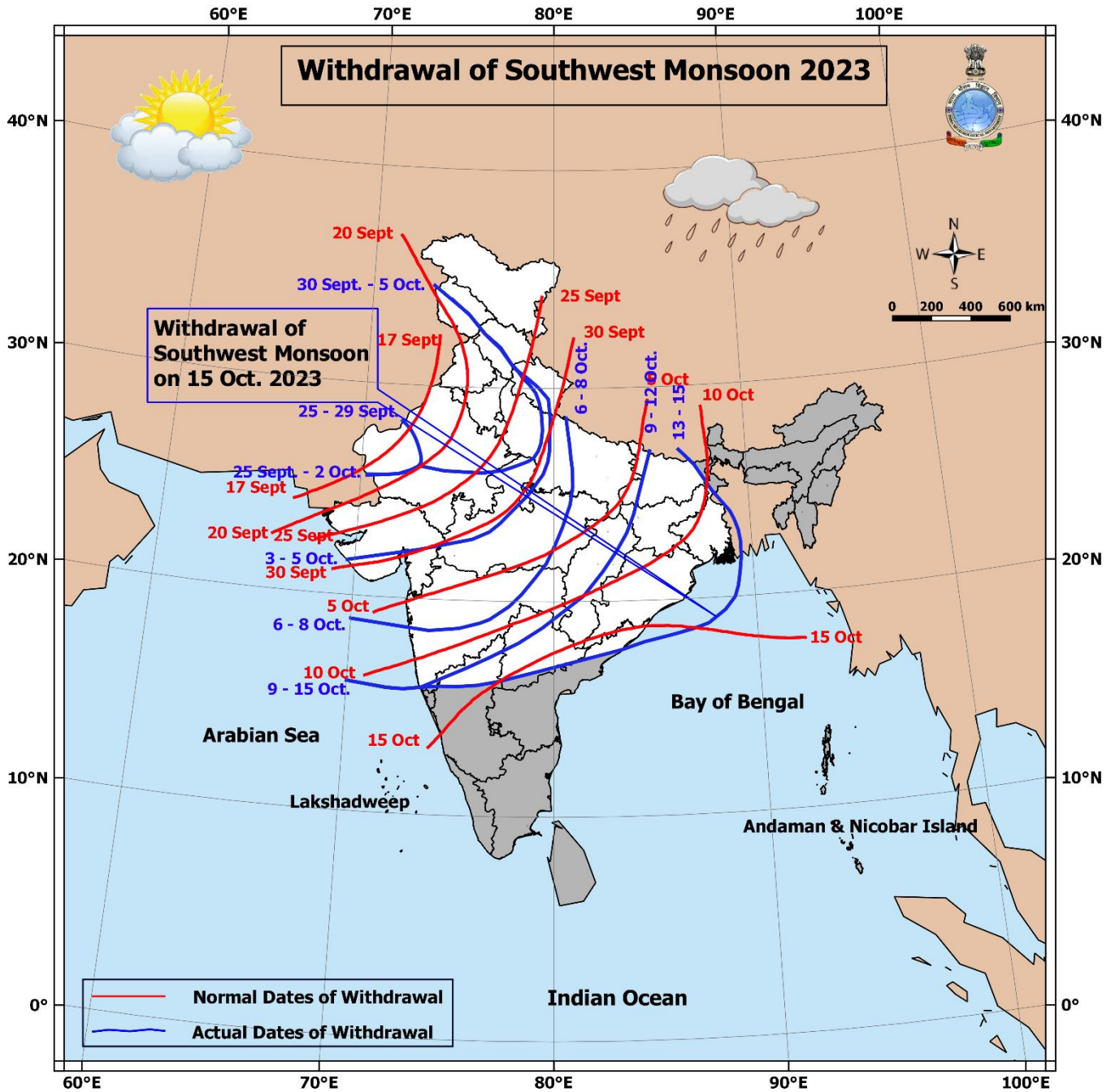




Table-1

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

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

* 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)

