2026-11-20
Time of Issue: 13:41:00 hours IST
(Mid-Day)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

Weather system, Forecast and Warnings:

- The **Cyclonic Storm "Akvan" [Pronunciation: Akvan]** over the westcentral Bay of Bengal near north Andhra Pradesh & south Odisha coasts moved north-northwestwards with the speed of 26 kmph during past 06 hours and crossed the north Andhra Pradesh & south Odisha coasts close to Gopalpur (near latitude 19.1 & longitude 84.8) with wind speed of 70-80kmph gusting to 90kmph during 0730-0830 IST, lay centred over south coastal Odisha & adjoining north coastal Andhra Pradesh close to Gopalpur near Latitude 19.2°N and Longitude 84.8°E, at 0830 hours IST of today, the 20th November, 2026, about 120 km northeast of Kalingapatnam (Andhra Pradesh), 130 km west-southwest of Puri (Odisha), and 230 km northeast of Visakhapatnam (Andhra Pradesh). It is likely to move nearly north-northeastwards across Odisha and weaken into a Deep Depression during next 03 hours and into a Depression during subsequent 06 hours.

South Peninsular India:

- **Isolated to Scattered** rainfall likely over Tamil Nadu, Puducherry & Karaikal during 20th-23rd November and on 26th November; Coastal Andhra Pradesh & Yanam, Kerala & Mahe and Rayalaseema during 20th-26th November; Lakshadweep on 24th November; Coastal Karnataka and North Interior Karnataka during 24th-26th November; South Interior Karnataka on 23rd November and during 25th-26th November; Telangana on 20th November.
- **Fairly Widespread to Widespread** rainfall likely over Tamil Nadu, Puducherry & Karaikal during 24th-25th November; Lakshadweep during 25th-26th 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-26th November; Coastal Andhra Pradesh & Yanam and Rayalaseema during 22nd-24th November, **with gusty winds (speed reaching 30-40 kmph gusting to 50 kmph)** likely over Kerala & Mahe on 24th November; Coastal Andhra Pradesh & Yanam and Rayalaseema during 20th-21st November; Telangana on 20th November.
- Isolated **thunderstorm & lightning** likely over Coastal Karnataka and North Interior Karnataka during 24th-26th November; South Interior Karnataka during 23rd-26th November.
- Isolated **heavy rainfall** likely over Tamil Nadu, Puducherry & Karaikal during 23rd-26th November; Kerala & Mahe during 24th-25th November.
- Strong Surface Winds likely over Coastal Andhra Pradesh & Yanam and Rayalaseema during 20th-24th November.

Central India:

- **Isolated to Scattered** rainfall likely over East Madhya Pradesh during 20th-22nd November; Vidarbha on 20th November; Chhattisgarh during 22nd-25th November.
- **Fairly Widespread to Widespread** rainfall likely over Chhattisgarh during 20th-21st November.
- Isolated **thunderstorm, lightning & gusty winds (speed reaching 40-50 kmph gusting to 60 kmph)** likely over Chhattisgarh during 20th-21st November, **with gusty winds (speed reaching 30-40 kmph gusting to 50 kmph)** likely over East Madhya Pradesh during 20th-21st November.
- Isolated **heavy rainfall** likely over Chhattisgarh during 20th-21st November.

East India:

- **Isolated to Scattered** rainfall likely over Andaman & Nicobar Islands during 20th-26th November; Sub-Himalayan West Bengal & Sikkim during 20th-23rd November; Gangetic West Bengal and Jharkhand during 22nd-23rd November; Bihar during 20th-22nd November; Odisha during 21st-23rd November.
- **Fairly Widespread to Widespread** rainfall likely over Gangetic West Bengal and Jharkhand during 20th-21st November; Odisha on 20th November.
- Isolated **thunderstorm, lightning & gusty winds (speed reaching 40-50 kmph gusting to 60 kmph)** likely

over Gangetic West Bengal, Jharkhand and Odisha on 20th November, **with gusty winds (speed reaching 30-40 kmph gusting to 50 kmph)** likely over Andaman & Nicobar Islands on 20th November; Bihar and Gangetic West Bengal on 21st November.

- Isolated **thunderstorm & lightning** likely over Sub-Himalayan West Bengal & Sikkim during 20th-21st November.
- Isolated **heavy rainfall** likely over Sub-Himalayan West Bengal & Sikkim during 20th-21st November; Bihar, Gangetic West Bengal and Jharkhand on 21st November with isolated **very heavy rainfall** also likely over Gangetic West Bengal, Jharkhand and Odisha on 20th November.

Northeast India:

- **Isolated to Scattered** rainfall likely over Arunachal Pradesh and Assam & Meghalaya during 20th-24th November; Nagaland, Manipur, Mizoram & Tripura during 22nd-24th November.
- **Fairly Widespread to Widespread** rainfall likely over Nagaland, Manipur, Mizoram & Tripura during 20th-21st November.
- Isolated **thunderstorm & lightning** likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 20th-21st November.
- Isolated **heavy rainfall** likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 20th-21st November.

West India:

- **No significant weather likely over West India during the week**.

Fog warning:

- Dense fog conditions very likely over East Uttar Pradesh and West Uttar Pradesh during 22nd-23rd November; Haryana Chandigarh & Delhi and Punjab during 20th-22nd November.

Wind warning:

- **Westcentral Bay of Bengal:** Squally wind speed reaching 50-60 kmph gusting to 70 kmph is prevailing and It will decrease gradually thereafter.
- **Northwest Bay of Bengal:** Gale wind speed reaching 60-70 kmph gusting to 80 kmph is prevailing and It will decrease becoming Squally wind speed reaching 40-50 kmph gusting to 60 kmph by evening of today.
- **Along & off North Andhra Pradesh & Yanam coasts:** Squally wind speed reaching 50-60 kmph gusting to 70 kmph is prevailing and It will decrease gradually thereafter.
- **Along & off South Odisha coasts:** Gale wind speed reaching 60-70 kmph gusting to 80 kmph is prevailing and It will decrease becoming Squally wind speed reaching 40-50 kmph gusting to 60 kmph by evening of today.
- **Along & off North Odisha & West Bengal coasts:** Squally wind speed reaching 45-55 gusting 65 kmph is prevailing and will continue till the evening of today, 20th Nov and decrease thereafter.

Sea condition:

- **Westcentral Bay of Bengal:** Very rough to rough sea condition likely to prevail during next 03hours and likely improve gradually thereafter
- **Northwest Bay of Bengal:**High Sea condition likely to continue for next 3 hours, becoming very rough to rough by evening of today and It is likely to improve thereafter
- **Along & off North Andhra coast:** Very rough to rough sea condition likely to prevail during next 03hours and likely improve gradually thereafter
- **Along & off South Odisha coasts:** High Sea condition likely to continue for next 3 hours, becoming very rough to rough by evening of today and It is likely to improve thereafter.
- **Along & Off adjoining areas of North Odisha & West Bengal coasts:** Rough Sea condition is likely to prevail till evening of today and improve gradually thereafter.

Fisherman warning:

- Fishermen are advised not to venture into
- Westcentral Bay of Bengal till 20st November night.
- Northwest Bay of Bengal till 21st November morning.

For Wind warning, Fisherman warning, sea condition and updates on Severe Cyclonic Storm "Akvan" [Pronunciation: Akvan] kindly refer to National bulletin available at https://mausam.imd.gov.in/responsive/cycloneinformation.php

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 a few places** over Andaman & Nicobar Islands, Jharkhand and Coastal Andhra Pradesh & Yanam; **at isolated places** over Bihar, East Madhya Pradesh and Vidarbha; **Dry** over rest of the country.

