

2025-12-16

Time of Issue: 08:10:00 hours IST
(Morning)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

Weather Forecast and Warnings

- Light rainfall/snowfall at few/isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 18th -21st and over Himachal Pradesh during 20th & 21st and Uttarakhand on 21st December.
- Thunderstorm and lightning very likely at isolated places over Tamil Nadu, Puducherry & Karaikal on 16th & 17th with gusty winds with speed reaching upto 30-40 kmph very likely at isolated places over Andaman & Nicobar Islands during 16th - 18th December.

Forecast of minimum temperatures:

- Gradual fall in minimum temperature likely by about 2°C over Northwest India during next 24 hour and thereafter gradual rise by about 2-3°C during subsequent 5 days.
- No significant change in minimum temperature very likely over Gujarat state during next 24 hours and thereafter rise by 2-3°C during subsequent 4 days.
- No significant change in minimum temperature over Maharashtra as well as Central, East and North east part of India during next 7 days.

Dense Fog & Cold wave Warnings:

- Dense fog conditions very likely to prevail during early hours/morning hours in isolated pockets of Northeast India during 16th-20th, Himachal Pradesh during 16th-18th, Punjab, Haryana Chandigarh & Delhi on 16th & 17th December.
- Dense fog conditions very likely to prevail during early hours/morning hours in isolated pockets of Uttar Pradesh on 16th & 17th and Madhya Pradesh during 16th -18th with **very dense fog** over Uttar Pradesh on 16th and Madhya Pradesh on 16th & 17th December.

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Main Weather Observations:

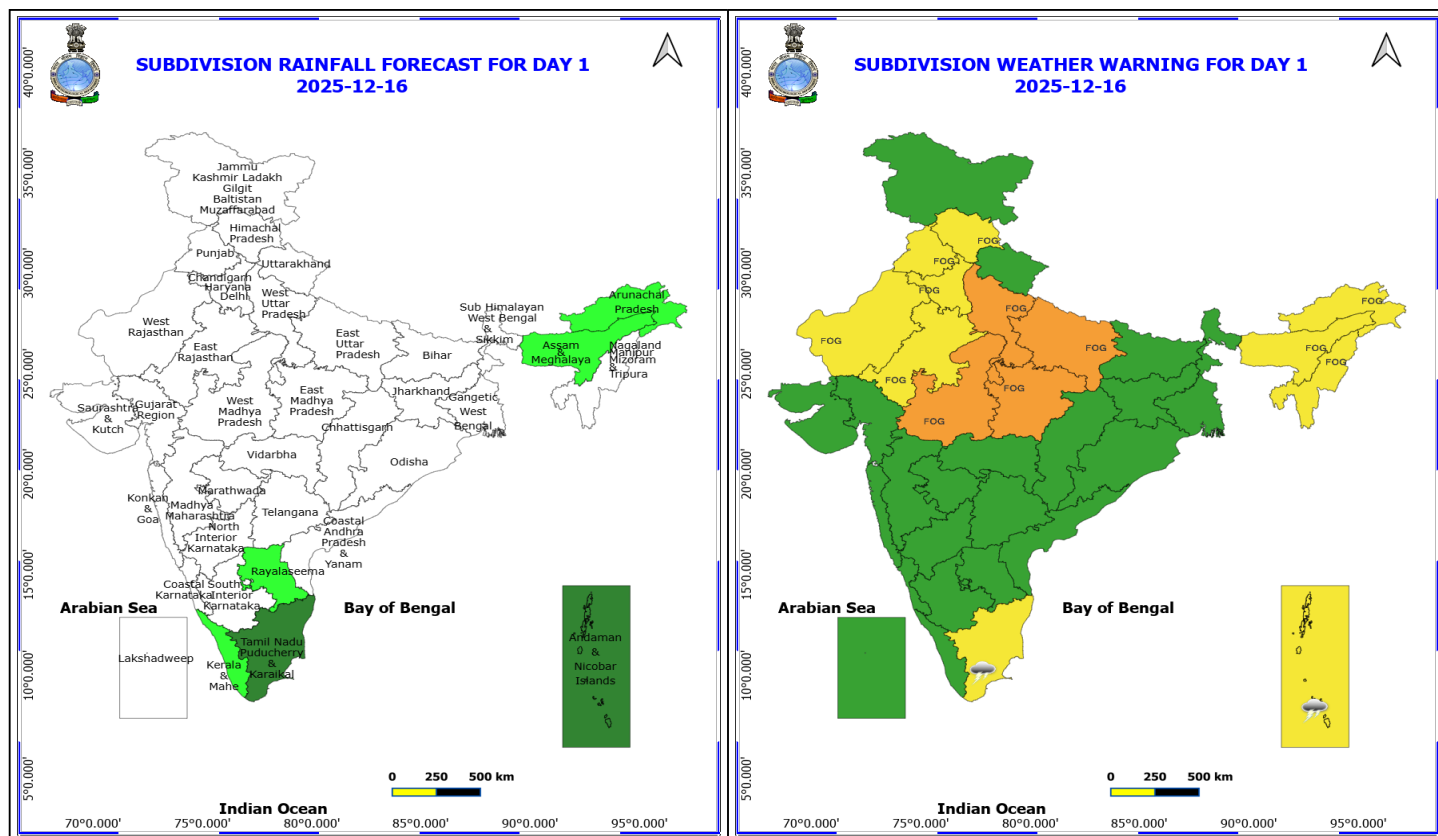
- ❖ **Rainfall distribution** (from 0830 hours IST of yesterday to 0530 hours IST of today): **at isolated places** over Tamilnadu Puducherry & Karaikal; **Dry** over rest of the country.
- ❖ **Fog Condition Observed (at 0530 hours of today): Dense fog conditions:** at most places over West Uttar Pradesh **Moderate fog conditions:** at a few places over East Madhya Pradesh, at isolated places over Bihar **Shallow fog conditions:** at most places over East Uttar Pradesh, at a few places over Bihar and Punjab, at isolated places over Assam & Meghalaya, Odisha, West Madhya Pradesh and Coastal Andhra Pradesh & Yanam
- ❖ **Visibility reported (at 0530 hours of today):** West Uttar Pradesh: Bareilly (dist Bareilly) & Lucknow (dist Lucknow) 50.0 Each; East Madhya Pradesh: Satna (dist Satna) 200.0; Bihar: Purnea (dist Purnia) 200.0;.
- ❖ **Minimum Temperature Departures (as on 15-12-2025): below normal(-1.6°C to -3.0°C)** at few places over Konkan & Goa, Madhya Maharashtra, Marathwada, Vidarbha, Chhattisgarh, Telangana, Tamil Nadu, Puducherry & Karaikal and Coastal Karnataka; at isolated places over Assam & Meghalaya, Sub Himalayan West Bengal & Sikkim, Gangetic West Bengal, Odisha, Bihar, East Uttar Pradesh, West Uttar Pradesh, Haryana-Chandigarh-Delhi, East Rajasthan, West Madhya Pradesh, East Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Rayalaseema, South Interior Karnataka and Kerala & Mahe. **appreciably below normal(-5.0°C to -3.1°C)** at few places over Odisha, Vidarbha, Chhattisgarh, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka and Kerala & Mahe; at isolated places over Assam & Meghalaya, West Madhya Pradesh, East Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, Marathwada, Telangana and Tamil Nadu, Puducherry & Karaikal. **markedly below normal(< -5.0°C)** at few places over Gangetic West Bengal, Odisha, West Madhya Pradesh, East Madhya Pradesh, Gujarat Region, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, North Interior Karnataka and South Interior Karnataka; at isolated places over Assam & Meghalaya, Sub Himalayan West Bengal & Sikkim, Jharkhand, Bihar, East Uttar Pradesh, Himachal Pradesh, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Telangana and Kerala & Mahe. The **lowest minimum temperature** of 5.4°C is reported at RAJGARH-OBS (MADHYA PRADESH) over the Plains of India
- ❖ **Maximum Temperature Departures (as on 15-12-2025):** The highest maximum temperature of 35.2°C is reported at KOTTAYAM (KERALA).