Fig. 1: Maximum Temperatures Dated 15.10.2023

Fig. 2: Departure of Maximum Temp. Dated 15.10.2023

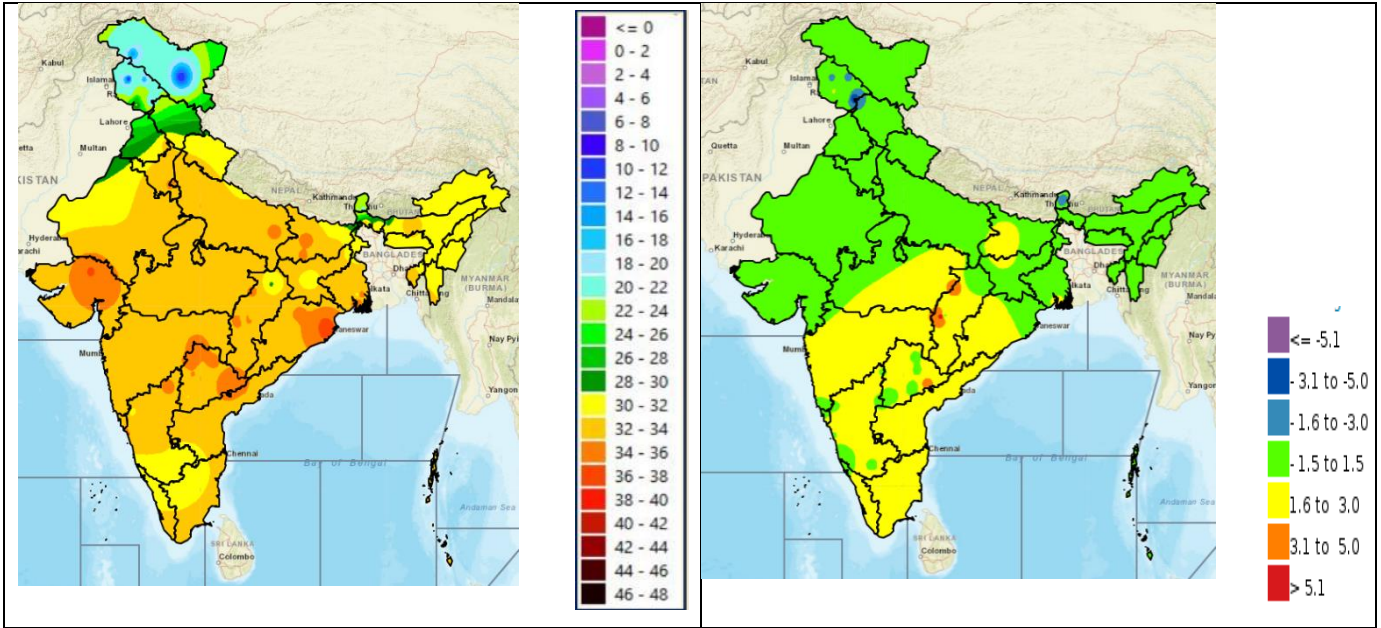