❖ **Significant rainfall recorded(in cm)** (from 0830 hours IST of yesterday to 0830 hours IST of today): **Coastal Andhra Pradesh & Yanam**: Ichchapuram (dist Srikakulam) 18; Sompeta (dist Srikakulam) 13; Palasa (dist Srikakulam) 10; Mandasa (dist Srikakulam) 3; **Gangetic West Bengal**: Kalyani Smo (dist Nadia), Amta (dist Howrah), Kalaikunda (Iaf) (dist West Midnapore) 9 Each; Contai (dist East Midnapore), Barrackpur(Iaf) (dist North 24 Parganas) 8 Each; D.p.ghat (dist Jhargram), Uluberia (dist Howrah), Mohanpur (dist West Midnapore), Amfu Kharagpur (dist West Midnapore), Midnapore (dist West Midnapore), Midnapore(CWC) (dist West Midnapore), Harinkhola (dist Hooghly), PTO Tarakeswar (dist Hooghly) 7 Each; Basirhat(pt) (dist North 24 Parganas), Amfu Kakdwip (dist South 24 Parganas), Jhargram PTO (dist Jhargram), Mo Saltlake (dist North 24 Parganas), Sagar Island PTO (dist South 24 Parganas) 6 Each; Dum Dum (dist North 24 Parganas), Durgachack (dist East Midnapore), Digha (dist East Midnapore), Alipore (dist Kolkata), Canning (dist South 24 Parganas), Burdwan PTO (dist Purba Bardhaman), Lalgarh (dist Jhargram) 5 Each; Purulia (dist Purulia), Diamond Harbour (dist South 24 Parganas), Phulberia (dist Purulia), Kharidwar (dist Purulia) 4 Each; Kansabati Dam (dist Bankura), Purihansa (dist Purulia), Bankura(CWC) (dist Bankura), Tusuma (dist Purulia) 3 Each; **Jharkhand**: Chakradharpur (dist West Singbhum), Majhgaon (dist West Singbhum), Baharagora (dist East Singbhum), Gurabandha (dist East Singbhum) 5 Each; Gudri (dist West Singbhum), Kumardungi (dist West Singbhum), Sadar Chaibasa (dist West Singbhum) 4 Each; Chaibasa (dist West Singbhum), Jamshedpur (dist East Singbhum), Chakulia (dist East Singbhum) 3 Each.

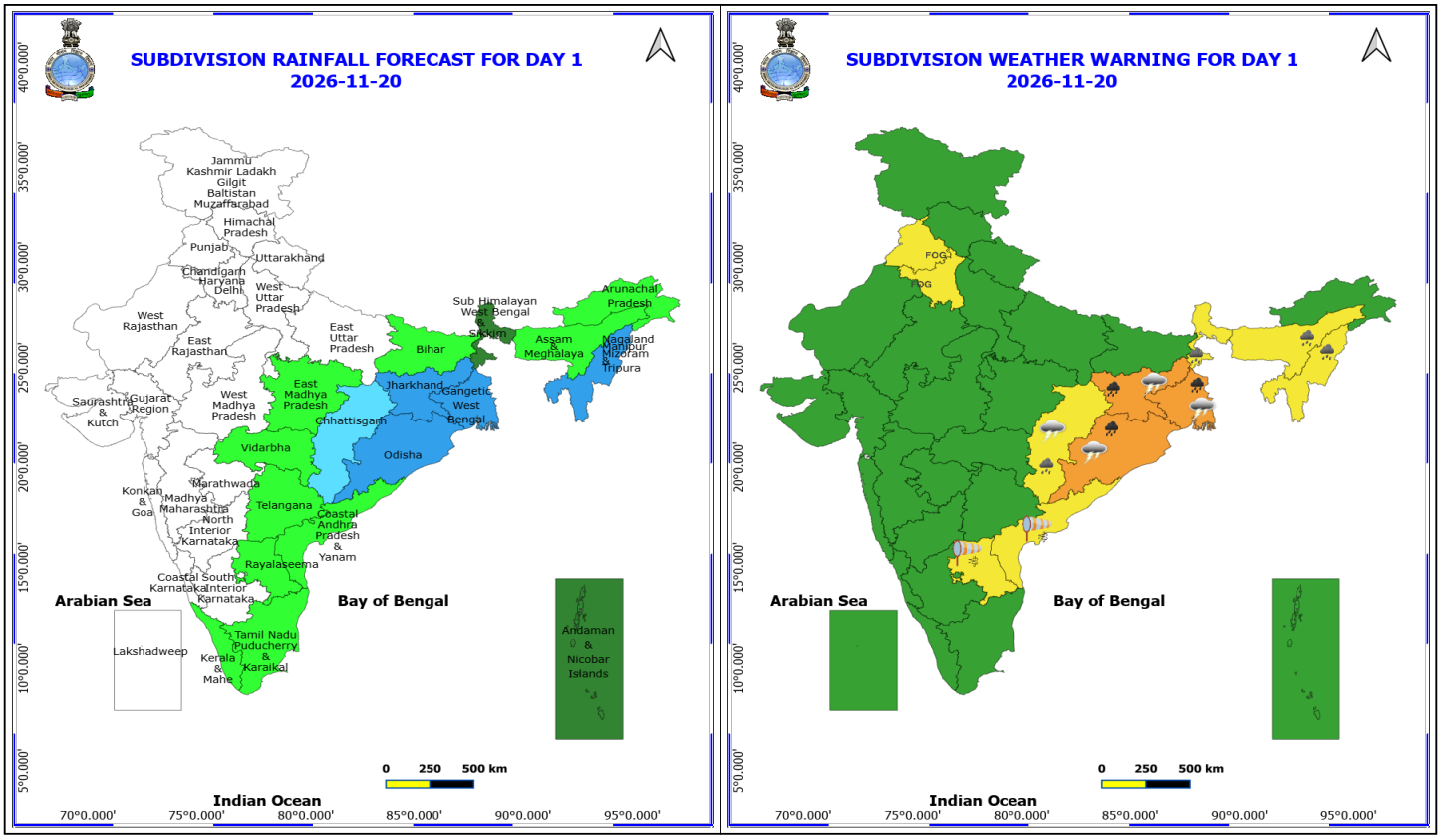
❖ **Heavy Rainfall observed** (from 0830 hours IST of yesterday to 0830 hours IST of today): **Extremely Heavy rain** over Odisha. **Heavy to very heavy rain** at isolated places over Coastal Andhra Pradesh & Yanam. **Heavy rain** at isolated places over Gangetic West Bengal and Tripura.

❖ **Minimum Temperature Departures (as on 20-11-2026): below normal(-1.6°C to -3.0°C)** at few places over Coastal Karnataka; at isolated places over Rayalaseema, North Interior Karnataka and South Interior Karnataka. **The lowest minimum temperature** of 6.5°C was reported at SIKAR (RAJASTHAN) over the Plains of India.

❖ **Maximum Temperature Departures (as on 19-11-2026): appreciably below normal(-5.0°C to -3.1°C)** at few places over North Interior Karnataka. **markedly below normal(< -5.0°C)** at most places over East Uttar Pradesh, West Uttar Pradesh, Himachal Pradesh, West Rajasthan, West Madhya Pradesh, East Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Rayalaseema and South Interior Karnataka. **The highest maximum temperature** of 35.9°C was reported at HONAVAR (KARNATAKA).