Meteorological Analysis (Based on 0530 hours IST)

- The **Western Disturbance** as an upper air cyclonic circulation over north Pakistan & neighbourhood at 3.1 km above mean sea level persists.
- The another **Western Disturbance** as a **trough** in middle tropospheric westerlies with its axis at 5.8 km above mean sea level now runs roughly along Long. 65°E to the north of Lat. 32°N.
- An **upper air cyclonic circulation** over west Assam and neighbourhood at 3.1 km above mean sea level.
- **Subtropical westerly Jet Stream** with core winds of the order upto 120 knots at 12.6 km above mean sea level prevails over North India.
- The **upper air cyclonic circulation** over south Tamil Nadu and neighbourhood at 3.1 km above mean sea level persists.
- A fresh feeble **Western Disturbance** is likely to affect western Himalayan region from the night of 17th December 2025.

Weather Outlook for subsequent 3 days

- Isolated to Scattered rainfall activity over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Hiamchal Pradesh, Kerala, Tamil Nadu and Islands.



16 December (Day 1)

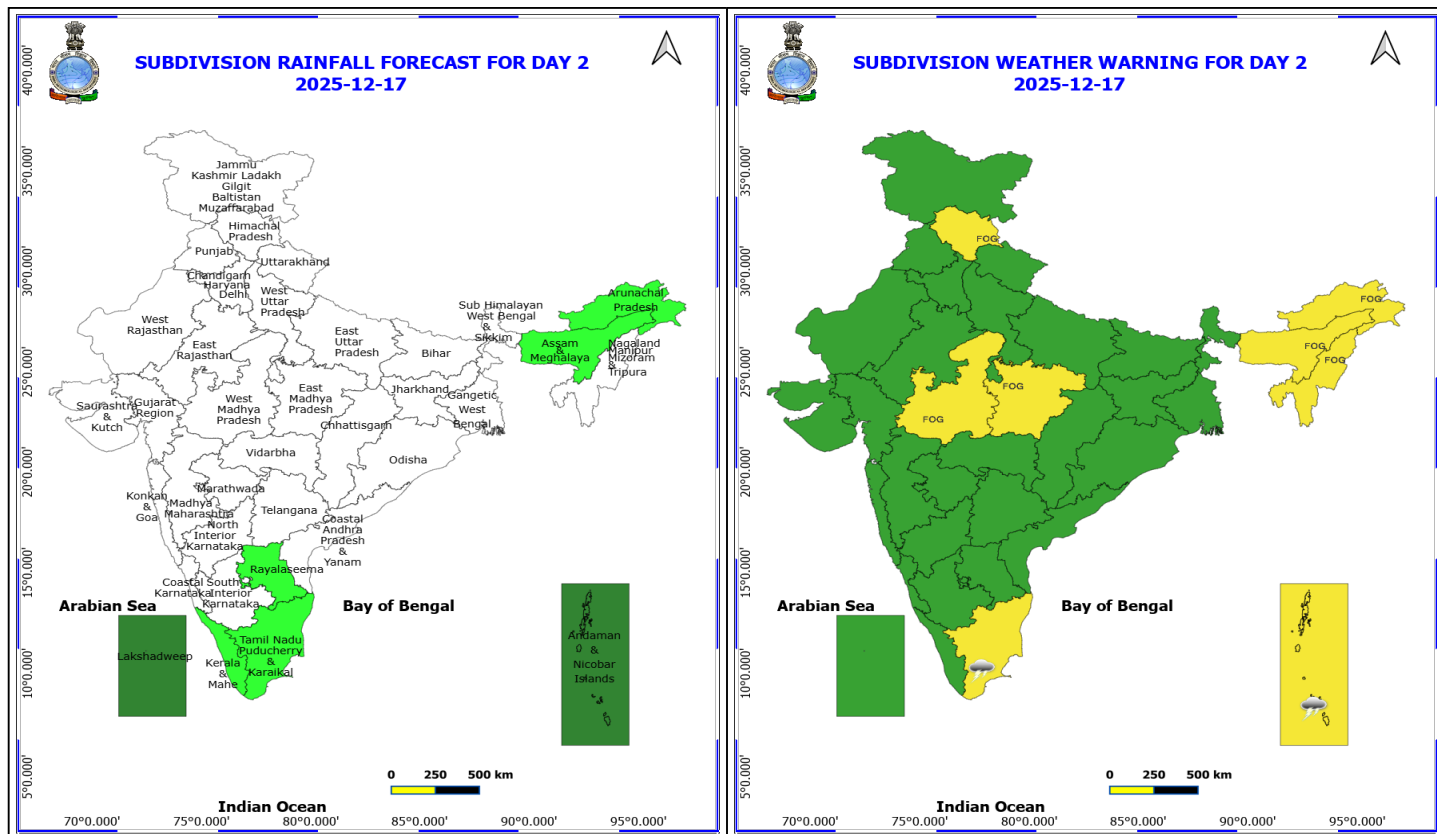
- ❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** very likely at isolated places over Andaman & Nicobar Islands.
- ❖ **Thunderstorm accompanied with Lightning** very likely at isolated places over Tamil Nadu Puducherry & Karaikal.
 - Dense to Very **Dense Fog** very likely at isolated pockets over Uttar Pradesh and north Madhya Pradesh.
- ❖ **Dense Fog** very likely at isolated pockets over Arunachal Pradesh, Assam & Meghalaya, Haryana, Chandigarh & Delhi, Himachal Pradesh, Nagaland, Manipur, Mizoram and Tripura, Punjab and north Rajasthan.
- ❖ **Squally weather with wind speeds reaching 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevail over Gulf of Mannar & adjoining Comorin area.