Fig. 3: Minimum Temperatures Dated 15.10.2023

Fig. 4: Departure of Minimum Temp. Dated 15.10.2023

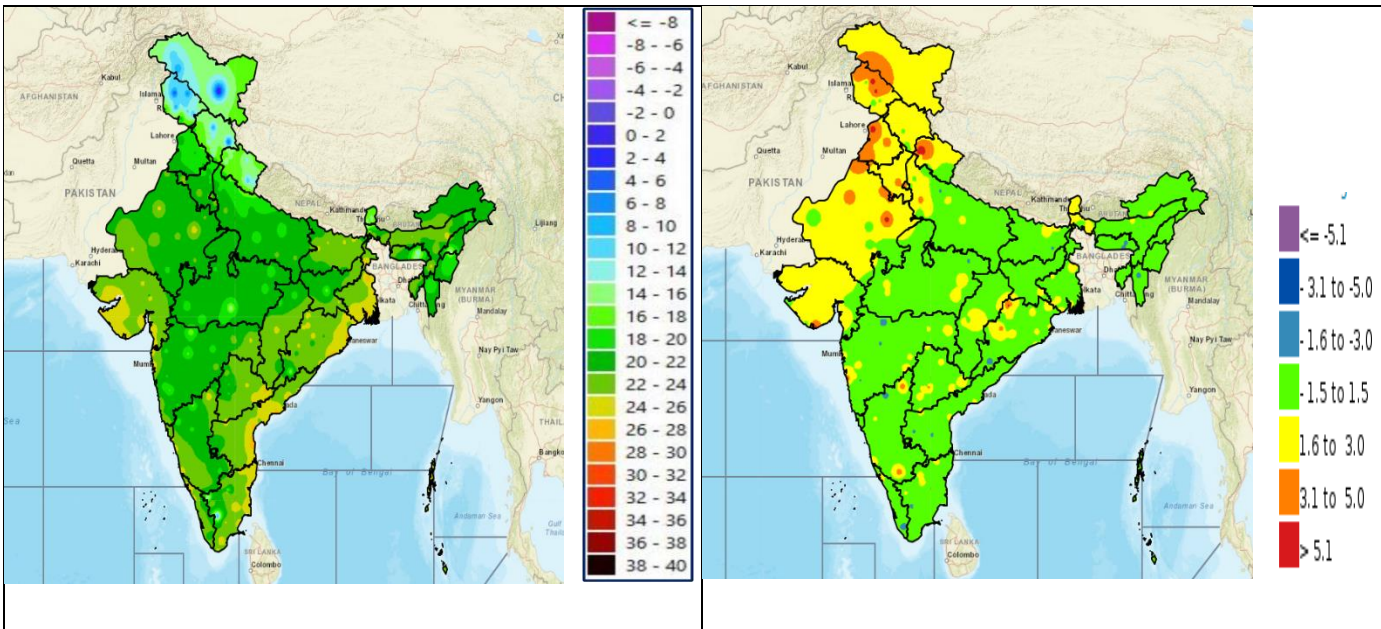
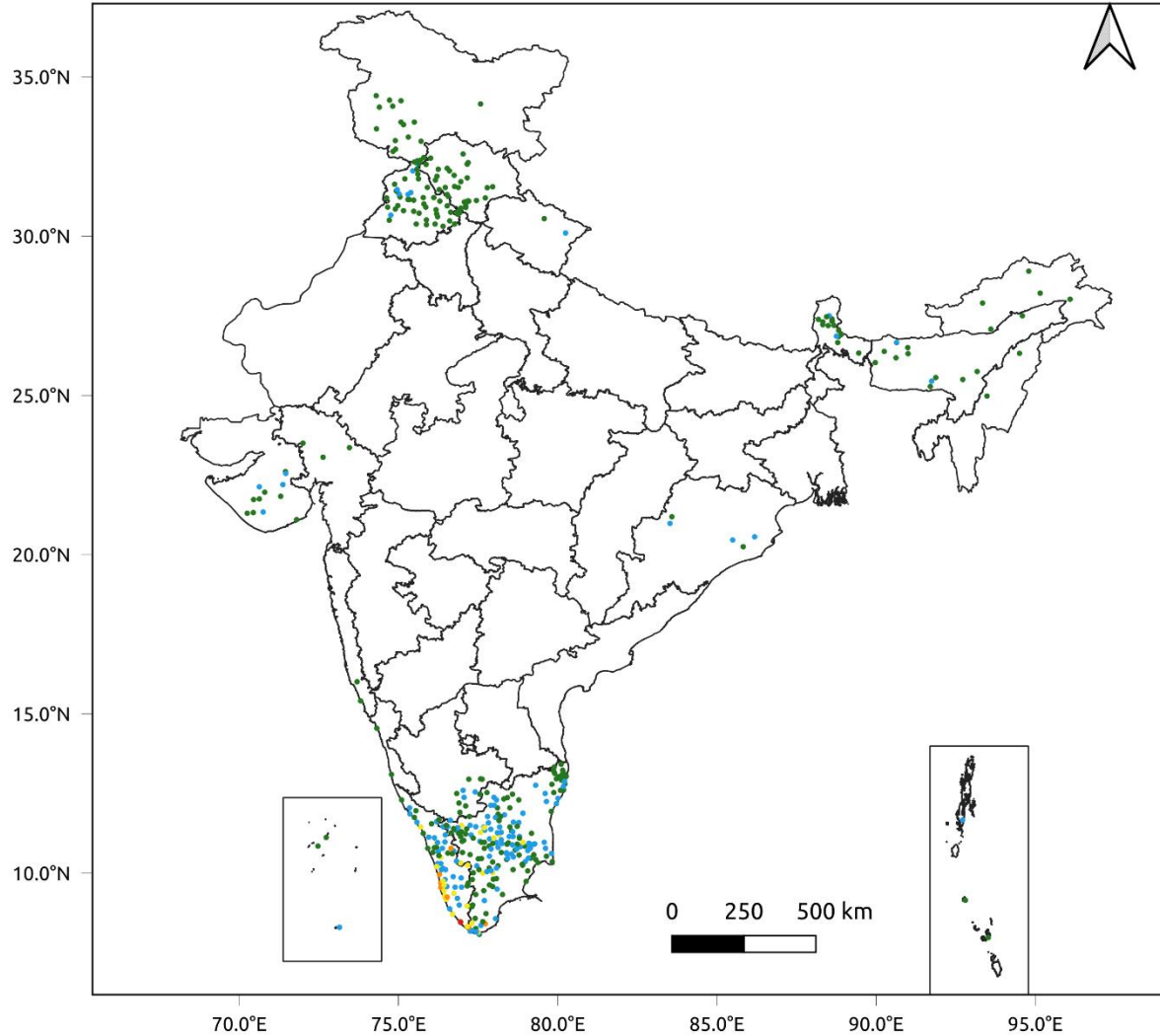