Meteorological Analysis (Based on 0830 hours IST)

- The **Cyclonic Storm "Akvan" [Pronunciation: Akvan]** over the westcentral Bay of Bengal near north Andhra Pradesh & south Odisha coasts moved north-northwestwards with the speed of 26 kmph during past 06 hours and crossed the north Andhra Pradesh & south Odisha coasts close to Gopalpur (near latitude 19.1 & longitude 84.8) with wind speed of 70-80kmph gusting to 90kmph during 0730-0830 IST, lay centred over south coastal Odisha & adjoining north coastal Andhra Pradesh close to Gopalpur near Latitude 19.2°N and Longitude 84.8°E, at 0830 hours IST of today, the 20th November, 2026, about 120 km northeast of Kalingapatnam (Andhra Pradesh), 130 km west-southwest of Puri (Odisha), and 230 km northeast of Visakhapatnam (Andhra Pradesh). It is likely to move nearly north-northeastwards across Odisha and weaken into a Deep Depression during next 03 hours and into a Depression during subsequent 06 hours.
- The **upper air cyclonic circulation** over Northeast Assam & neighbourhood at 3.1 km above mean sea level persists.
- A fresh **Western Disturbance** as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 56°E to the north of Lat. 32°N.
- The **upper air cyclonic circulation** over east Bangladesh & neighbourhood extending upto 1.5 km above mean sea level persists.
- The **Western Disturbance** as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 75°E to the north of Lat. 33°N has moved away east-northeastwards.
- The **upper air cyclonic circulation** over Southeast Arabian sea & adjoining south Lakshadweep area extending upto 3.1 km above mean sea level has become less marked.



20 November (Day 1)

❖ **Heavy to Very Heavy Rainfall** very likely at isolated places over Gangetic West Bengal, Jharkhand and Odisha.

❖ **Heavy Rainfall** very likely at isolated places over Assam & Meghalaya, Chhattisgarh, Nagaland, Manipur, Mizoram and Tripura and Sub Himalayan West Bengal & Sikkim.

❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** very likely at isolated places over Chhattisgarh, Gangetic West Bengal, Jharkhand and Odisha.

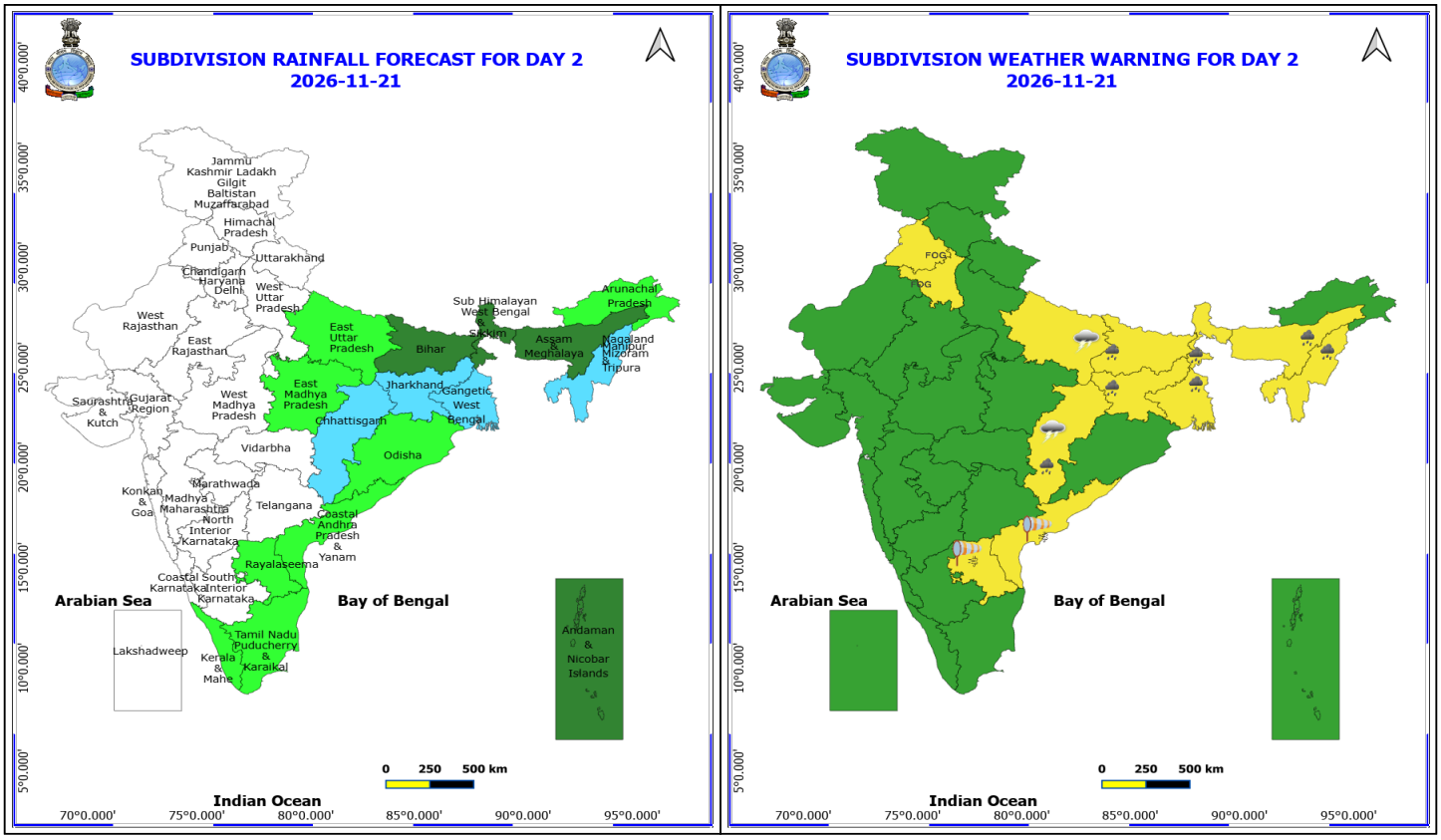
❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** very likely at isolated places over Andaman & Nicobar Islands, Andhra Pradesh, East Madhya Pradesh and Telangana.

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

❖ **Strong Surface Winds** very likely at isolated places over Andhra Pradesh.

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

❖ Fishermen are advised not to venture into Northwest Bay of Bengal and Westcentral Bay of Bengal.



21 November (Day 2)

❖ **Heavy Rainfall** very likely at isolated places over Assam & Meghalaya, Bihar, Chhattisgarh, Jharkhand, Nagaland, Manipur, Mizoram and Tripura and West Bengal & Sikkim.

❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** very likely at isolated places over Chhattisgarh and East Uttar Pradesh.