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17 December (Day 2)

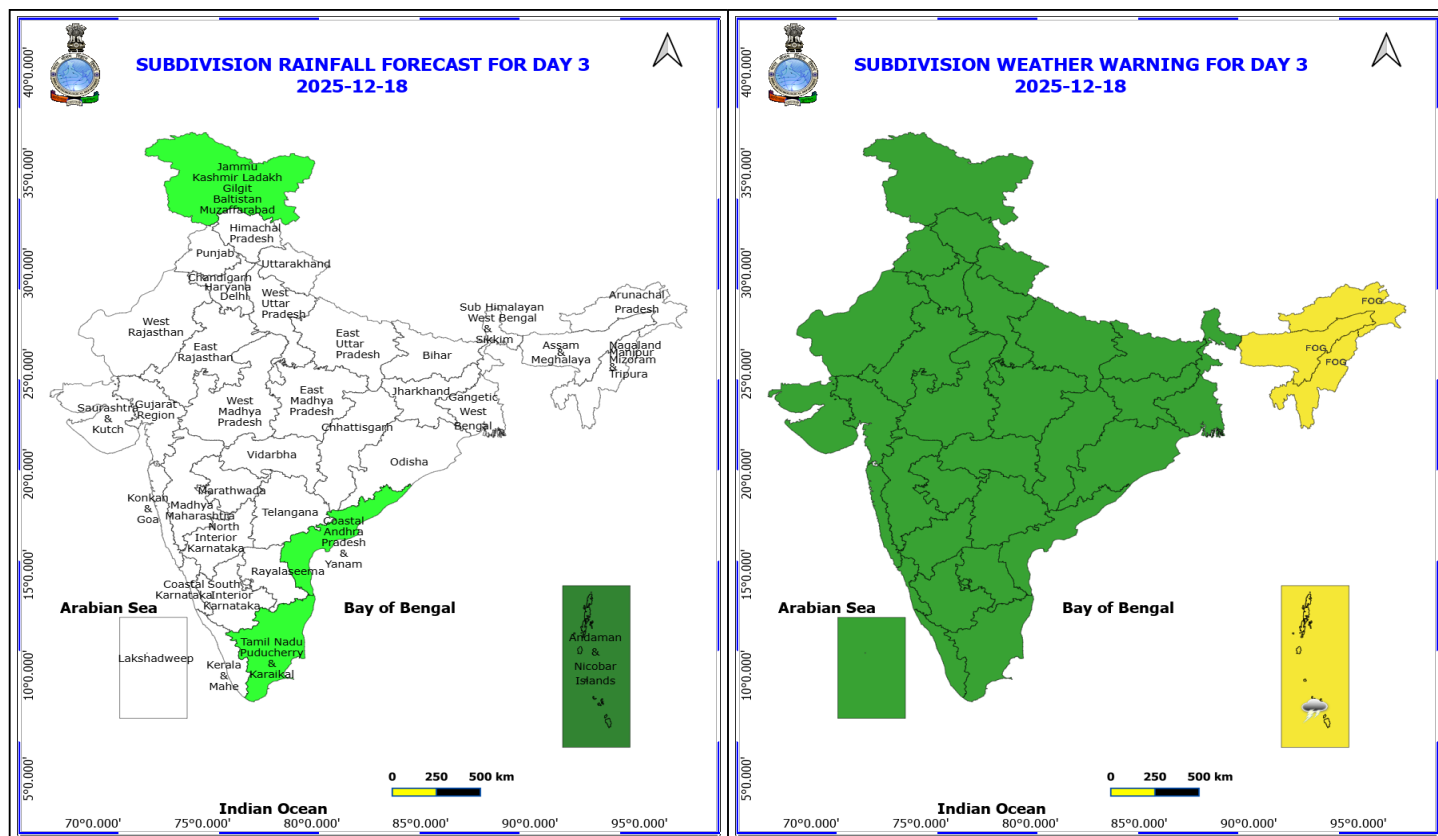
- ❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** very likely at isolated places over Andaman & Nicobar Islands.
- ❖ **Thunderstorm accompanied with Lightning** very likely at isolated places over Tamil Nadu Puducherry & Karaikal.
- ❖ **Dense Fog** very likely at isolated pockets over Arunachal Pradesh, Assam & Meghalaya, Himachal Pradesh, Madhya Pradesh and Nagaland, Manipur, Mizoram and Tripura.
- ❖ **Squally weather with wind speeds reaching 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevail over Gulf of Mannar & adjoining Comorin area.