Fig. 5: Accumulated Rainfall (mm) during past 24 hours

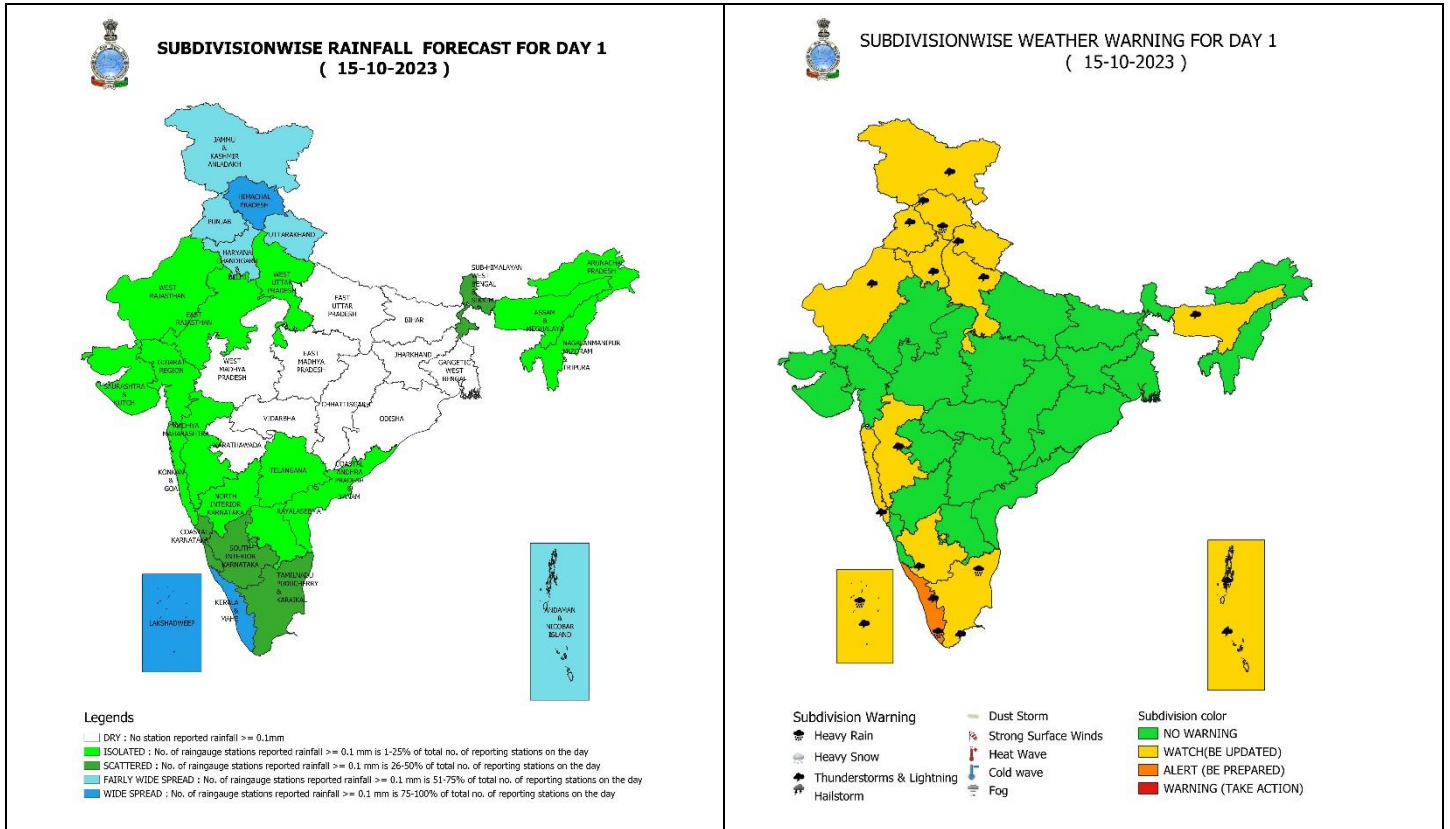


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 14-10-2023 to 0830 IST of 15-10-2023