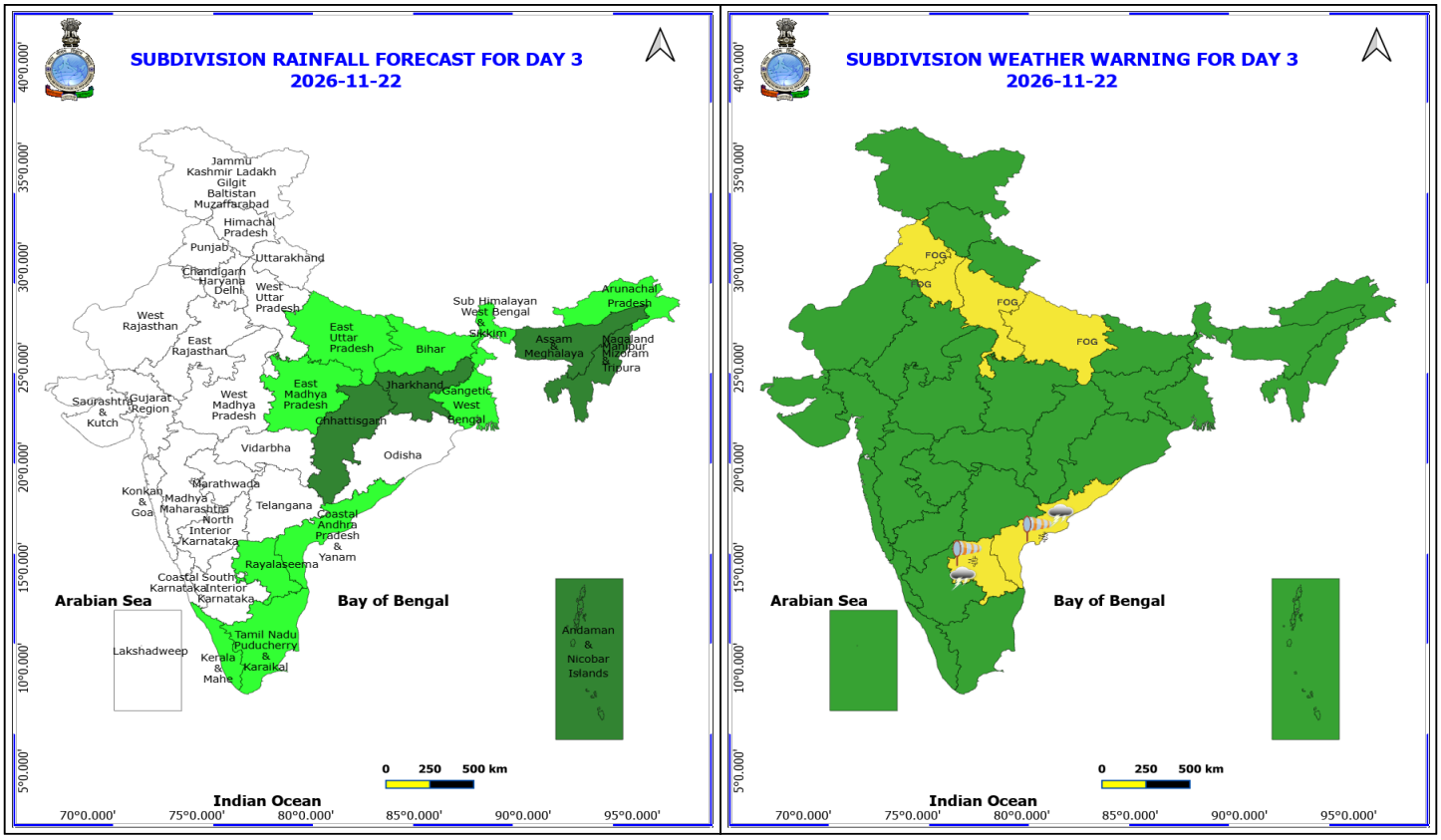
❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** very likely at isolated places over Andhra Pradesh, Bihar, East Madhya Pradesh and Gangetic West Bengal.

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

❖ **Strong Surface Winds** very likely at isolated places over Andhra Pradesh.

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

❖ Fishermen are advised not to venture into Northwest Bay of Bengal.



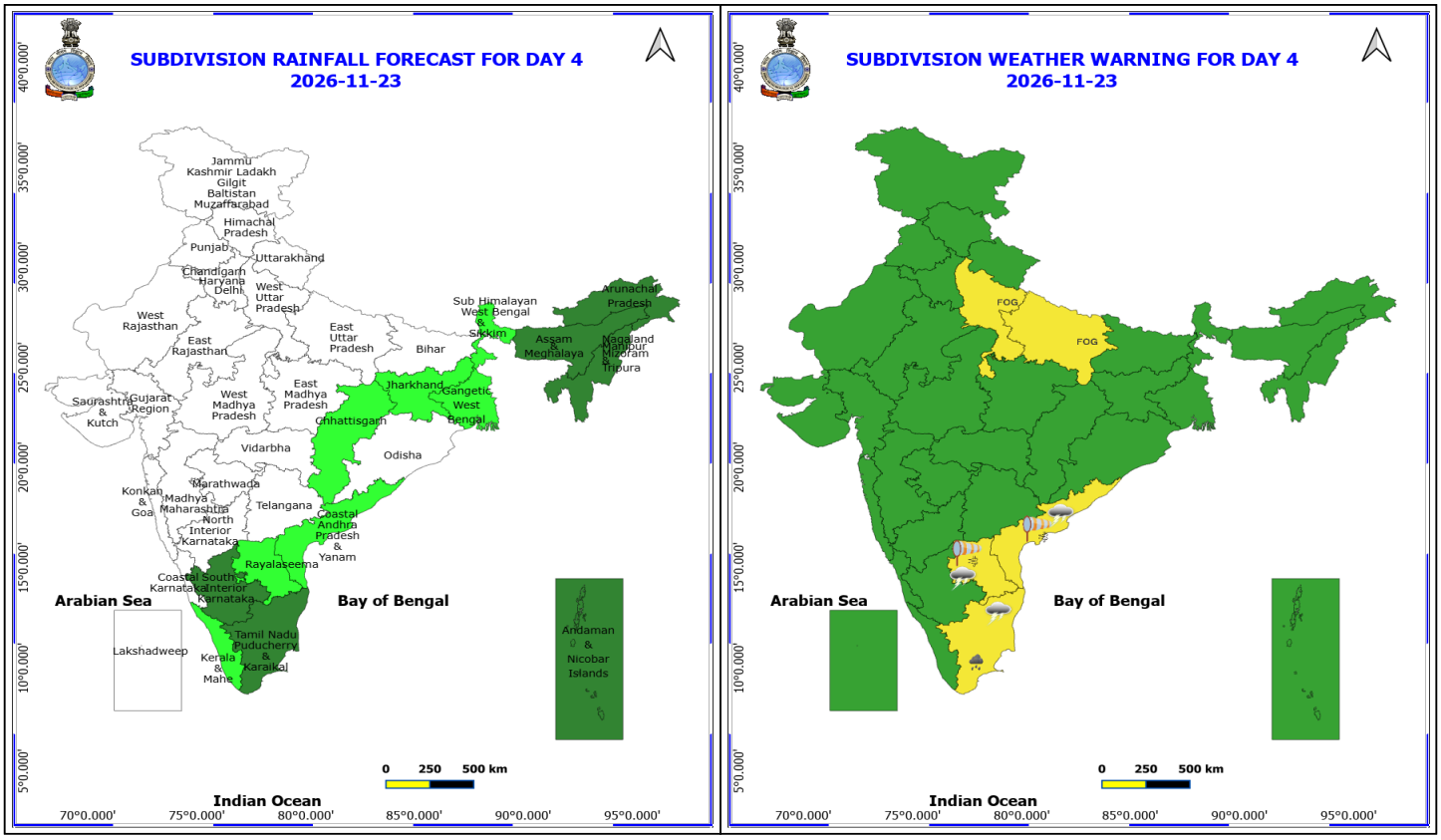
22 November (Day 3)

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

❖ **Strong Surface Winds** very likely at isolated places over Andhra Pradesh.

