राष्ट्रीय मौसम पूर्वानुमान केन्द्र
भारत मौसम विज्ञान विभाग
पृथ्वी विज्ञान मंत्रालय

National Weather Forecasting Centre
India Meteorological Department
Ministry of Earth Sciences

2026-11-21
Time of Issue: 13:04:00 hours IST
(Mid-Day)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

Weather Forecast and Warnings:

Northeast India:

- **Isolated to Scattered** rainfall likely over Arunachal Pradesh and Assam & Meghalaya during 21st-24th November; Nagaland, Manipur, Mizoram & Tripura during 23rd-24th November.
- **Fairly Widespread to Widespread** rainfall likely over Nagaland, Manipur, Mizoram & Tripura during 21st-22nd November.
- Isolated **thunderstorm & lightning** likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 21st-22nd November.
- Isolated **heavy rainfall** likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 21st-22nd November..

South Peninsular India:

- **Isolated to Scattered** rainfall likely over Tamil Nadu, Puducherry & Karaikal during 21st-23rd November and during 26th-27th November; Coastal Andhra Pradesh & Yanam, Kerala & Mahe and Rayalaseema during 21st-27th November; Lakshadweep on 24th November; Coastal Karnataka and North Interior Karnataka during 24th-27th November; South Interior Karnataka on 23rd November and during 25th-27th November.
- **Fairly Widespread to Widespread** rainfall likely over Tamil Nadu, Puducherry & Karaikal during 24th-25th November; Lakshadweep during 25th-27th November; South Interior Karnataka on 24th November.
- Isolated **thunderstorm, lightning & gusty winds (speed reaching 40-50 kmph gusting to 60 kmph)** likely over Tamil Nadu, Puducherry & Karaikal during 23rd-27th November; Coastal Andhra Pradesh & Yanam and Rayalaseema during 23rd-25th November, **with gusty winds (speed reaching 30-40 kmph gusting to 50 kmph)** likely over Kerala & Mahe during 24th-25th November; Rayalaseema during 21st-22nd November.
- Isolated **thunderstorm & lightning** likely over Coastal Karnataka and North Interior Karnataka during 24th-27th November; South Interior Karnataka during 23rd-27th November.
- Isolated **heavy rainfall** likely over Tamil Nadu, Puducherry & Karaikal during 23rd-27th November; Kerala & Mahe during 24th-26th November.

West, Central and East India:

- **No significant weather likely over West, Central and East India during the week**.

Fog warning:

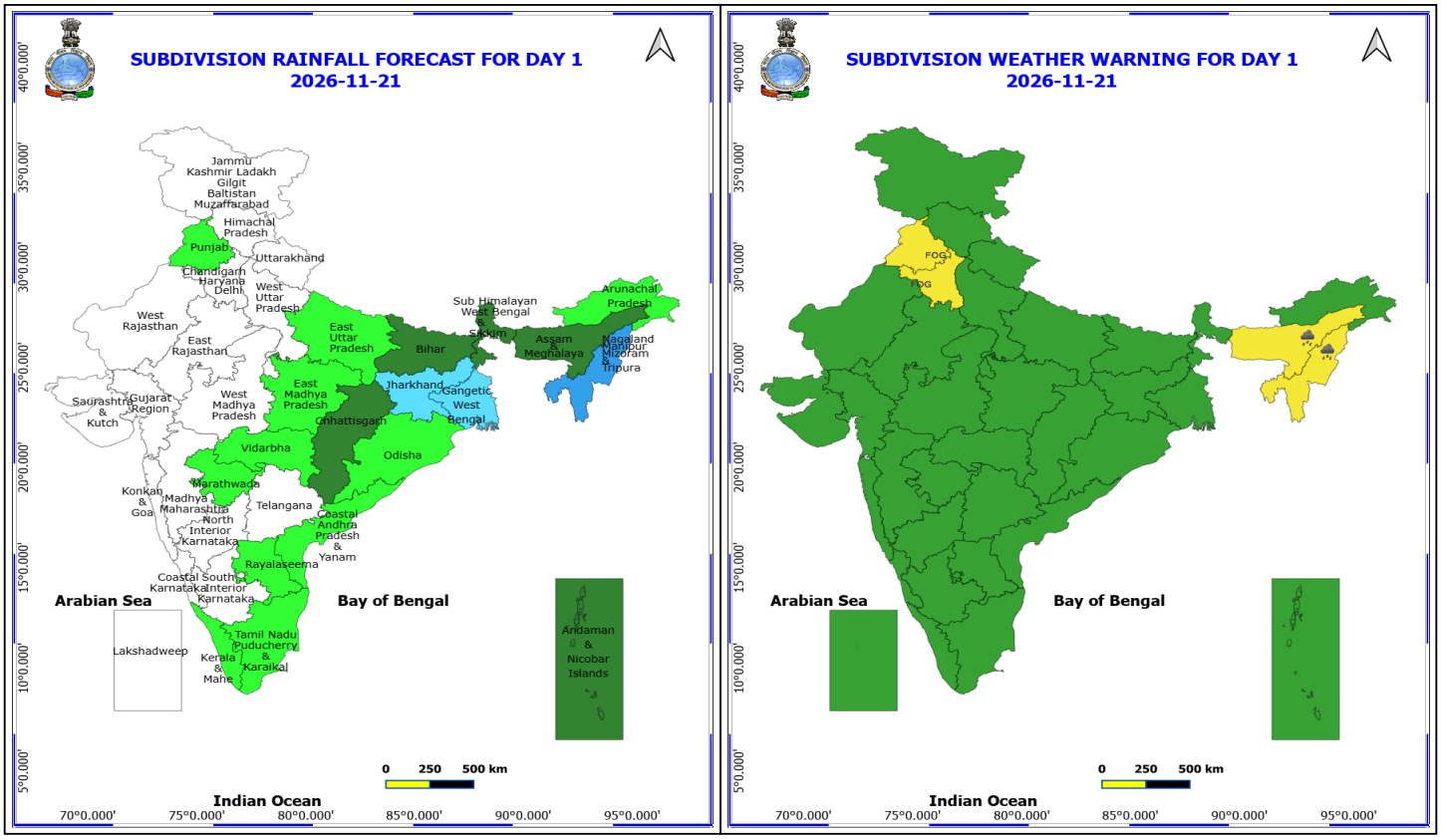
- **Dense fog conditions** very likely over East Uttar Pradesh during 22nd-23rd November; Haryana Chandigarh & Delhi and Punjab on 21st November.

Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST of yesterday to 0830 hours IST of today): **at most places** over Gangetic West Bengal; **at isolated places** over Sub Himalayan West Bengal & Sikkim; **Dry** over rest of the country.
  ❖ **Significant rainfall recorded(in cm)** (from 0830 hours IST of yesterday to 0830 hours IST of today): **Gangetic West Bengal**: Digha (dist East Midnapore) 17; Contai (dist East Midnapore) 10; Sagar Island PTO (dist South 24 Parganas) 8; Harinkhola (dist Hooghly), Burdwan PTO (dist Purba Bardhaman), PTO Tarakeswar (dist Hooghly) 7 Each; Midnapore(CWC) (dist West Midnapore) 6; **Chhattisgarh**: Champa (dist Janjgir), Bhaisma (dist Korba) 9 Each; Barpali (dist Korba) 8; Bilaspur (dist Bilaspur), Korba (dist Korba), Baloda (dist Janjgir), Kartala (dist Korba) 7 Each; Darri (dist Korba), Pachpedi (dist Bilaspur) 6 Each.
- **Very Heavy rainfall (12-20 cm)** has been recorded over Gangetic West Bengal and Odisha.
- **Heavy rainfall (7-11 cm)** has been recorded over Chhattisgarh.
  ❖ **Minimum Temperature Departures (as on 21-11-2026): below normal(-1.6°C to -3.0°C)** at few places over Gujarat Region, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam and Telangana; at isolated places over East Rajasthan, West Madhya Pradesh, East Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, Marathwada, Rayalaseema, Tamil Nadu, Puducherry & Karaikal and South Interior Karnataka. **appreciably below normal(-5.0°C to -3.1°C)** at many places over Konkan & Goa and Coastal Karnataka; at few places over East Rajasthan, Gujarat Region, Saurashtra & Kutch, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and North Interior Karnataka; at isolated places over West Madhya Pradesh, East Madhya Pradesh, Tamil Nadu, Puducherry & Karaikal and South Interior Karnataka. **markedly below normal(< -5.0°C)** at most places over Rayalaseema; at few places over West Madhya Pradesh, North Interior Karnataka and South Interior Karnataka; at isolated places over West Rajasthan, East Madhya Pradesh, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal. **The lowest minimum temperature** of 7.7°C was reported at MANDI (HIMACHAL PRADESH), and SIKAR (RAJASTHAN) over the Plains of India.
  ❖ **Maximum Temperature Departures (as on 20-11-2026): below normal(-1.6°C to -3.0°C)** at isolated places over South Interior Karnataka. **appreciably below normal(-5.0°C to -3.1°C)** at isolated places over West Rajasthan, Gujarat Region, Telangana and North Interior Karnataka. **markedly below normal(< -5.0°C)** at most places over East Uttar Pradesh, West Uttar Pradesh, Himachal Pradesh, East Rajasthan, West Madhya Pradesh, East Madhya Pradesh, Madhya Maharashtra, Marathwada, Vidarbha, Chhattisgarh, Coastal Andhra Pradesh & Yanam and Rayalaseema. **The highest maximum temperature** of 36.5°C was reported at KOZHIKODE (CALICUT) (KERALA).

Meteorological Analysis (Based on 0830 hours IST)

- The **Low Pressure Area** over north interior Odisha lay over north Chhattisgarh & neighbourhood at 0830 hours IST of today, the 21st November, 2026. The associated cyclonic circulation extends upto 4.5 km above mean sea level tilting southwestwards with height.
- The **Western Disturbance** as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 63°E to the north of Lat. 28°N persists.
- An **upper air cyclonic circulation** lies over Nagaland & neighbourhoodat 1.5 km above mean sea level.
- An **upper air cyclonic circulation** lies over Marathwada & neighbourhood at 3.1 km above mean sea level.
- The **upper air cyclonic circulation** over Northeast Assam & neighbourhood at 3.1 km above mean sea level has become less marked.
- The **upper air cyclonic circulation** over east Bangladesh & neighbourhood extending upto 1.5 km above mean sea levelhas become less marked.



21 November (Day 1)

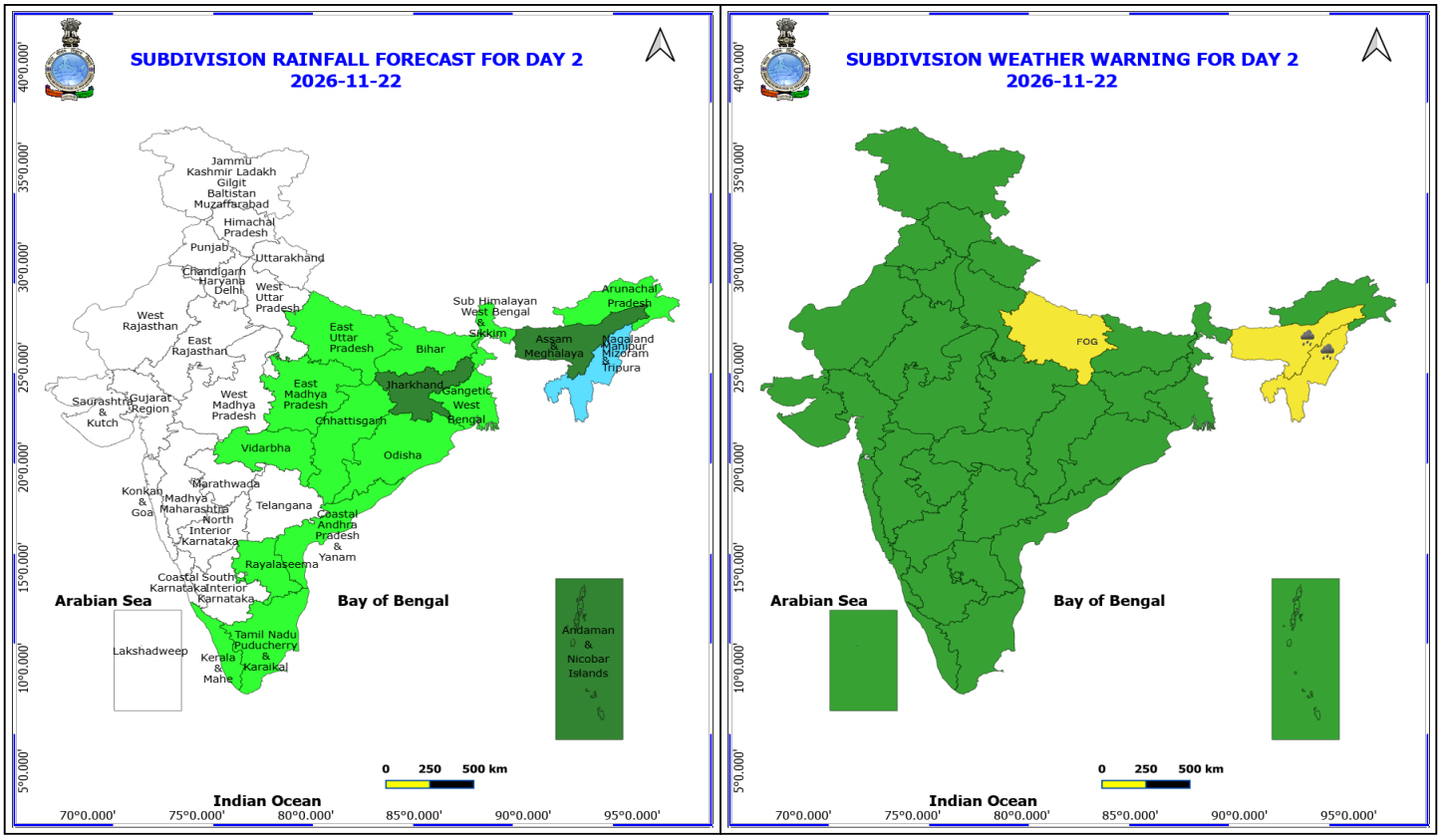
❖ **Heavy Rainfall** very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram and Tripura.

❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** very likely at isolated places over Andaman & Nicobar Islands and Rayalaseema.

❖ **Thunderstorm accompanied with Lightning** very likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram and Tripura and West Bengal & Sikkim.

❖ **Dense Fog** very likely at isolated places over Haryana, Chandigarh & Delhi and Punjab.

No Fishermen Warning



22 November (Day 2)

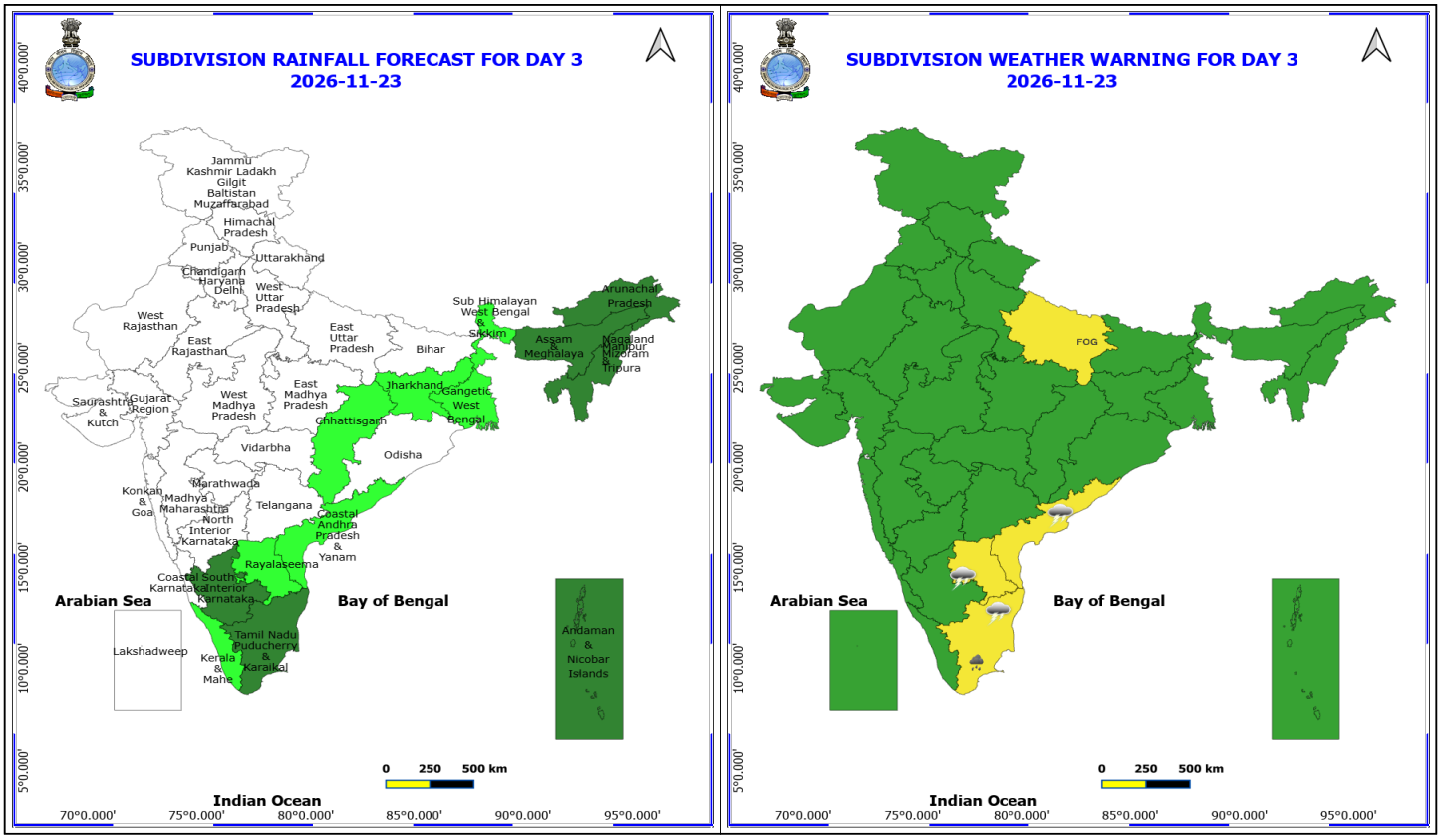
❖ **Heavy Rainfall** very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram and Tripura.

❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** very likely at isolated places over Rayalaseema.

❖ **Thunderstorm accompanied with Lightning** very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram and Tripura.

❖ **Dense Fog** very likely at isolated places over East Uttar Pradesh.

No Fishermen Warning



23 November (Day 3)

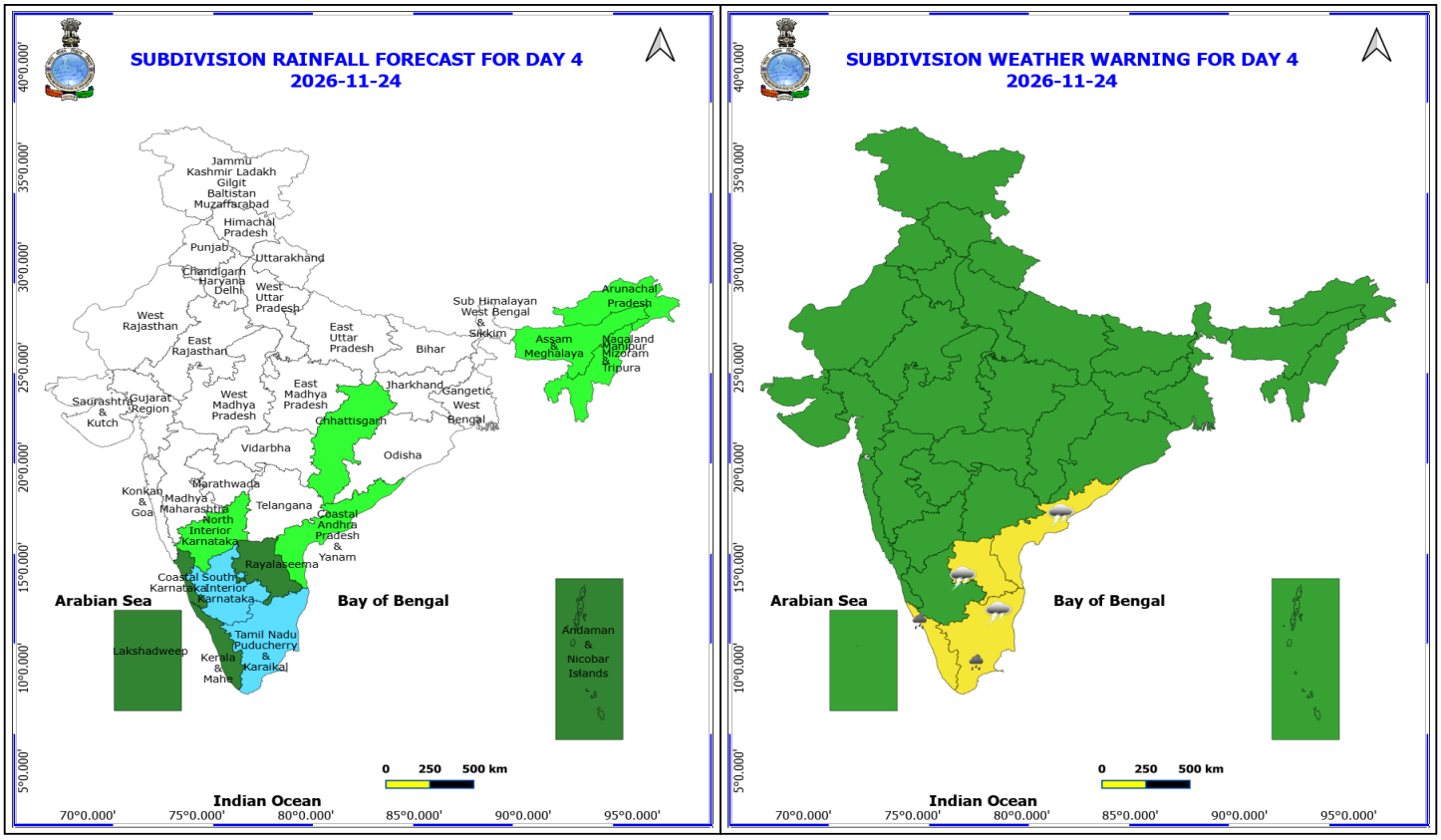
❖ **Heavy Rainfall** very likely at isolated places over Tamil Nadu Puducherry & Karaikal.

❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** very likely at isolated places over Andhra Pradesh and Tamil Nadu Puducherry & Karaikal.

❖ **Thunderstorm accompanied with Lightning** very likely at isolated places over South Interior Karnataka.

❖ **Dense Fog** very likely at isolated places over East Uttar Pradesh.

No Fishermen Warning



24 November (Day 4)

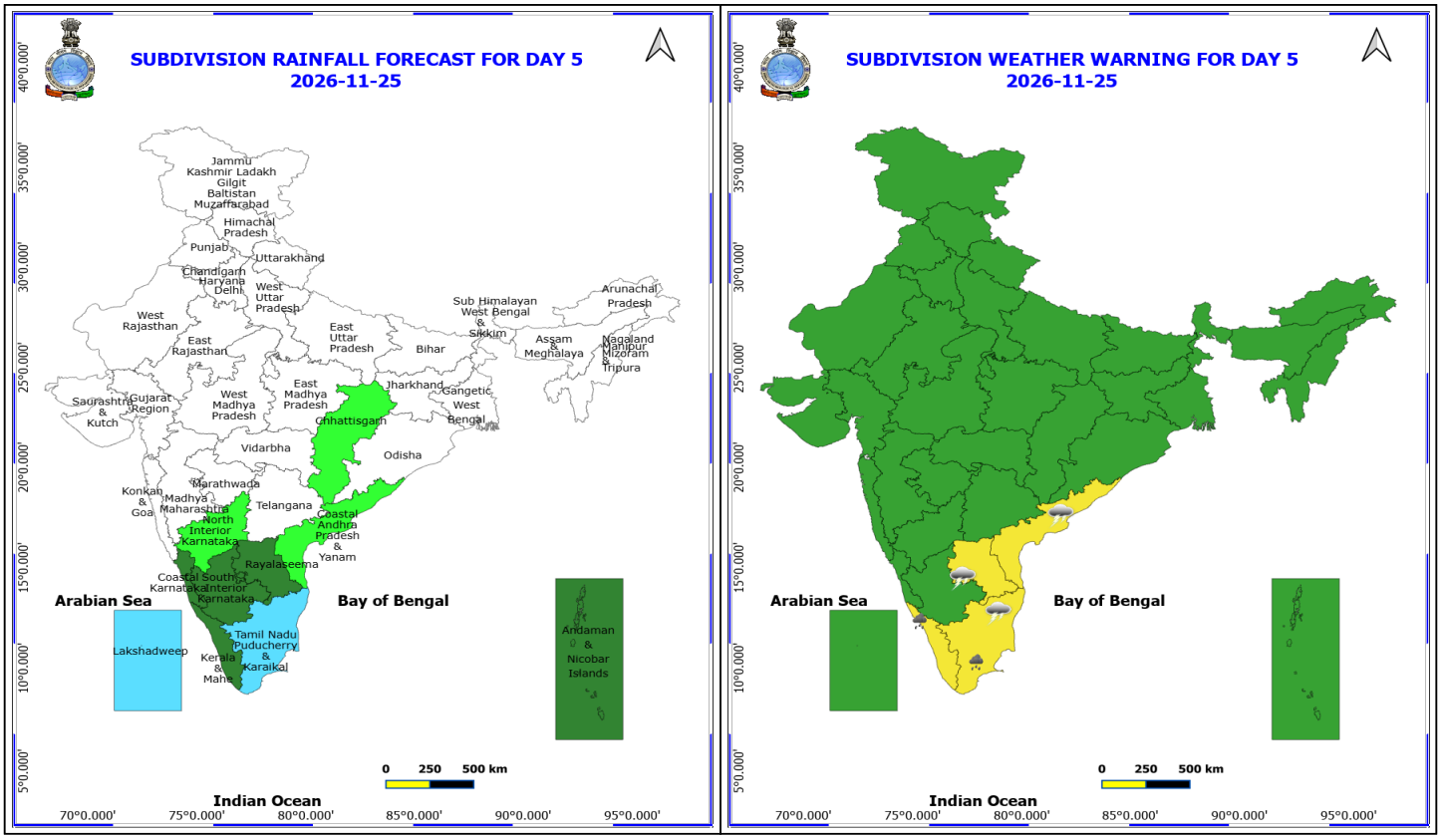
❖ **Heavy Rainfall** likely at isolated places over Kerala & Mahe and Tamil Nadu Puducherry & Karaikal.

❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** likely at isolated places over Andhra Pradesh and Tamil Nadu Puducherry & Karaikal.

❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** likely at isolated places over Kerala & Mahe.

❖ **Thunderstorm accompanied with Lightning** likely at isolated places over Karnataka.