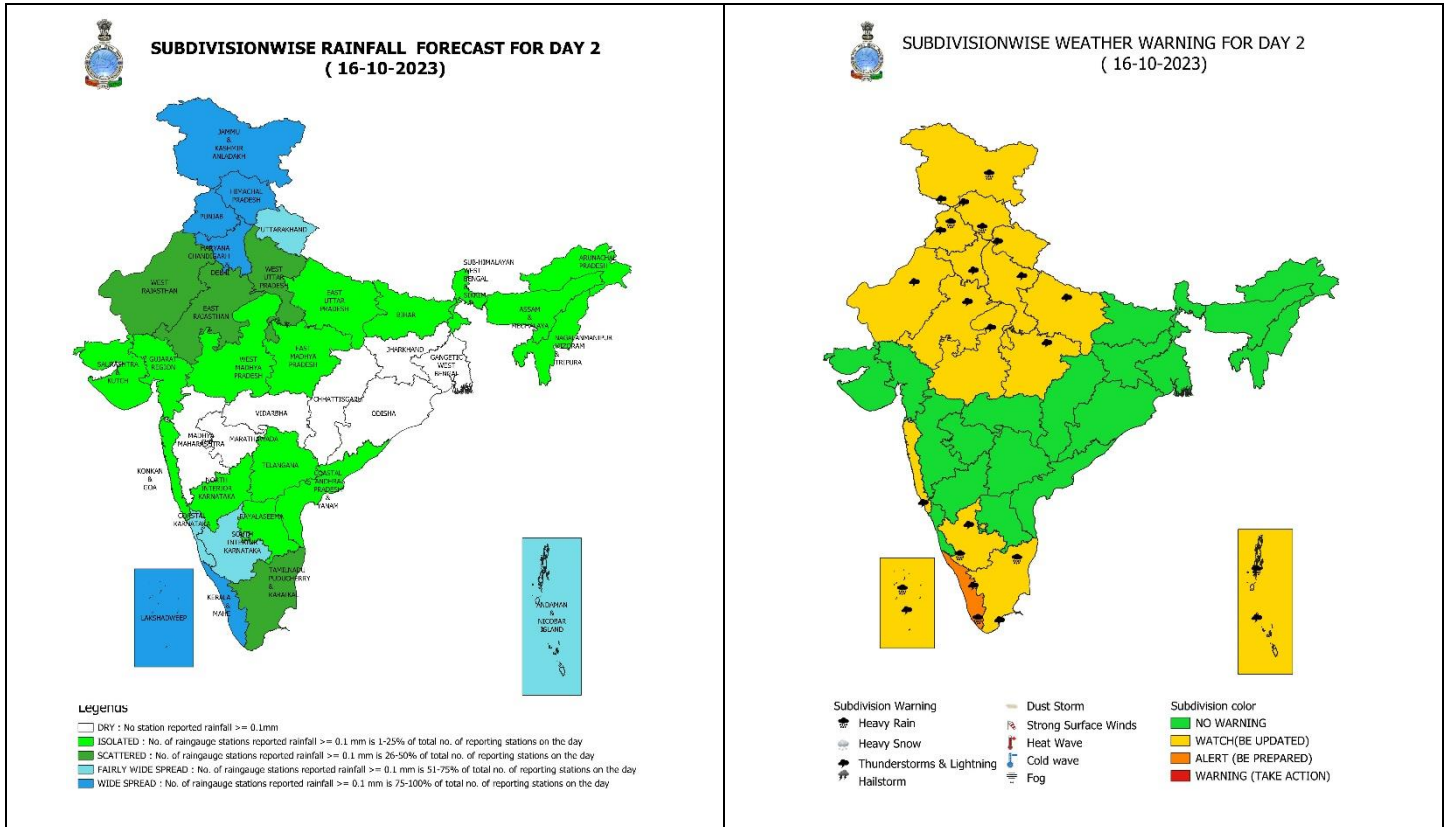
Legends

- 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)