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

No Fishermen Warning



23 November (Day 4)

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

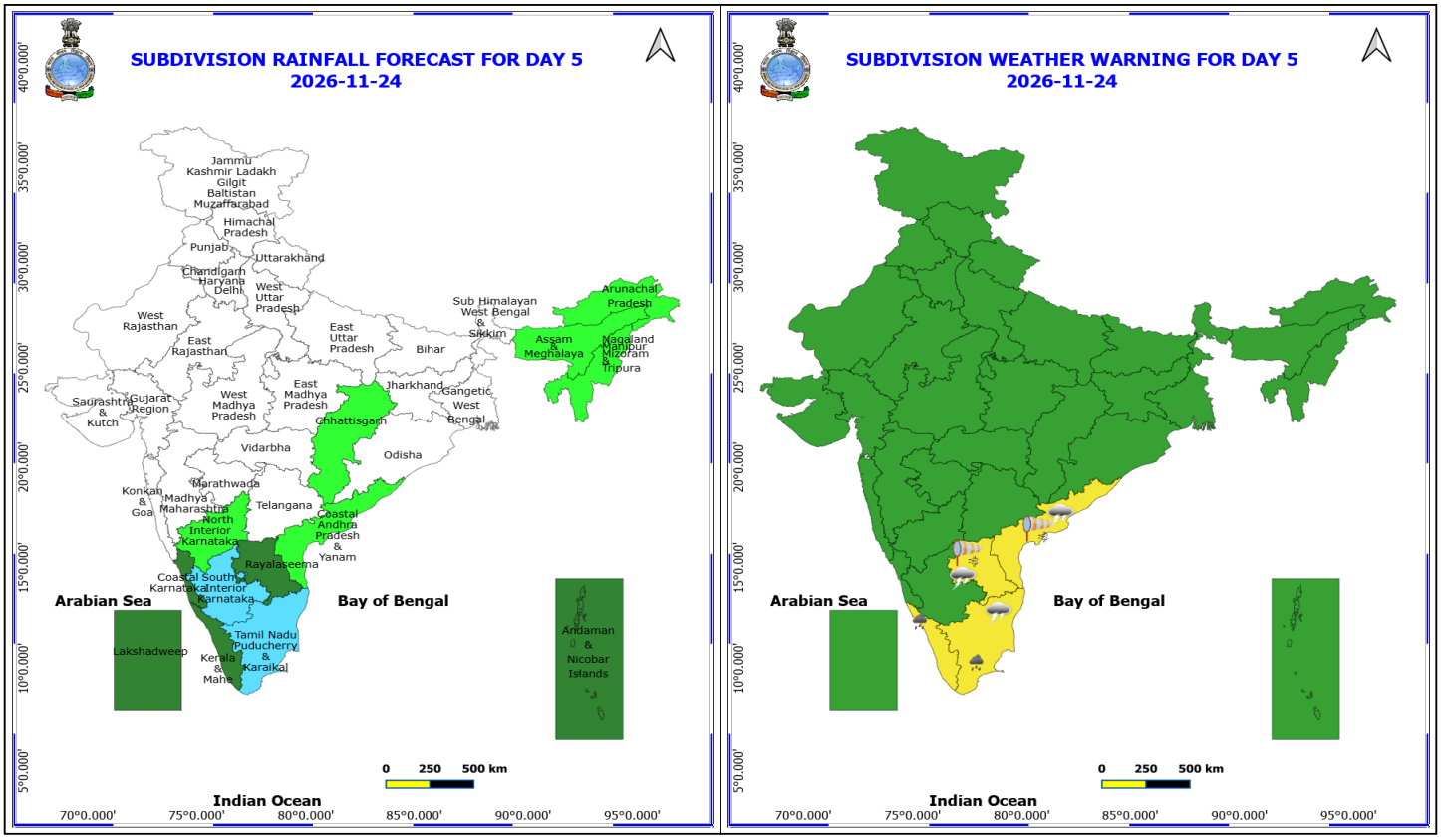
❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** likely at isolated places over Andhra Pradesh and Tamil Nadu Puducherry & Karaikal.

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

❖ **Strong Surface Winds** likely at isolated places over Andhra Pradesh.

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

No Fishermen Warning



24 November (Day 5)

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

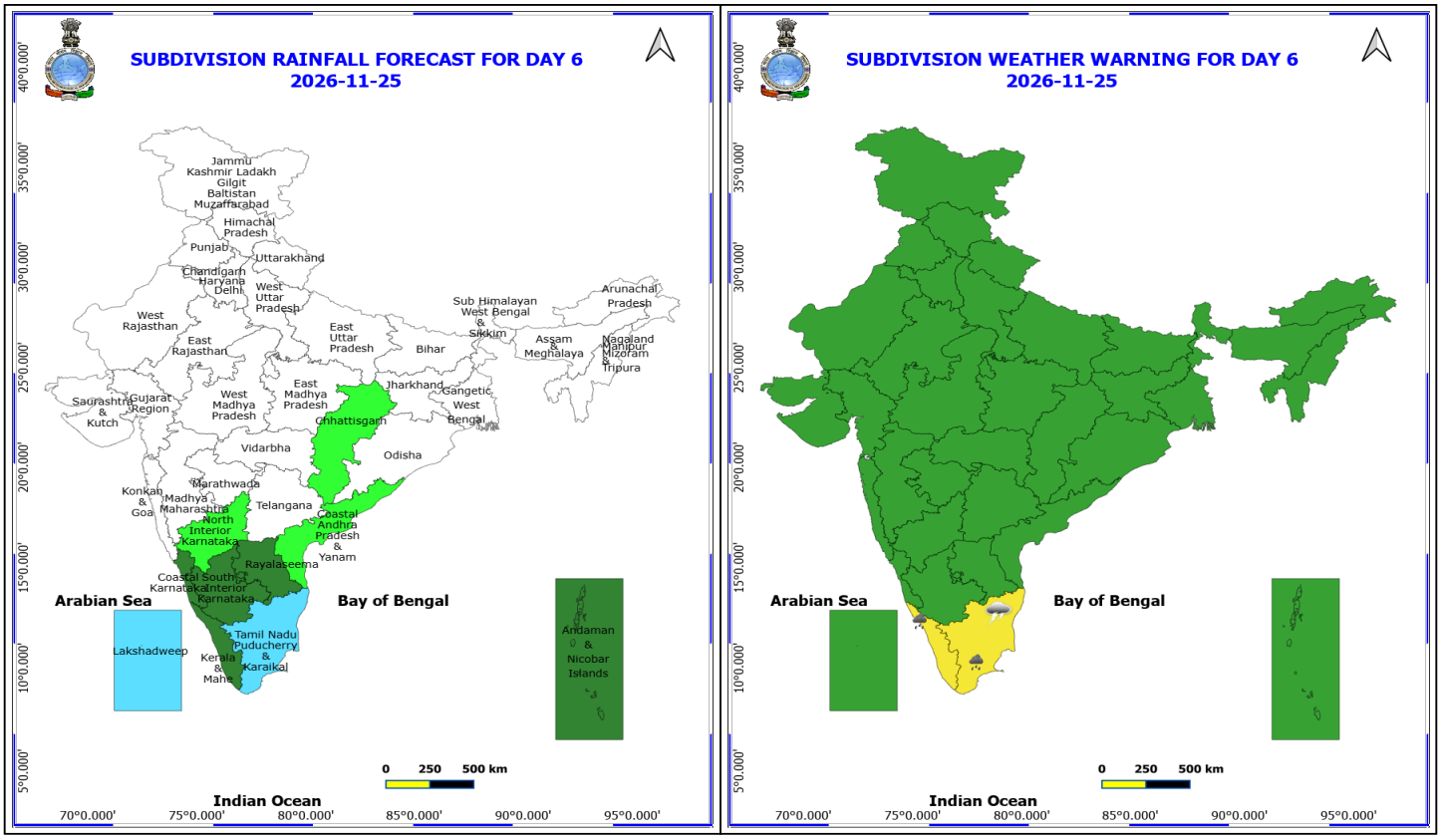
❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** likely at isolated places over Andhra Pradesh and Tamil Nadu Puducherry & Karaikal.