No Fishermen Warning



25 November (Day 5)

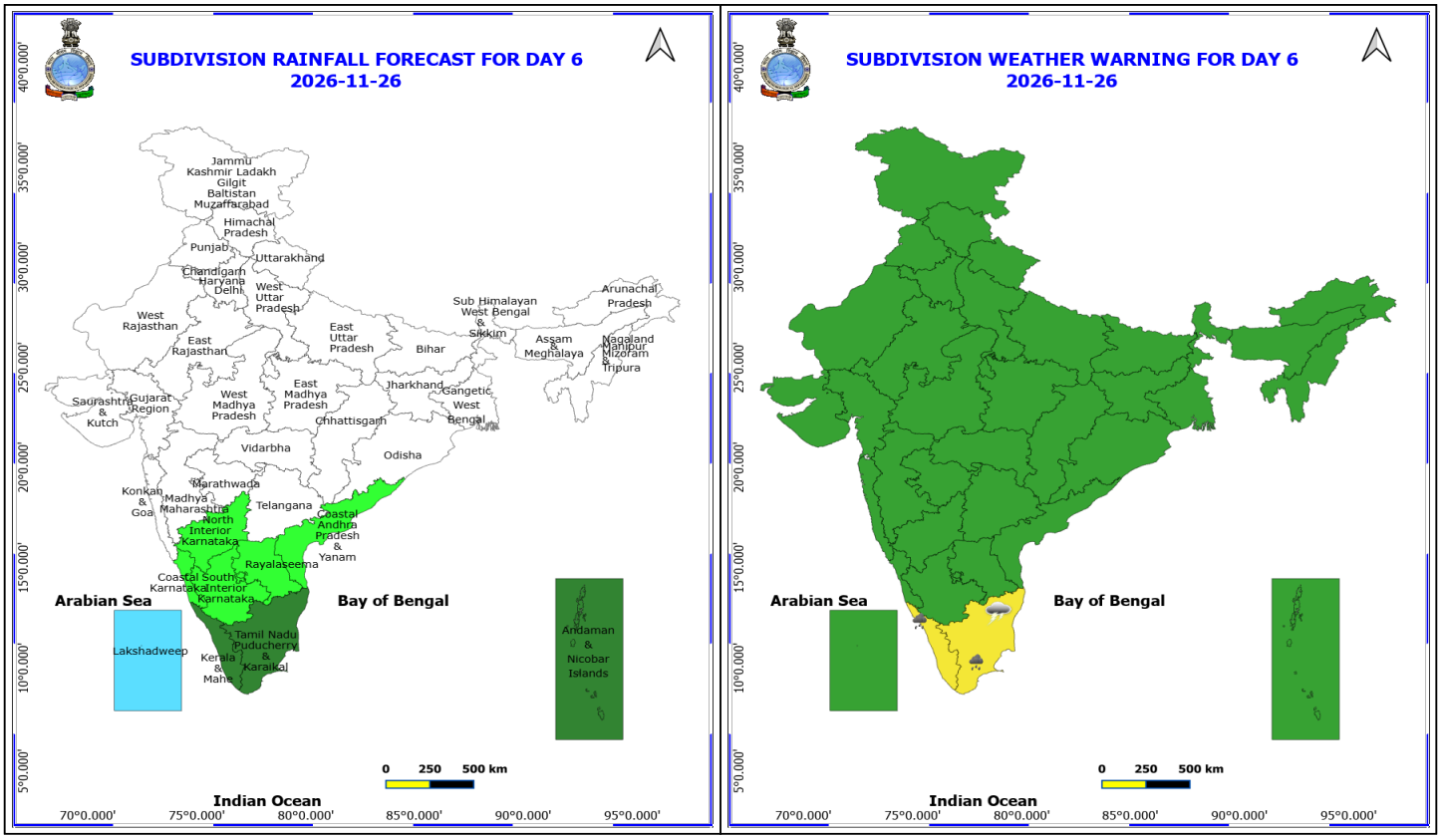
❖ **Heavy Rainfall** likely at isolated places over Kerala & Mahe and Tamil Nadu Puducherry & Karaikal.

❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** likely at isolated places over Andhra Pradesh and Tamil Nadu Puducherry & Karaikal.

❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** likely at isolated places over Kerala & Mahe.

❖ **Thunderstorm accompanied with Lightning** likely at isolated places over Karnataka.

No Fishermen Warning



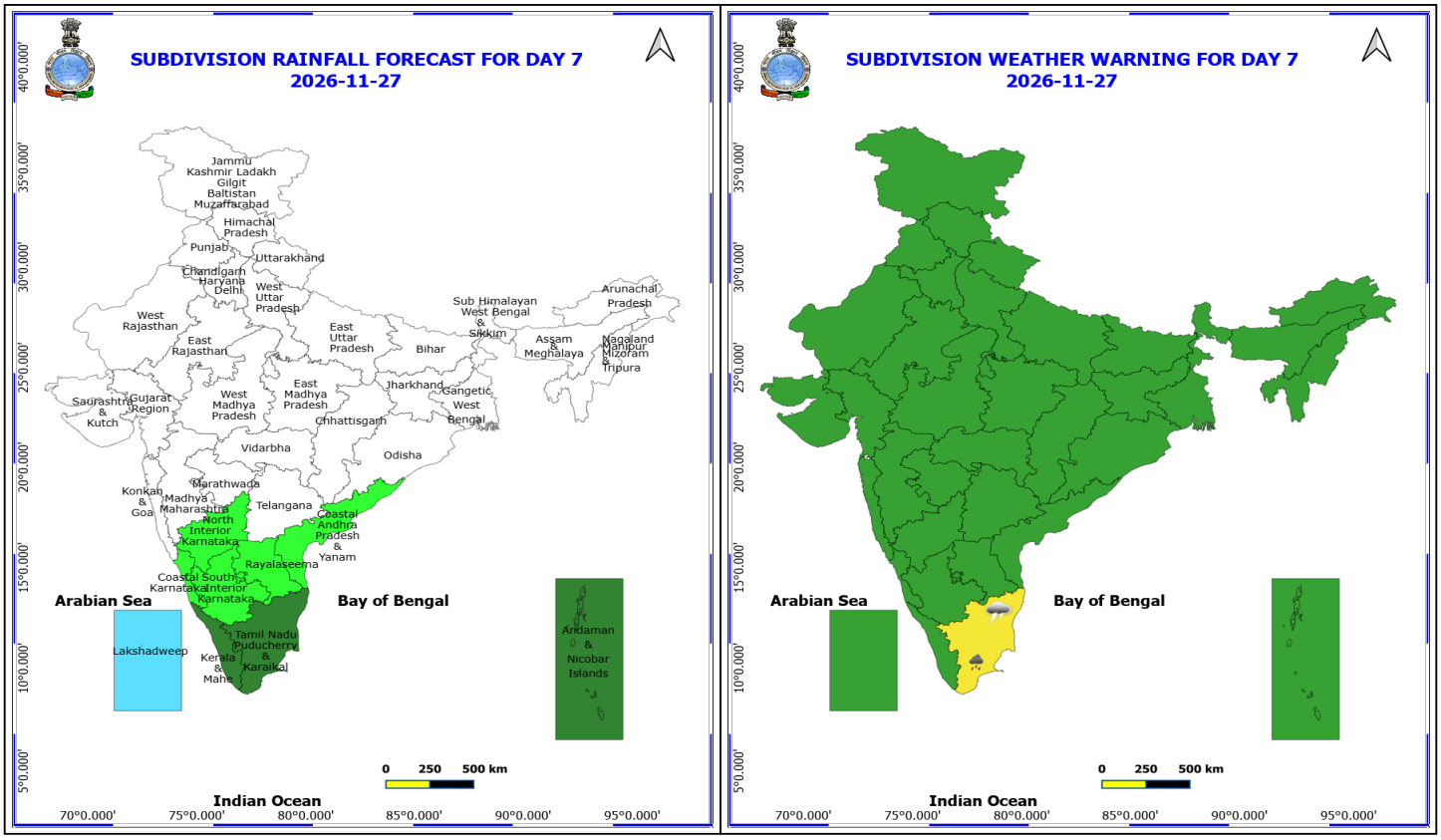
26 November (Day 6)

❖ **Heavy Rainfall** likely at isolated places over Kerala & Mahe and Tamil Nadu Puducherry & Karaikal.

❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** likely at isolated places over Tamil Nadu Puducherry & Karaikal.

❖ **Thunderstorm accompanied with Lightning** likely at isolated places over Karnataka.

No Fishermen Warning



27 November (Day 7)

❖ **Heavy Rainfall** likely at isolated places over Tamil Nadu Puducherry & Karaikal.

❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** likely at isolated places over Tamil Nadu Puducherry & Karaikal.

❖ **Thunderstorm accompanied with Lightning** likely at isolated places over Karnataka.

No Fishermen Warning

Table-1

7 Days Rainfall Forecast

S.No.	Subdivision	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov	26-Nov	27-Nov
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	SCT	SCT	SCT	SCT	SCT	SCT	SCT
2	ARUNACHAL PRADESH	ISOL	ISOL	SCT	ISOL	DRY	DRY	DRY
3	ASSAM & MEHGHALAYA	SCT	SCT	SCT	ISOL	DRY	DRY	DRY
4	N. M. M. & T.	WS	FWS	SCT	ISOL	DRY	DRY	DRY
5	S.H. WEST BENGAL & SIKKIM	SCT	ISOL	ISOL	DRY	DRY	DRY	DRY
6	GANGETIC WEST BENGAL	FWS	ISOL	ISOL	DRY	DRY	DRY	DRY
7	ODISHA	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
8	JHARKHAND	FWS	SCT	ISOL	DRY	DRY	DRY	DRY
9	BIHAR	SCT	ISOL	DRY	DRY	DRY	DRY	DRY
10	EAST UTTAR PRADESH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
11	WEST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
12	UTTARAKHAND	DRY	DRY	DRY	DRY	DRY	DRY	DRY
13	HARYANA, CHD & DELHI	DRY	DRY	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
16	JAMMU AND KASHMIR AND LADAKH	DRY	DRY	DRY	DRY	DRY	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	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	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
26	VIDARBHA	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
27	CHATTISGARH	SCT	ISOL	ISOL	ISOL	ISOL	DRY	DRY
28	COASTAL ANDHRA PRADESH	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
30	RAYALASEEMA	ISOL	ISOL	ISOL	SCT	SCT	ISOL	ISOL
31	TAMILNADU & PUDUCHERRY	ISOL	ISOL	SCT	FWS	FWS	SCT	SCT
32	COSTAL KARNATAKA	DRY	DRY	DRY	SCT	SCT	ISOL	ISOL
33	NORTH INTERIOR KARNATAKA	DRY	DRY	DRY	ISOL	ISOL	ISOL	ISOL
34	SOUTH INTERIOR KARNATAKA	DRY	DRY	SCT	FWS	SCT	ISOL	ISOL
35	KERALA	ISOL	ISOL	ISOL	SCT	SCT	SCT	SCT
36	LAKSHDWEEP	DRY	DRY	DRY	SCT	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 2026-11-20