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18 December (Day 3)

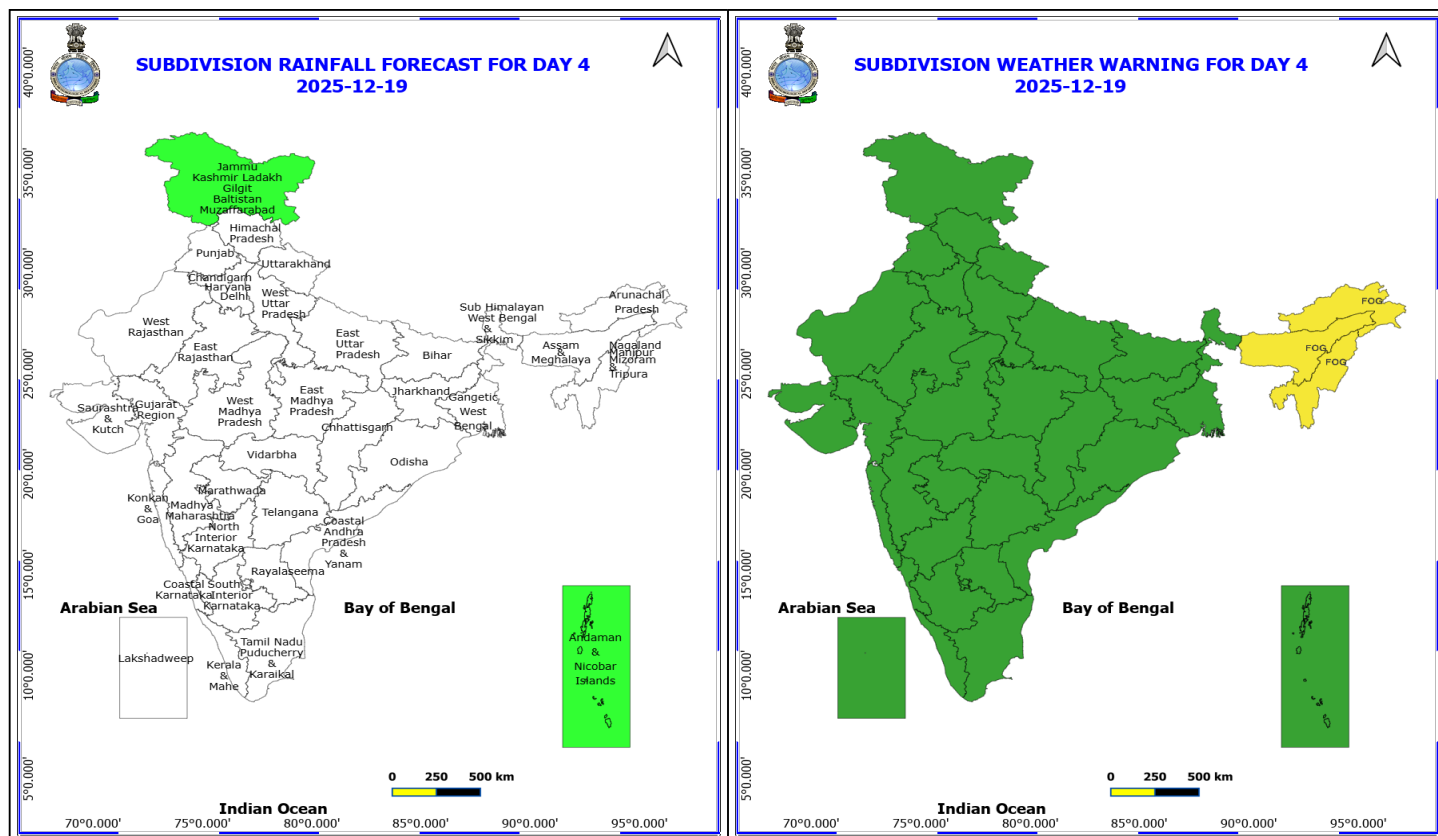
- ❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** very likely at isolated places over Andaman & Nicobar Islands.
- ❖ **Dense Fog** very likely at isolated pockets over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram and Tripura.
- ❖ **Squally weather with wind speeds reaching 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevail over Gulf of Mannar & adjoining Comorin area.

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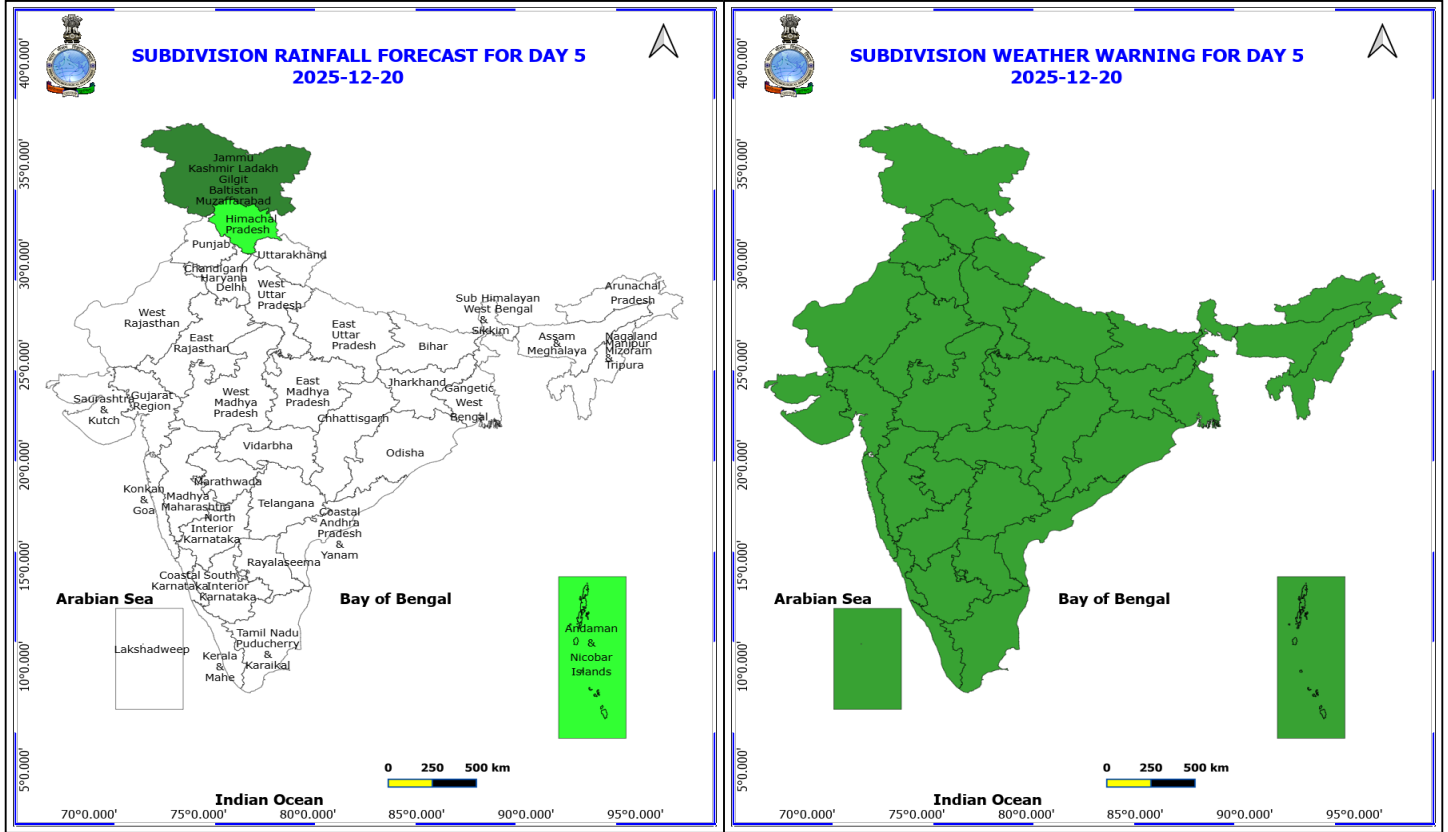
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19 December (Day 4)