❖ **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.

❖ **Strong Surface Winds** likely at isolated places over Andhra Pradesh.

No Fishermen Warning



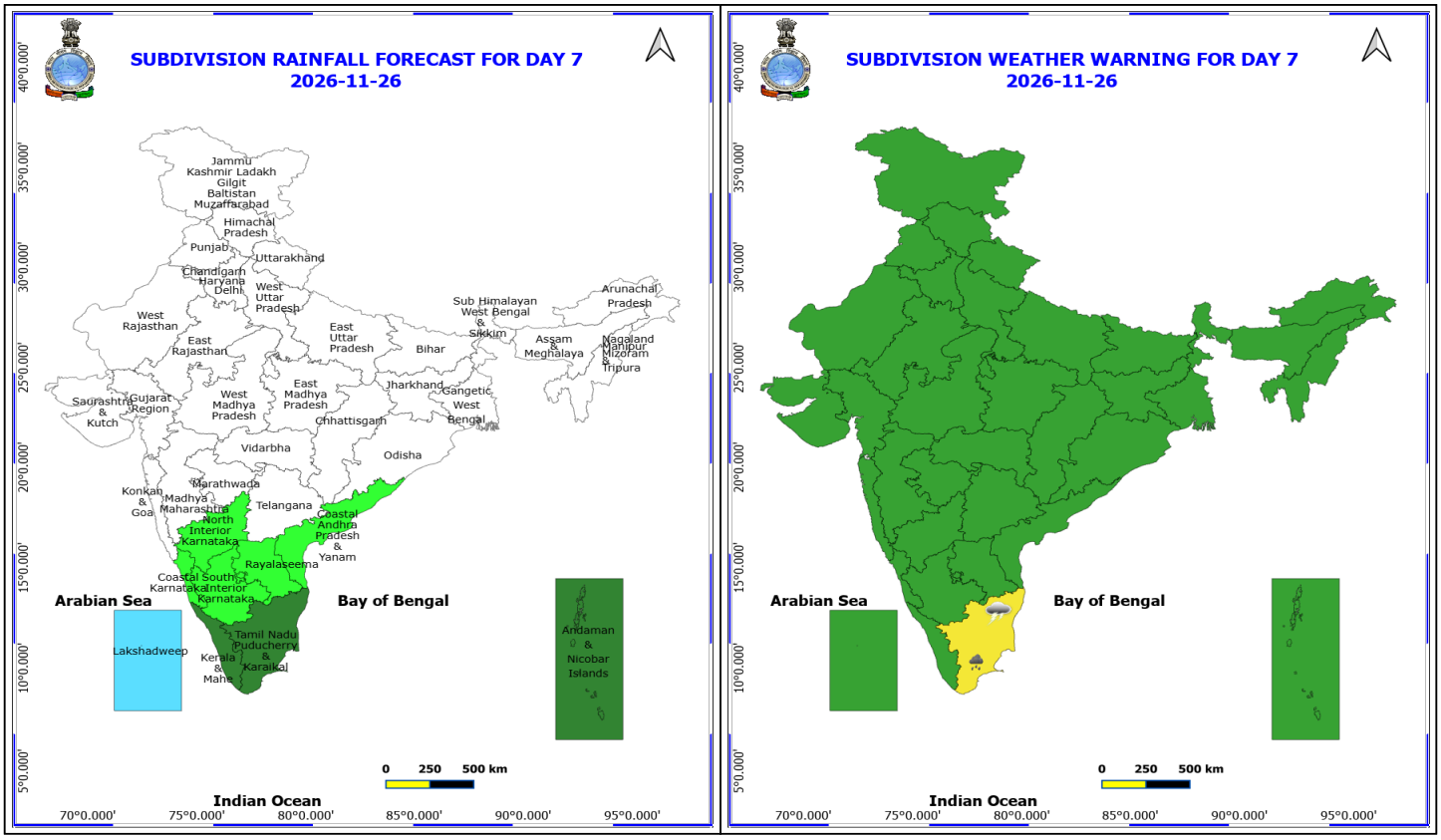
25 November (Day 6)

❖ **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



26 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

Flash Flood Warnings

Flash Flood Risk (FFR) till 1130 IST of 21-11-2026:

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours.

Odisha: Deogarh, Sambalpur, Sundargarh and Mayurbhanj districts

Gangetic West Bengal: Howrah, East Midnapore, North 24 Parganas, South 24 Parganas, Nadia and Bankura districts

Jharkhand: East Singhbhum, West Singhbhum, Seraikela-Kharsawan and Simdega districts

Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over Area of Concern (AoC) as shown in map due to expected rainfall occurrence in next 24 hours.

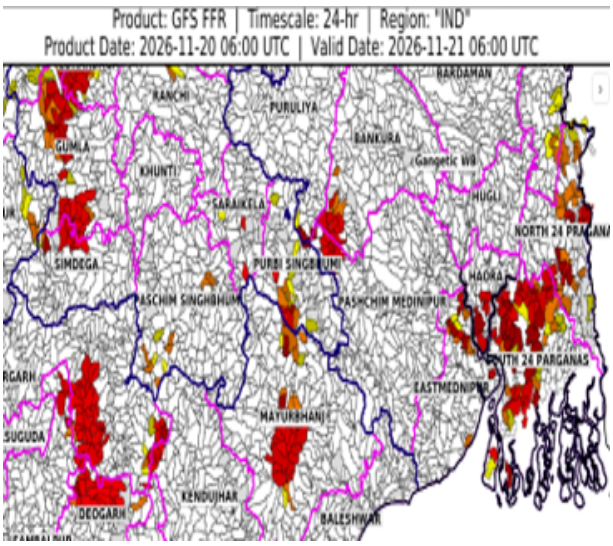


Table-1

7 Days Rainfall Forecast

S.No.	Subdivision	20-Nov	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov	26-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	ISOL	SCT	ISOL	DRY	DRY
3	ASSAM & MEHGHALAYA	ISOL	SCT	SCT	SCT	ISOL	DRY	DRY
4	N. M. M. & T.	WS	FWS	SCT	SCT	ISOL	DRY	DRY
5	S.H. WEST BENGAL & SIKKIM	SCT	SCT	ISOL	ISOL	DRY	DRY	DRY
6	GANGETIC WEST BENGAL	WS	FWS	ISOL	ISOL	DRY	DRY	DRY
7	ODISHA	WS	ISOL	DRY	DRY	DRY	DRY	DRY
8	JHARKHAND	WS	FWS	SCT	ISOL	DRY	DRY	DRY
9	BIHAR	ISOL	SCT	ISOL	DRY	DRY	DRY	DRY
10	EAST UTTAR PRADESH	DRY	ISOL	ISOL	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	DRY	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	ISOL	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	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
27	CHATTISGARH	FWS	FWS	SCT	ISOL	ISOL	ISOL	DRY
28	COASTAL ANDHRA PRADESH	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
29	TELANGANA	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
30	RAYALASEEMA	ISOL	ISOL	ISOL	ISOL	SCT	SCT	ISOL
31	TAMILNADU & PUDUCHERRY	ISOL	ISOL	ISOL	SCT	FWS	FWS	SCT
32	COSTAL KARNATAKA	DRY	DRY	DRY	DRY	SCT	SCT	ISOL
33	NORTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
34	SOUTH INTERIOR KARNATAKA	DRY	DRY	DRY	SCT	FWS	SCT	ISOL
35	KERALA	ISOL	ISOL	ISOL	ISOL	SCT	SCT	SCT
36	LAKSHDWEEP	DRY	DRY	DRY	DRY	SCT	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 2026-11-19