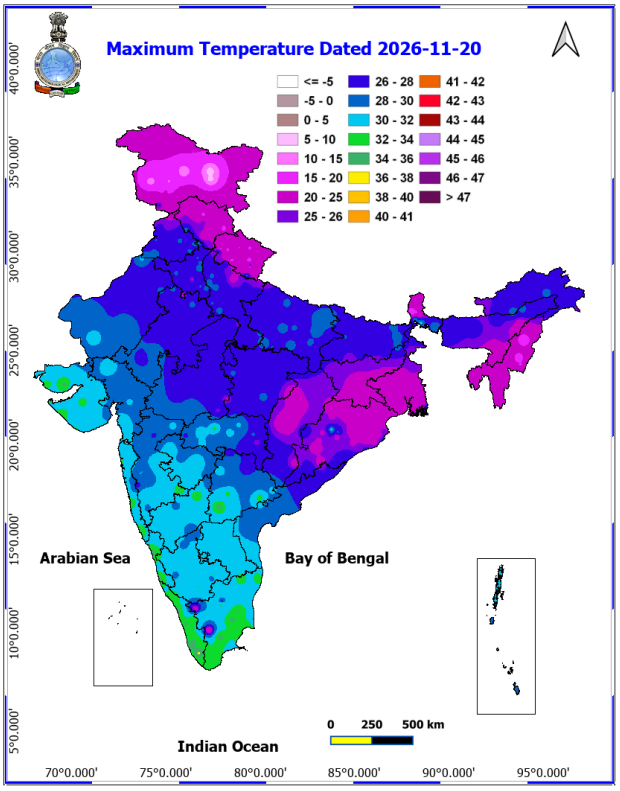


Fig. 2: Departure of Maximum Temp. Dated 2026-11-20

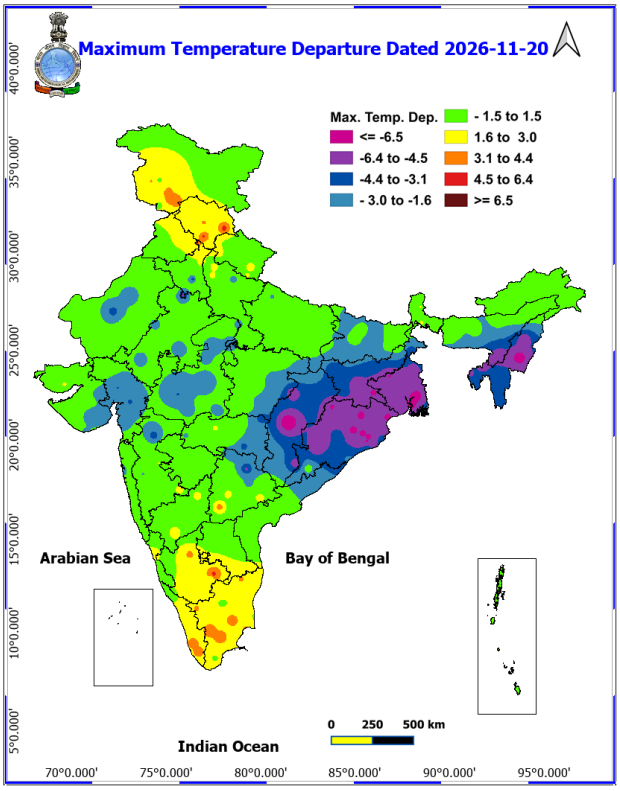


Fig. 3: Minimum Temperatures Dated 2026-11-21

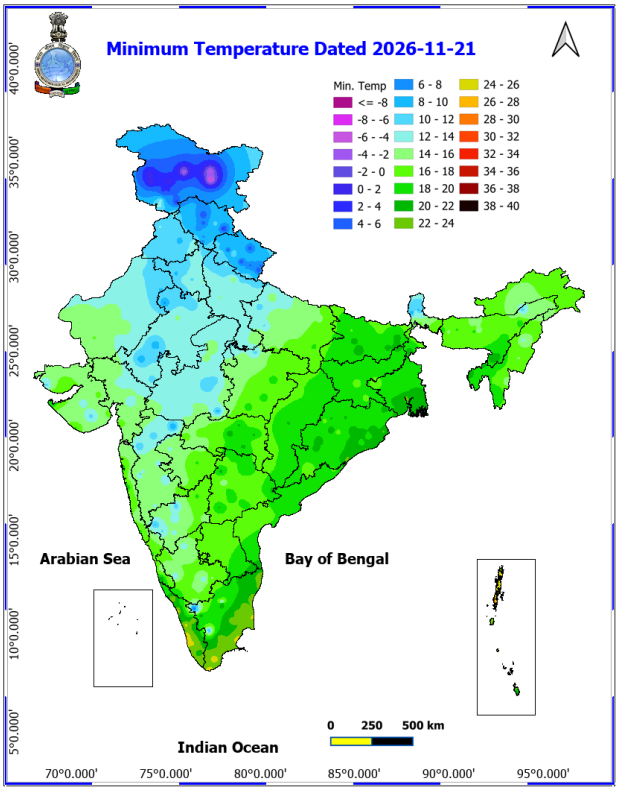
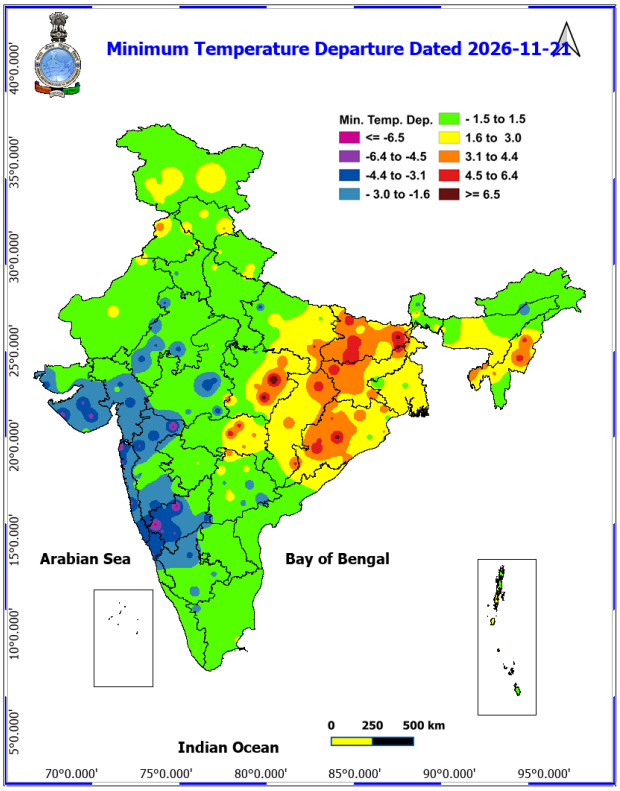
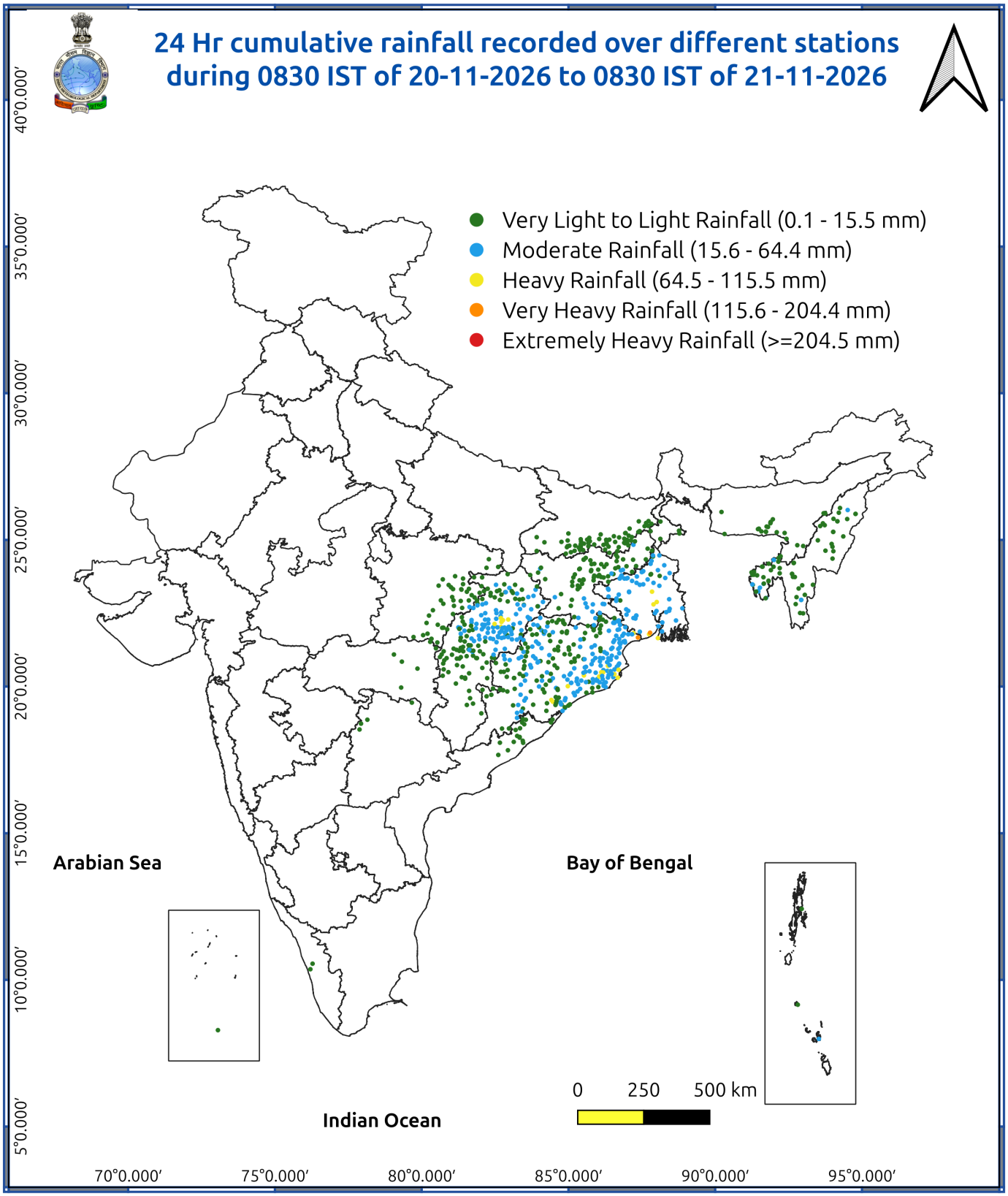


Fig. 4: Departure of Minimum Temp. Dated 2026-11-21



24 Hr cumulative rainfall recorded over different stations during 0830 IST of 20-11-2026 to 0830 IST of 21-11-2026



Impace and Actions

Impact expected due to dense fog in the night /morning hours:

- **Dense fog conditions** very likely over East Uttar Pradesh during 22nd-23rd November; Haryana Chandigarh & Delhi and Punjab on 21st November.