- ❖ **Dense Fog** likely at isolated pockets over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram and Tripura.
- ❖ **Squally weather with wind speeds reaching 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevail over Gulf of Mannar & adjoining Comorin area.



20 December (Day 5)

No Warning

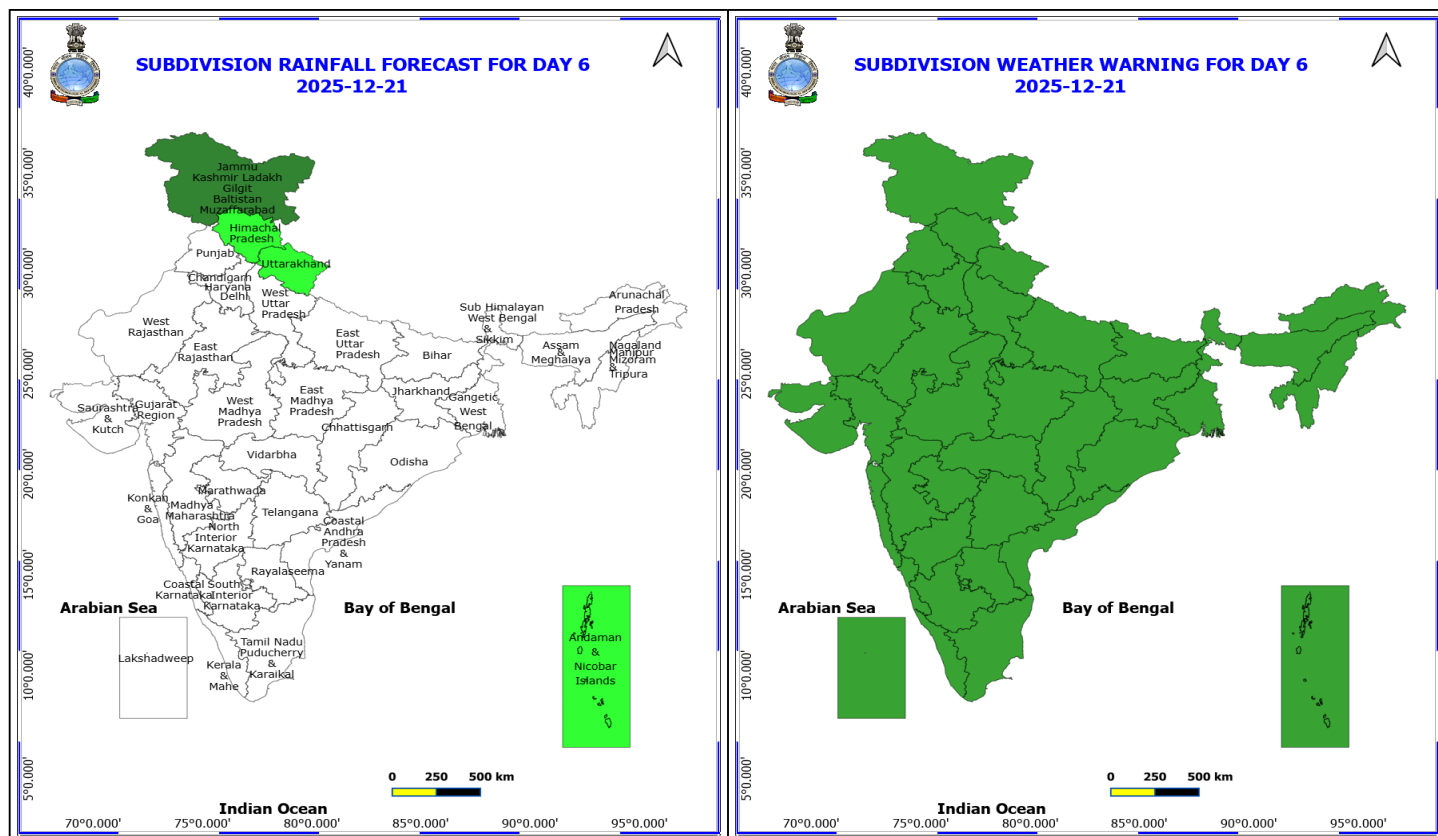
No Warning

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21 December (Day 6)