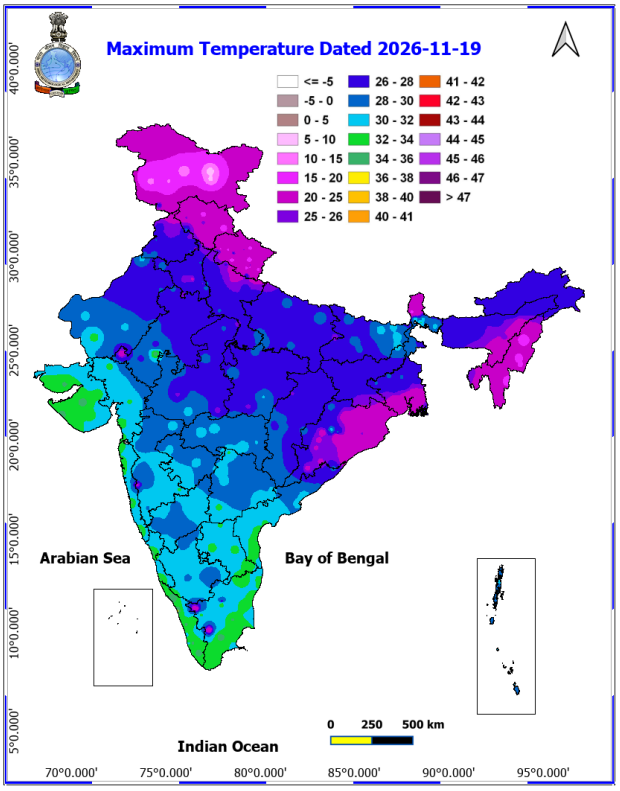


Fig. 2: Departure of Maximum Temp. Dated 2026-11-19

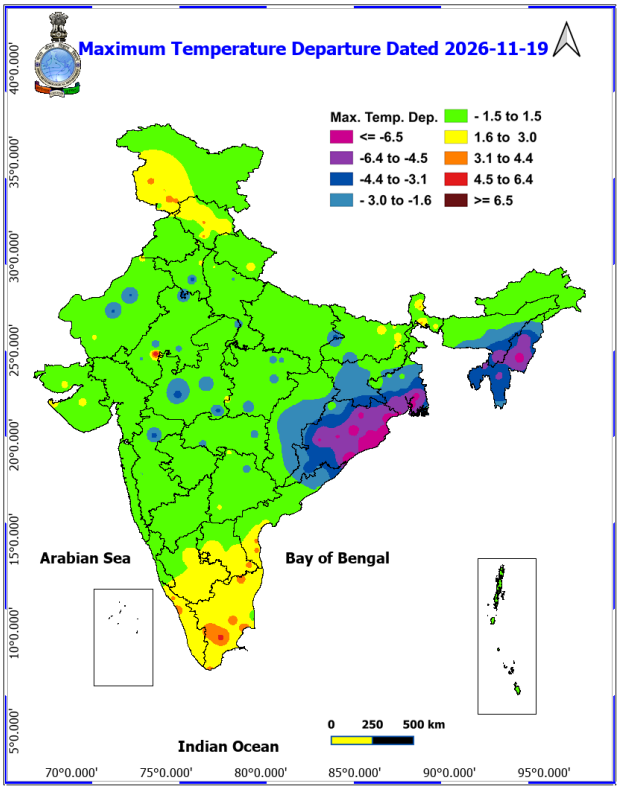


Fig. 3: Minimum Temperatures Dated 2026-11-20

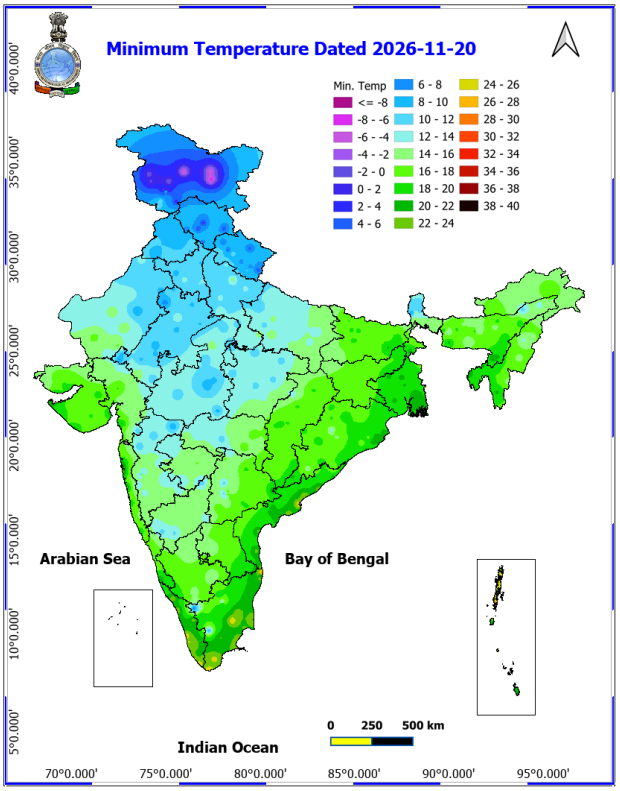
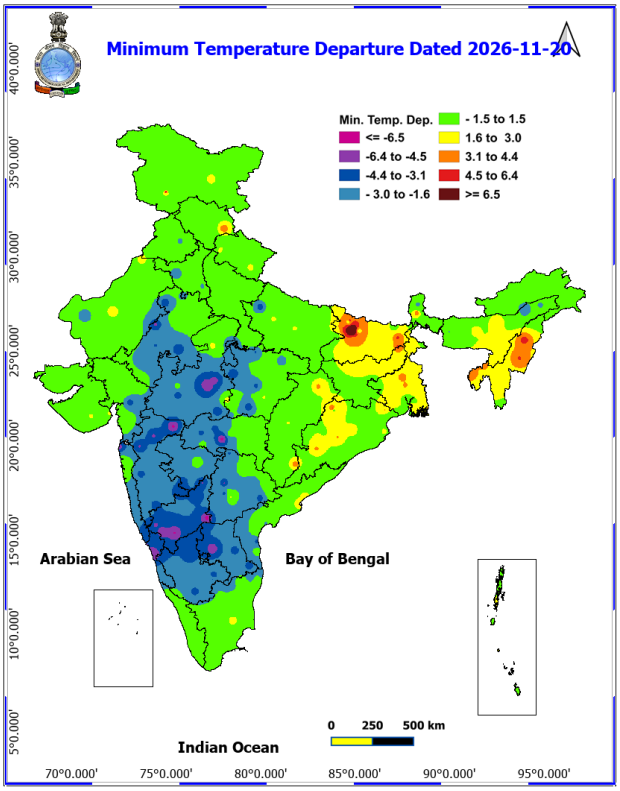
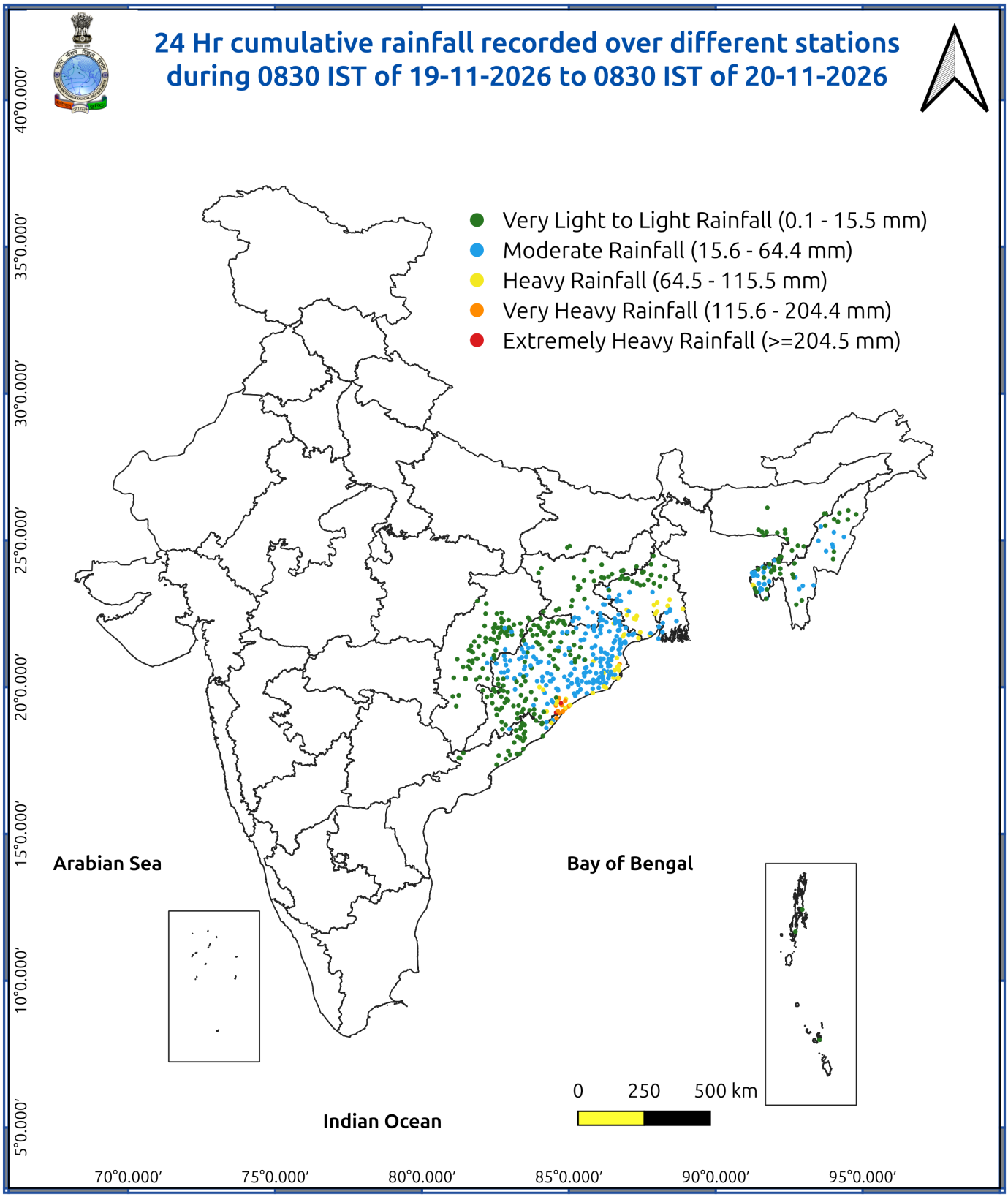