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 Heavy / Very Heavy Rainfall

- In **Odisha,**drain out excess water from standing rice fields, vegetable nurseries and recently sown fields of *rabi* crops. Postpone sowing of *rabi* crops such as mustard, toria, groundnut, sunflower, green gram, black gram, chickpea and lentil until rainfall subsides and the soil attains suitable moisture levels for sowing. After cessation of rainfall, tie lodged paddy plants in bundles and keep them upright. Carry out earthing up around the base of plants in horticultural crops and provide mechanical support. Undertake propping in sugarcane crop to keep them upright.
- In **Chhattisgarh**, keep harvested produce of rice in safe and elevated place, if feasible. Make provision to drain excess water from the standing crop fields. Provide support / staking to banana and tomato plants; support for vine-type vegetables such as bitter gourd, bottle gourd and other cucurbitaceous vegetables.
- In **Assam and Nagaland, Manipur, Mizoram & Tripura,** Postpone irrigation, intercultural operations and application of plant protection measures & fertilizers to the standing crops. Provide adequate drainage in

standing crop fields to avoid waterlogging.

Agromet advisories for likely impact of Thunderstorm / Gusty Winds

- Shift the harvested produce in safer places or cover the produce with tarpaulin sheets in the fields. Tie the harvested crops securely and cover them to minimize the risk of displacement from strong surface winds.
- Provide mechanical support to horticultural crops and staking or support to vegetables and young fruit plants / fruit-bearing plants to avoid lodging due to strong winds.

Advisories for likely impact of Heavy Rainfall for Livestock / Poultry / Fisheries

- Keep the animals inside the shed during heavy rainfall and provide them balanced feed.
- Store the feed and fodder in a safe place to prevent spoilage.
- Remove excess rainwater from fish ponds through properly screened outlets to prevent fish escape.
- Inspect and repair damaged pond embankments, inlet and outlet structures after cessation of rainfall.

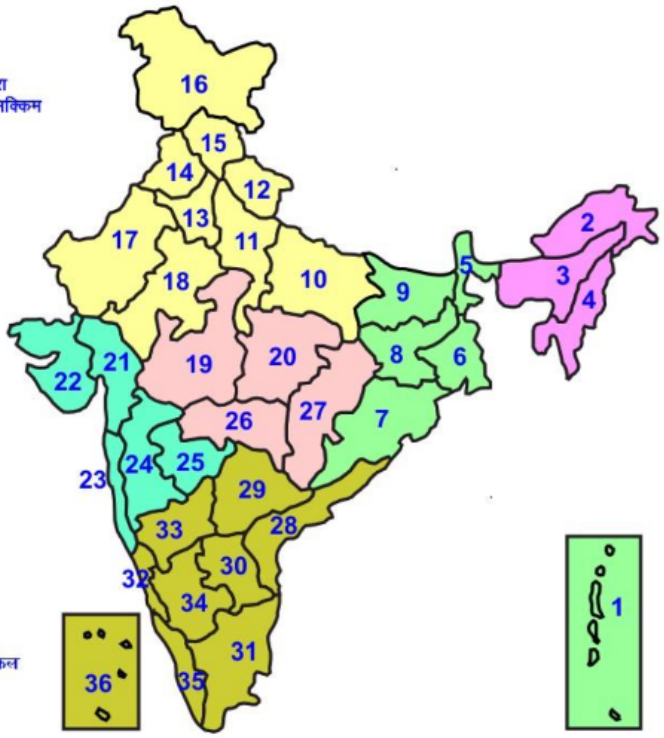
Legends & abbreviations:

Region wise classification of meteorological Sub-Divisions:

- **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana Chandigarh & Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
- **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
- **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
- **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- **West India:** Gujarat Region, Saurashtra & Kutch, Coastal Maharashtra (Konkan) & Goa, Madhya Maharashtra and Marathawada.
- **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Keralam & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

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 एंवम् सिक्किम
6 पश्चिम गांगेय बंगाल
7 ओडिसा
8 झारखंड
9 बिहार
10 पूर्वी उत्तर प्रदेश
11 पश्चिम उत्तर प्रदेश
12 उत्तराखंड
13 हरियाणा चंडिगढ़ एंवम् दिल्ली
14 पंजाब
15 हिमाचल प्रदेश
16 जम्मू एवंम कश्मीर एवंम लद्दाख
17 पश्चिम राजस्थान
18 पूर्वी राजस्थान
19 पश्चिम मध्य प्रदेश
20 पूर्वी मध्य प्रदेश
21 गुजरात क्षेत्र
22 सौराष्ट्र एंवम् कच्छ
23 कोंकण एंवम् गोवा
24 मध्य महाराष्ट्र
25 मराठावाडा
26 विदर्भ
27 छत्तीसगढ़
28 तटीय आंध्र प्रदेश एवं यनम
29 तेलंगाना
30 रायलसीमा
31 तमिलनाडु ,पुदुचेरी एवंम कराईकल
32 तटिय कर्नाटक
33 आंतरिक उत्तरी कर्नाटक
34 आंतरिक दक्षिणी कर्नाटक
35 केरल एवंम 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 Rajsthan
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)

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
Very Heavy Rain
Extremely Heavy Rain
Heavy Snow
Thunderstorm & Lightning
Hailstrom
Dust Strom
Dust Raising Winds
Strong surface winds
Heat Wave
Hot Day
Warm Night
Cold Wave
Cold Day
Ground Frost
Fog
Hot & Humid

*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)

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 ≥40° C for plains and ≥30° 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 ≥6.5° C

(b). Based on Actual maximum temperature

Heat Wave: When actual maximum temperature ≥45°C.
Severe Heat Wave: When actual maximum temperature ≥47°C

(c). Criteria for heat wave for coastal stations

When maximum temperature departure is >4.5°C from normal. Heat Wave may be described provided maximum temperature ≥37°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 °C.

Cold Wave

When minimum temperature of a station ≤10°C for plains and ≤0°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 ≤ -6.5 °C

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

Cold Wave : When Minimum Temperature is ≤ 4.0 °C
Severe Cold Wave: When Minimum Temperature is ≤ 2.0 °C

(c) For Coastal Stations

When Minimum Temperature departure is ≤-4.5 °C & actual Minimum Temperature is ≤ 15 °C

Cold Day

When minimum temperature of a station ≤10°C for plains and ≤0°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 ≤ -6.5 °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 ≤4°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 Strom: Wind speed >220 kmph (>119 knots)