No Warning

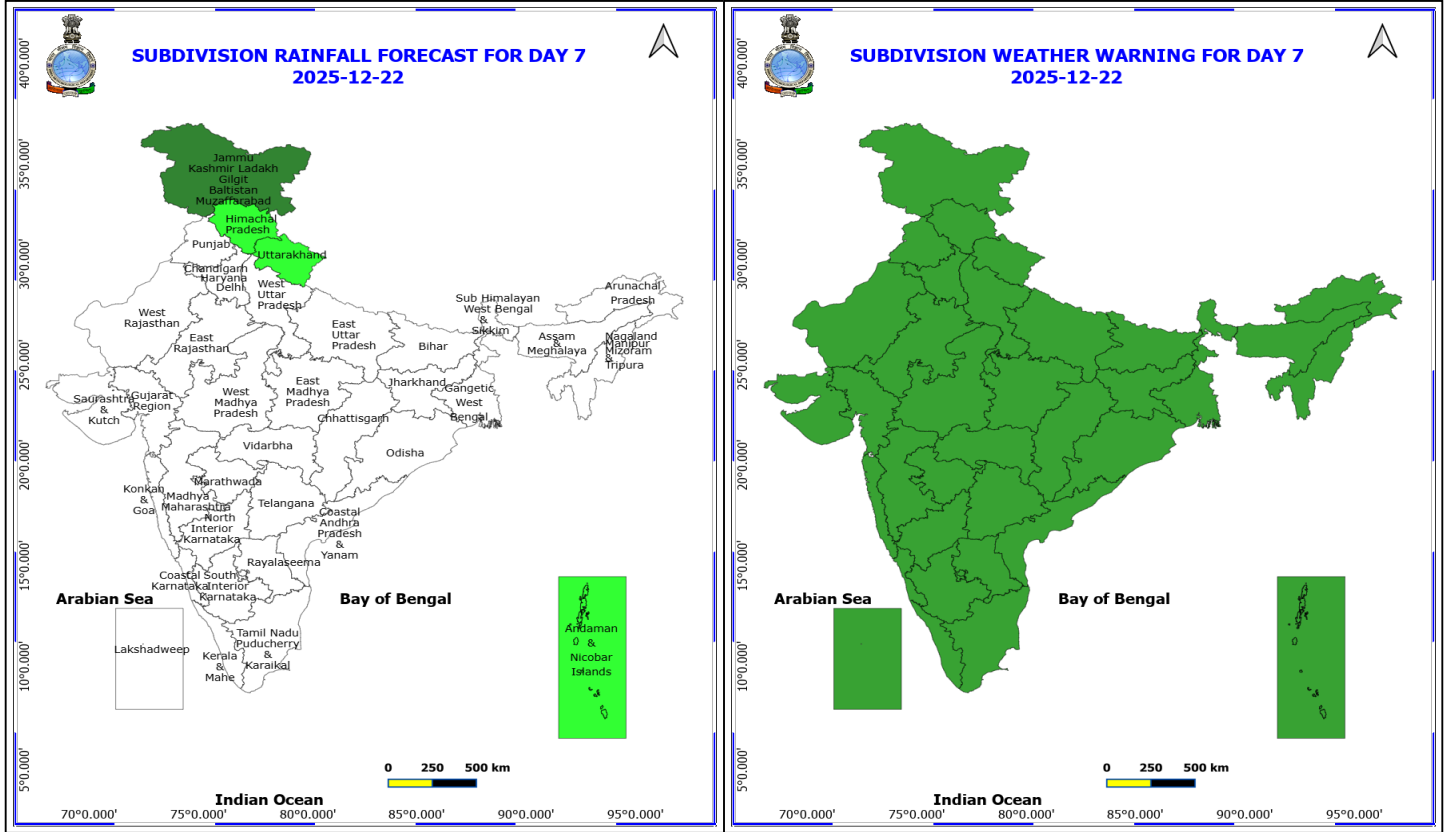
No Fishermen Warning

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22 December (Day 7)

No Warning

No Fishermen Warning

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Table-1

7 Days Rainfall Forecast

S.No.	Subdivision	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec	22-Dec
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	SCT	SCT	SCT	ISOL	ISOL	ISOL	ISOL
2	ARUNACHAL PRADESH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
3	ASSAM & MEHGHALAYA	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
4	N. M. M. & T.	DRY	DRY	DRY	DRY	DRY	DRY	DRY
5	S.H. WEST BENGAL & SIKKIM	DRY	DRY	DRY	DRY	DRY	DRY	DRY
6	GANGETIC WEST BENGAL	DRY	DRY	DRY	DRY	DRY	DRY	DRY
7	ODISHA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
8	JHARKHAND	DRY	DRY	DRY	DRY	DRY	DRY	DRY
9	BIHAR	DRY	DRY	DRY	DRY	DRY	DRY	DRY
10	EAST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
11	WEST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
12	UTTARAKHAND	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL
13	HARYANA, CHD & DELHI	DRY	DRY	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	DRY	DRY	DRY	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
16	JAMMU AND KASHMIR AND LADAKH	DRY	DRY	ISOL	ISOL	SCT	SCT	SCT
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	DRY	DRY	DRY	DRY	DRY	DRY	DRY
21	GUJRAT REGION	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASHTRA & KUTCH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
25	MARATHWADA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
26	VIDARBHA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
27	CHATTISGARH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
28	COASTAL ANDHRA PRADESH	DRY	DRY	ISOL	DRY	DRY	DRY	DRY
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
30	RAYALASEEMA	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
31	TAMILNADU & PUDUCHERRY	SCT	ISOL	ISOL	DRY	DRY	DRY	DRY
32	COSTAL KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
33	NORTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
34	SOUTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
35	KERALA	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
36	LAKSHDWEAP	DRY	SCT	DRY	DRY	DRY	DRY	DRY

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

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Fig. 1: Maximum Temperatures Dated 2025-12-15