Fig. 4: Departure of Minimum Temp. Dated 2026-11-20



24 Hr cumulative rainfall recorded over different stations during 0830 IST of 19-11-2026 to 0830 IST of 20-11-2026



Impace and Actions

Impact Expected and Action Suggested due to heavy rainfall:

- **Isolated very heavy rainfall also likely over Gangetic West Bengal, Jharkhand and Odisha on 20th November**.

Impact expected:

- Breaking of tree branches, uprooting of small trees like banana, papaya, drum sticks. Strong wind and rain may damage plantation, horticulture and standing crops.
- Partial damage to vulnerable structures due to strong winds and rain.
- Minor damage to kutcha houses/walls, huts and roads due to heavy rain.
- Loose objects may fly.
- Small ships, trawlers and boats may be affected.
- Road and rail traffic may be affected due to heavy rain and squally winds.
- There could be localised landslides, mudslides, landslips, water logging, inundation and flooding over low lying areas.
- Occasional reduction in visibility due to heavy rainfall.
- Helicopter services may get affected.

Action suggested:

- People are advised to keep a watch on the weather for worsening conditions and be ready to move to safer places accordingly.
- Take safe shelters; do not take shelter under trees, as there could be lightning.
- In case of expected lightning, unplug electrical/ electronic appliances, immediately, get out of water bodies and keep away from all the objects that conduct electricity.
- Tourism and recreational activities to be regulated.
- Offshore and offshore activities to be judiciously regulated.
- Helicopter services to be regulated.

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

- **Dense fog conditions** very likely over East Uttar Pradesh and West Uttar Pradesh during 22nd-23rd November; Haryana Chandigarh & Delhi and Punjab during 20th-22nd 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 / Extremely 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 **Gangetic West Bengal**, drain out excess water from fields of standing crops, winter vegetables and betel vine garden. Postpone the land preparation and sowing of *rabi* crops such as mustard, rapeseed, lentil and potato until the rainfall subsides and the soil moisture reaches an optimum level. Strengthen trellises for climbing vegetables like beans and gourds.
- In **Jharkhand,** postpone harvesting of pigeon pea and late sown and long duration rice crop. Store the already harvested produce in a safe and dry place, if feasible. Postpone sowing of wheat, mustard, rapeseed and vegetables until rainfall ceases and soil moisture conditions become favourable. Ensure proper drainage facilities in vegetable nurseries and fields of potato and pulses. Provide staking to vegetable crops such as tomato, chilli and brinjal to prevent from lodging.
- 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.

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:

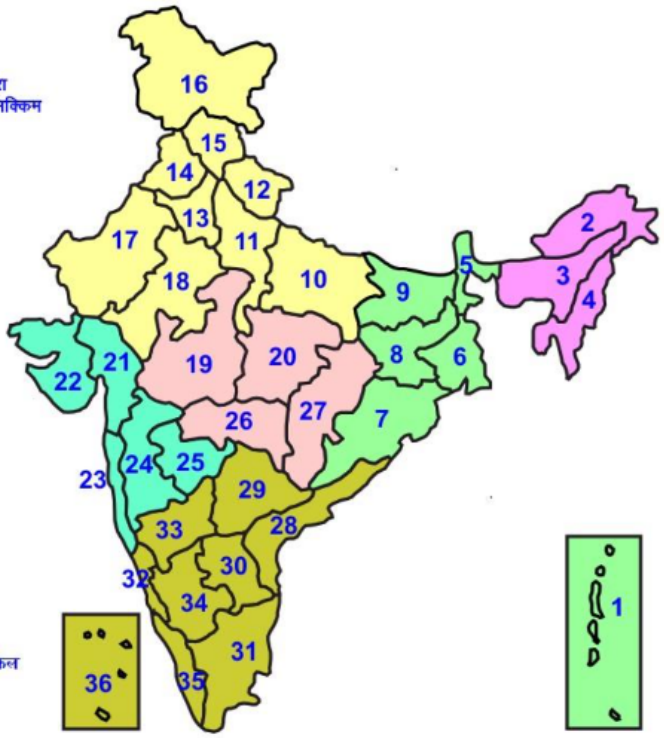
- **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad,

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)