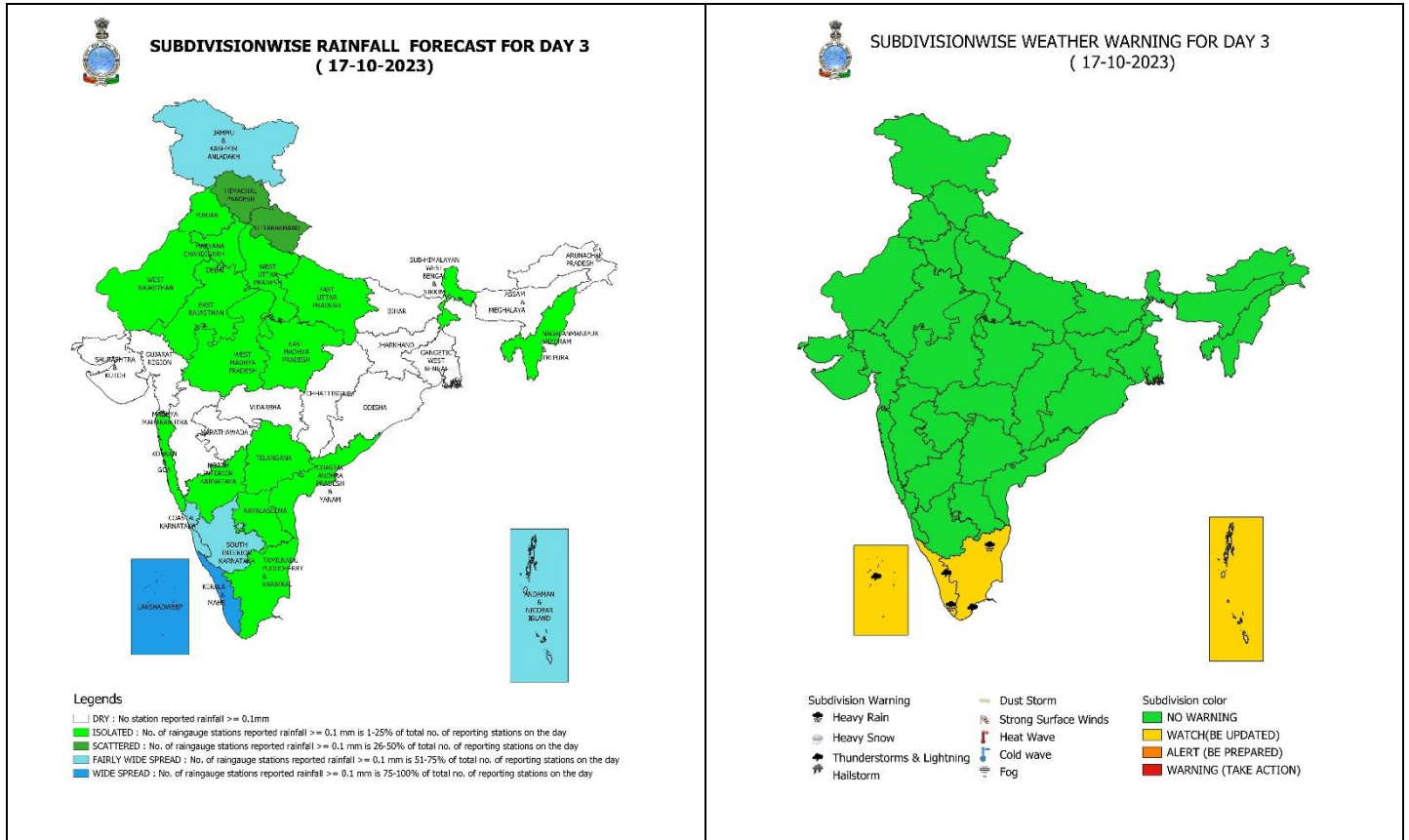
15 October (Day 1):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Kerala & Mahe; **heavy rainfall** very likely over Himachal Pradesh, Andaman & Nicobar Islands, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.
- ❖ **Thunderstorm with lightning accompanied with gusty winds speed reaching 30-40 kmph** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Kerala & Mahe and Lakshadweep area; **Thunderstorm with lightning** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, West Rajasthan, West Uttar Pradesh, Andaman & Nicobar Islands, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra, South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Squally weather** (wind speed 40-45 kmph gusting to 55 kmph) very likely over Lakshadweep area and adjoining southeast Arabian Sea & Kerala coast, Comorin area and Gulf of Mannar. Fishermen are advised not to venture into these areas.



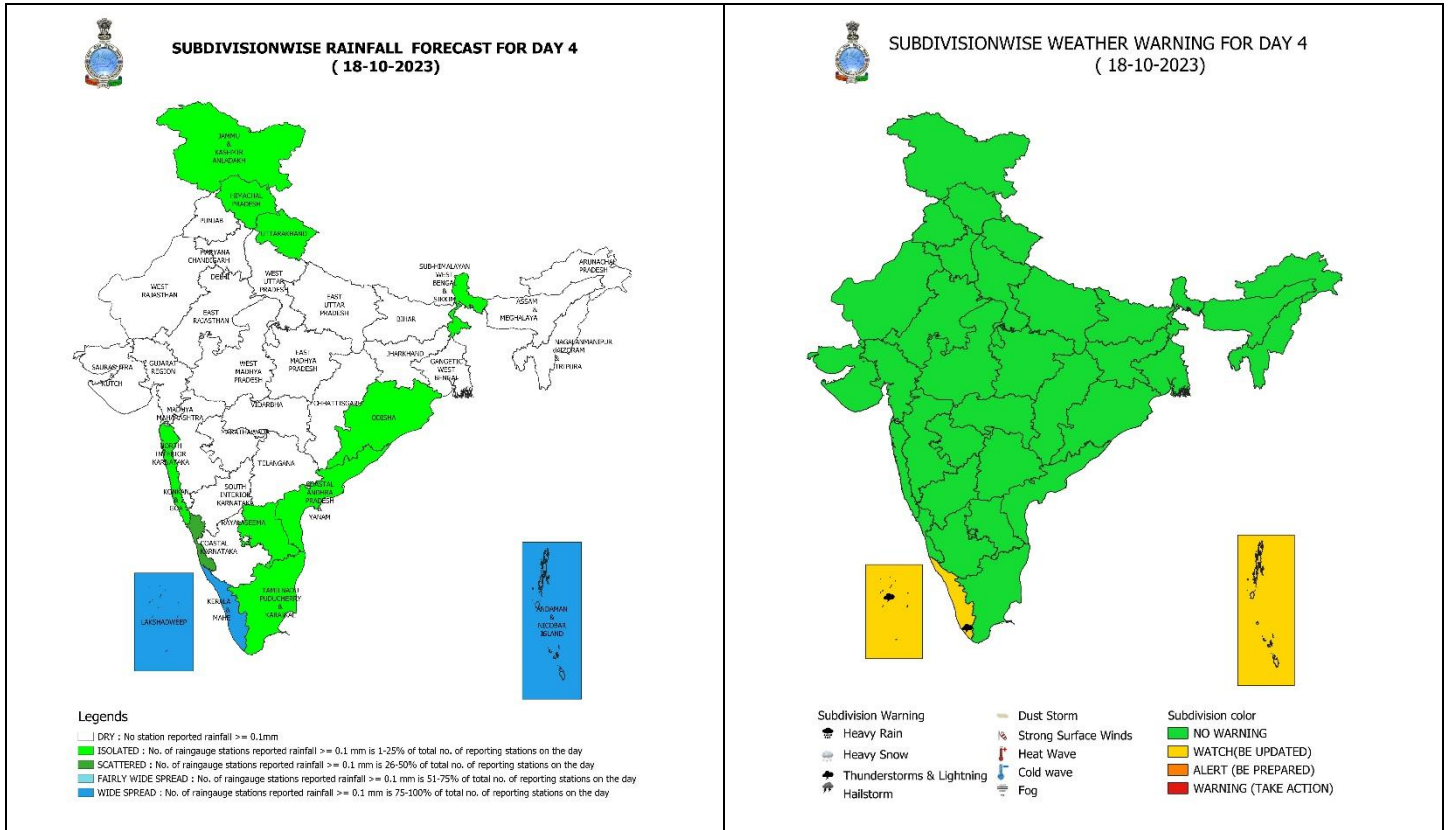
16 October (Day 2):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Kerala & Mahe; **heavy rainfall** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab, Andaman & Nicobar Islands, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.
- ❖ **Thunderstorm with lightning accompanied with gusty winds speed reaching 30-40 kmph** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Kerala & Mahe, Lakshadweep; **Thunderstorm with lightning** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Andaman & Nicobar Islands, Konkan & Goa, South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Squally weather** (wind speed 40-45 kmph gusting to 55 kmph) very likely over Lakshadweep area and adjoining southeast Arabian Sea & Kerala coast, Comorin area and Gulf of Mannar. Fishermen are advised not to venture into these areas.