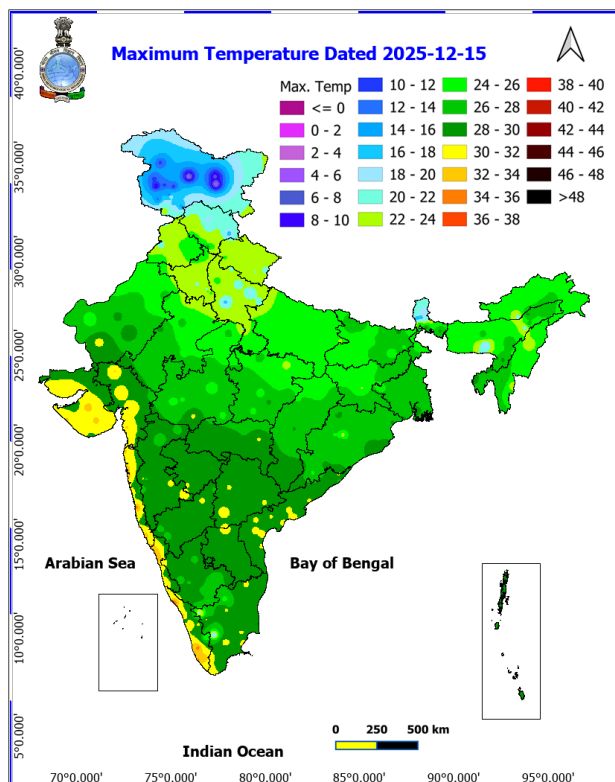


Fig. 2: Departure of Maximum Temp. Dated 2025-12-15

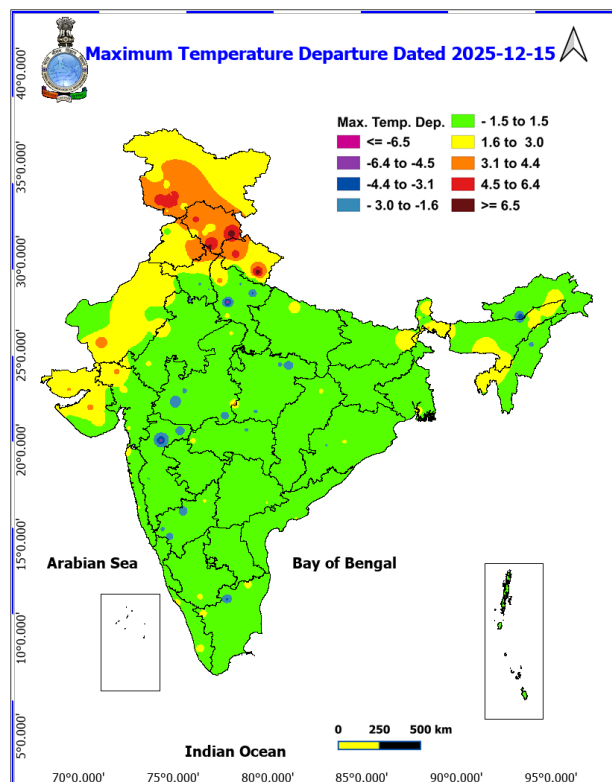


Fig. 3: Minimum Temperatures Dated 2025-12-15

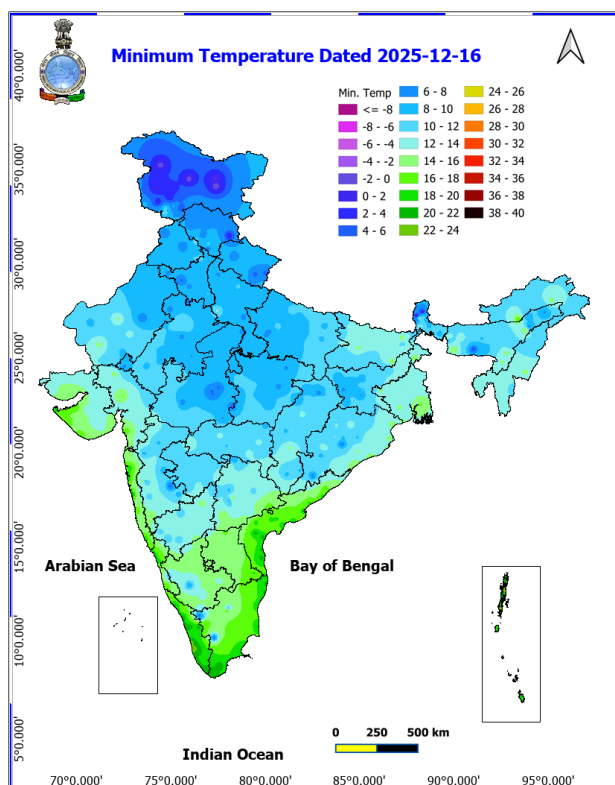
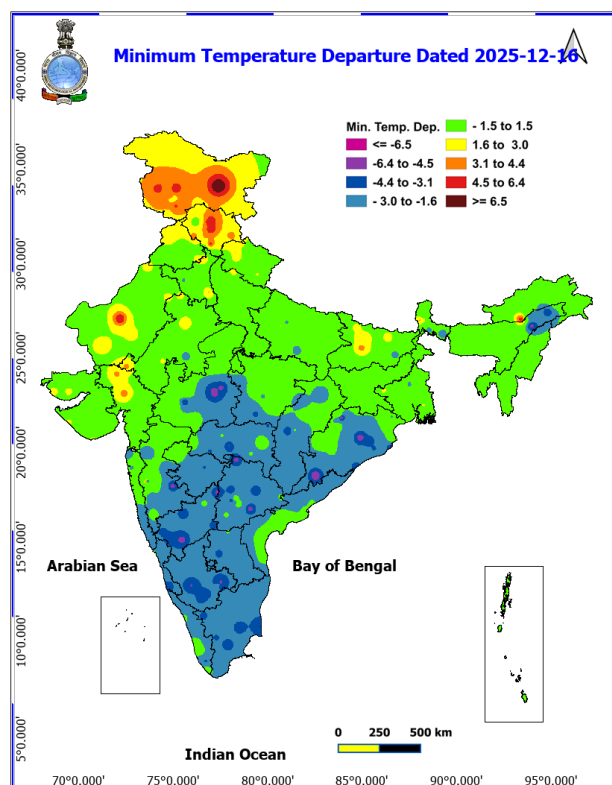
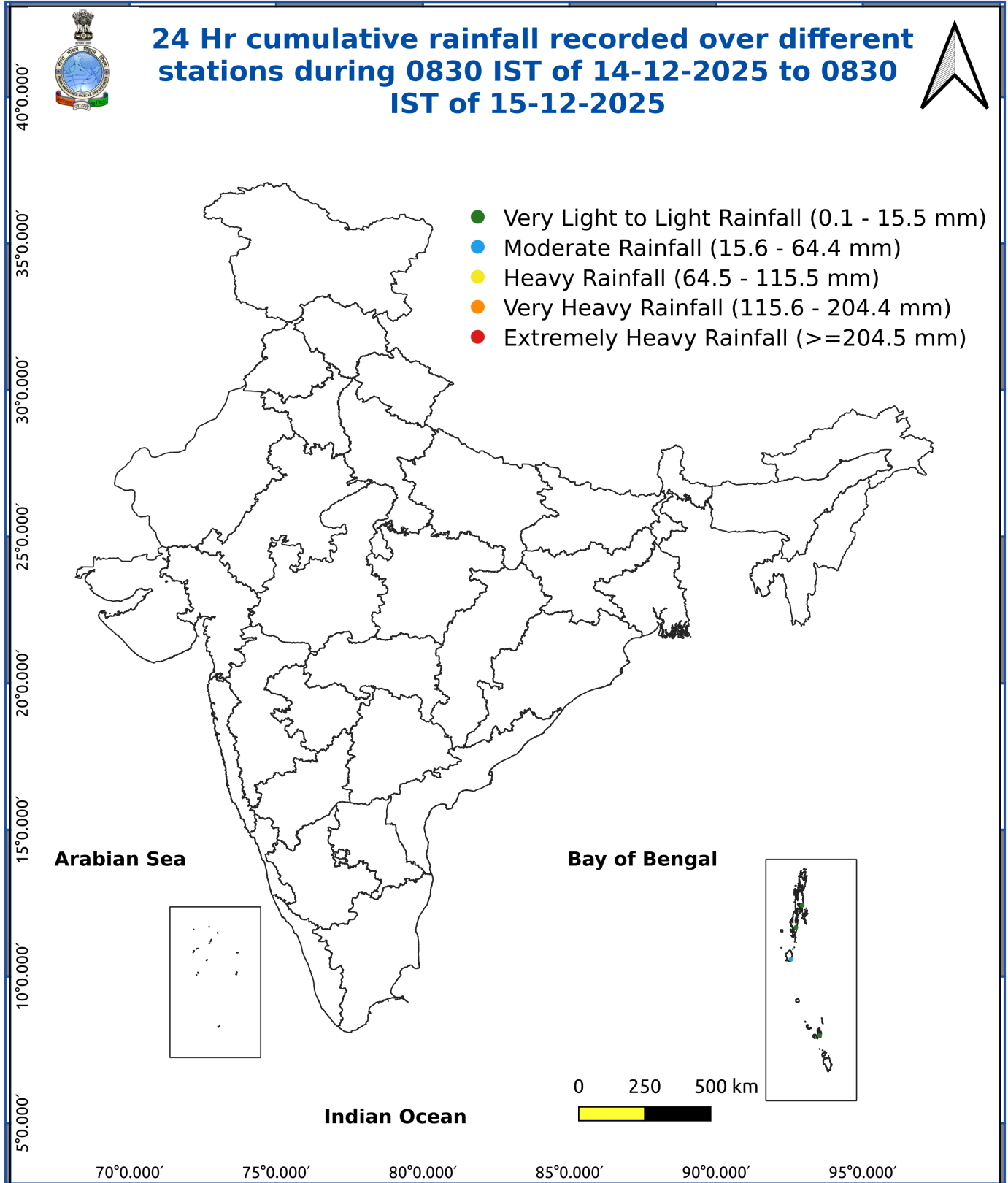