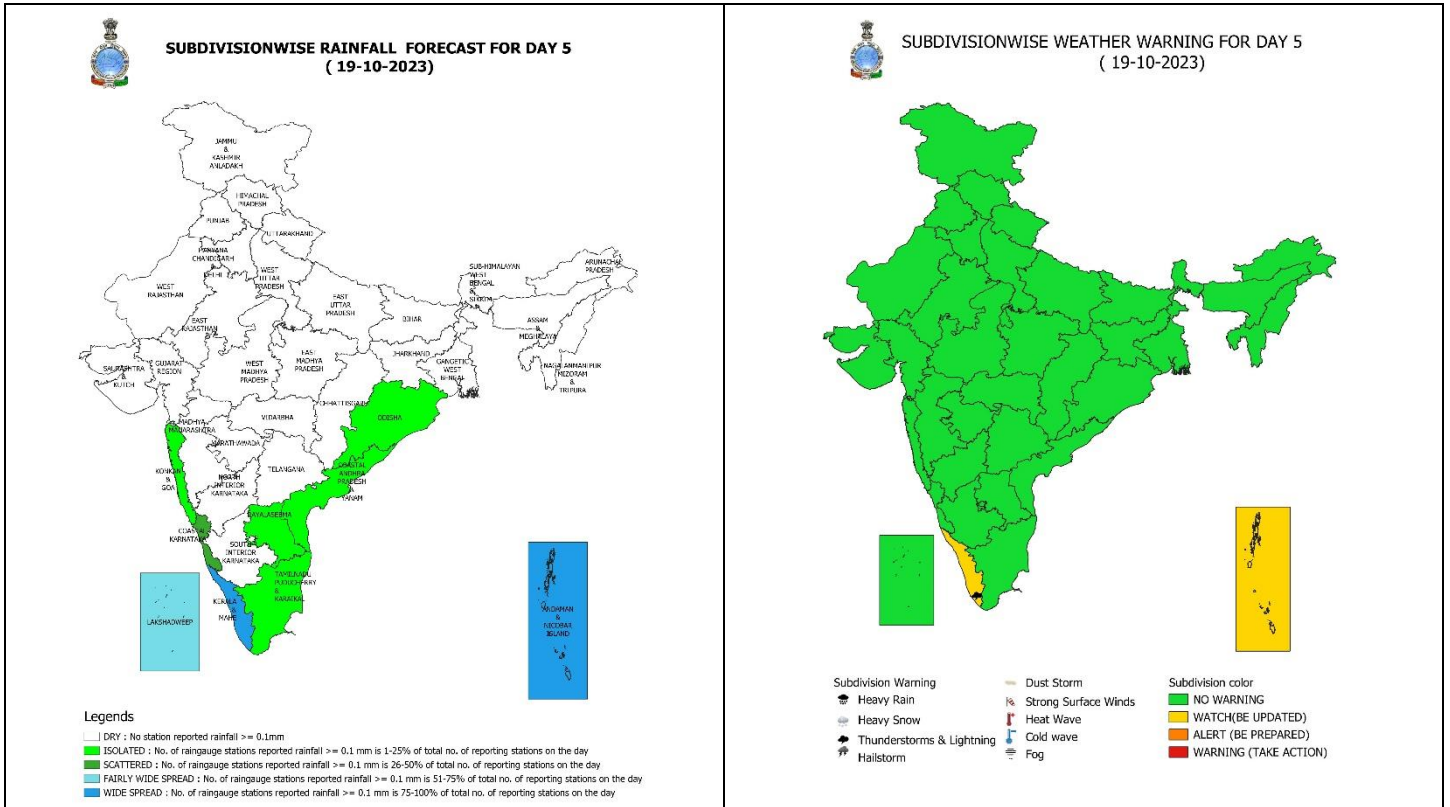
17 October (Day 3):