Fig. 4: Departure of Minimum Temp. Dated 2025-12-15





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Impact expected due to dense/very dense fog in the early hours/morning hours: likely to prevail during early hours/morning hours in isolated pockets of Uttar Pradesh on 16th & 17th and Madhya Pradesh during 16th -18th, Northeast India during 16th-20th, Himachal Pradesh during 16th-18th, Punjab, Haryana Chandigarh & Delhi on 16th & 17th December.

❖ **Transport and Aviation:**

- May affect some airports, highways and railway routes in the areas of met- sub-division.
- Difficult driving conditions with slower journey times.
- Unless taken precautionary measures, it may lead to some road traffic collisions.

Power Sector::

- Chances of Tripping of Power lines in the very dense fog routes

Human Health:

- Lung related health impacts: Dense fog contains particulate matter and other pollutants and in case exposed it gets lodged in the lungs, clogging them and decreasing their functional capacity which increases episodes of wheezing, coughing and shortness of breath.
- Impact on people having asthma bronchitis: Long time exposure to dense fog may cause respiratory problem for people having asthma bronchitis and other lung related health problems.
- Eye Irritation: Dense fog contains pollutions of various types and these Pollutants in the air if exposed may tend to irritate the membranes of the eye causing various infections leading to redness or swelling of the eye.

Action suggested:

❖ **Transport and Aviation:**

- Be careful while driving or outing through any transport.
- Use fog lights during driving.
- Be in touch with airlines, railways and state transport for schedule of your journey.

❖ **Power Sector:**

- To keep ready Maintenance Team.
- Human Health: To avoid outing until unless emergency and to cover the face.

Agromet advisories for various parts of the country

Agromet advisories for likely impact of Cold Waves / below normal Temperatures

- In **Interior Karnataka** and **Telangana**, apply light and frequent irrigation to the standing crops in the evening to protect the crops from low temperature stress. Use mulching and cover vegetable nurseries and young fruit plants with straw / polythene sheets to maintain optimum soil temperature.

Livestock / Poultry

- Keep cattle inside the sheds during night and provide dry bedding to protect them from cold.
- Keep the chicks warm by providing artificial light in the poultry sheds.

Agromet advisories for likely impact of Thunderstorm / Gusty Winds Over Andaman & Nicobar Islands

- Provide mechanical support to horticultural crops and staking or support to vegetables and young fruit plants /

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fruit-bearing plants to avoid lodging due to strong winds.

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 बंगाल
- 7 ओडिसा
- 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 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 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)

Subdivision Colour

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

Probabilistic Forecast

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

- Heavy Rain

Thunderstorm & Lightning

Strong surface winds

Cold Wave

Hot & Humid

Very Heavy Rain

Hailstorm

Heat Wave

Cold Day

Extremely Heavy Rain

Dust Storm

Hot Day

Ground Frost

Heavy Snow

Dust Raising Winds

Warm Night

FOG Fog

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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



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



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 $\geq 37^{\circ}\text{C}$



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 $> 6.4^{\circ}\text{C}$.



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 $\leq 15^{\circ}\text{C}$



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 $\leq -6.5^{\circ}\text{C}$



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



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



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



Ice deposits on ground

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



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

Moderate: Wind speed 52-61 kmph
Severe: Wind speed 62-87 kmph
Very Severe: Wind speed > 87 kmph



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



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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