- ❖ **Heavy rainfall** very likely at isolated places over Andaman & Nicobar Islands, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- ❖ **Thunderstorm with lightning accompanied with gusty winds speed reaching 30-40 kmph** very likely at isolated places over Kerala & Mahe and Lakshadweep; **with lightning** at isolated places over Andaman & Nicobar Islands and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Squally weather** (wind speed 40-45 kmph gusting to 55 kmph) very likely over southeast Arabian Sea and adjoining Lakshadweep area & Kerala coast. Fishermen are advised not to venture into these areas.



18 October (Day 4):

- ❖ **Heavy rainfall** very likely at isolated places over Andaman & Nicobar Islands.
- ❖ **Thunderstorm with lightning accompanied with gusty winds speed reaching 30-40 kmph** very likely at isolated places over Kerala & Mahe and Lakshadweep; **with lightning** at isolated places over Andaman & Nicobar Islands.
- ❖ **Squally weather** (wind speed 40-45 kmph gusting to 55 kmph) very likely over southeast Arabian Sea and adjoining Lakshadweep area. Fishermen are advised not to venture into these areas.

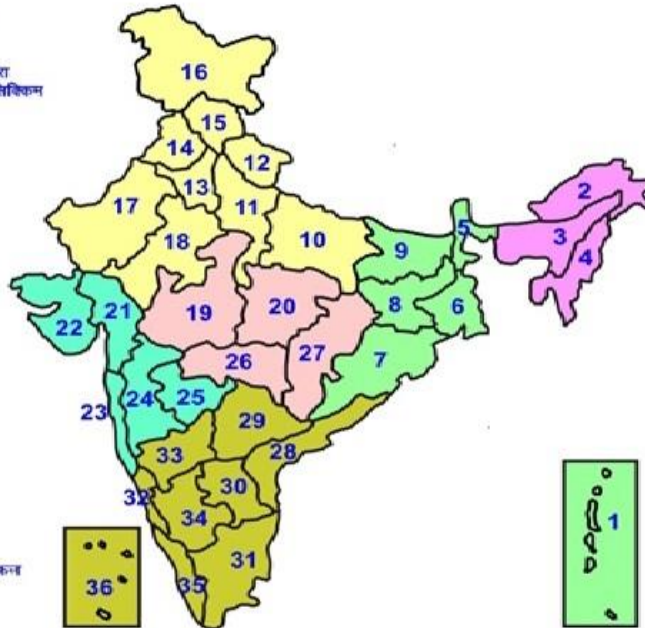


19 October (Day 5):

- ❖ **Heavy rainfall** very likely at isolated places over Andaman & Nicobar Islands.
- ❖ **Thunderstorm with lightning accompanied with gusty winds speed reaching 30-40 kmph** very likely at isolated places over Kerala & Mahe; **with lightning** at isolated places over Andaman & Nicobar Islands.
- ❖ **Squally weather** (wind speed 40-45 kmph gusting to 55 kmph) very likely over southeast & adjoining eastcentral Arabian Sea. Fishermen are advised not to venture into these areas.

LEGENDS

- 1 अंडमान और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड मनीपुर मीजोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम बंगाल
- 7 ओडिशा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा चंडीगढ़ 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
- 22 सौराष्ट्र
- 23 कोंकण
- 24 मध्य महाराष्ट्र
- 25 महाराष्ट्र
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 तटीय आंध्र प्रदेश एवं यनम
- 29 तेलंगाना
- 30 चण्डीगढ़
- 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. Odisha
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. Marathawada
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 Widespred (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 Occurance (%)
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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(Service to the Nation since 1875)

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)

* 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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