



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

## Friday, November 15, 2024 Time of Issue: 1330 hours IST (MID-DAY)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

## **Significant Weather Features**:

#### Weather Systems:

- A cyclonic circulation lies over Gulf of Mannar & adjoining Sri Lanka coast in lower tropospheric levels.
- A Western Disturbance as a trough aloft in middle tropospheric westerlies runs roughly along Long. 65°E to the north of Lat. 30°N.

#### Forecast & Warnings (upto 7 days) :

- Light to moderate rainfall at a few places accompanied with isolated thunderstorm and lightning very likely over south Peninsular India during 15<sup>th</sup>-17<sup>th</sup> November, 2024.
- ✓ Light rainfall at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and at isolated places over north Punjab today.
- Isolated heavy rainfall very likely over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh, Rayalaseema on 15<sup>th</sup>; & Kerala & Mahe on 15<sup>th</sup> & 16<sup>th</sup> November, 2024.
- Dense to very dense fog conditions very likely to prevail in night/early morning hours in some pockets of Punjab, Haryana, Bihar till 17<sup>th</sup> morning hours; East Uttar Pradesh till 16<sup>th</sup> morning hours. Dense fog conditions very likely to prevail in night/early morning hours in isolated pockets over West Rajasthan, Bihar till 18<sup>th</sup> morning hours; Himachal Pradesh during 17<sup>th</sup>-19<sup>th</sup> morning hours; Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim during 17<sup>th</sup> morning hours.

#### ii. Temperature conditions and Forecast:

#### Temperature Conditions during past 24 hours till 0830 hours IST of today

No significant change in minimum temperature observed over most parts of the country during past 24 hours. Minimum temperatures are **appreciably above normal by 3°C-5°C** at isolated places over northwest Rajasthan, Punjab, Haryana, south Telangana, Madhya Maharashtra, West Uttar Pradesh; **above normal by 2°C - 3°C** at many places over Coastal Andhra Pradesh & Yanam, Rayalaseema, southwest Rajasthan. These are **below normal by 2°C-3°C** at isolated places over central Madhya Pradesh, north Chhattisgarh and near normal over rest parts of the country. Today, **the lowest minimum temperature** of **10.4°C** is reported at **Ambikapur (Chhattisgarh)** over the plains of the country.

#### **Forecast of temperature:**

- Gradual fall in minimum temperatures by 2-3°C very likely over Northwest & Central India during next 5 days.
- No significant change in minimum temperatures over West India during next 2 days and gradual fall by 2-3°C during subsequent 2-3 days.
   Gradual fall in minimum temperatures by 2-3°C very likely over East India during next 2-3 days.

### iii. Weather forecast over Delhi/NCR during 15th Nov. to 18th Nov. 2024

#### Past Weather:

There has been a slight fall in minimum temperatures over Delhi/NCR during past 24hr. The Maximum and Minimum temperature over Delhi is in the range of 28 to 30°C and 11 to 17°C respectively. The maximum temperature was above normal by 1 to 2°C and the minimum temperature was above normal by 2 to 4°C over most places. Mainly smog condition with predominant surface wind from variable direction with wind speed reaching 04 to 08 kmph prevailed during past 24hr. Moderate fog reported at Palam airport. Palam airport recorded lowest visibility 500 m during 0630 to 0830 hours IST which improved thereafter becoming 600m at 0900 hours IST. Safdarjung airport recorded lowest visibility 400m during 0700 hours to 0800 IST which improved thereafter becoming 500m at 0830 hours IST. Mainly smog condition with wind speed less than 06 kmph variable direction prevailed over the region in the forenoon today.

#### Weather Forecast:

**15.11.2024:** Mainly clear sky. The predominant surface wind is likely to be northwest with wind speed upto 04-08 kmph till evening. It would decrease thereafter becoming less than 06 kmph from variable direction during night. Smog/shallow fog is likely in the evening/night.

**16.11.2024:** Mainly clear sky. The predominant surface wind is likely to be from northwest direction with speed less than 06 kmph during morning hours. Smog/moderate fog is likely in the morning. The wind speed will increase thereafter becoming less than 12 kmph from northwest direction during afternoon. It will decrease thereafter becoming less than 10 kmph from northwest direction during evening and night. Smog/ shallow fog is likely in the evening/night.

**17.11.2024:** Mainly clear sky. The predominant surface wind is likely to be from north direction with speed less than 08 kmph during morning hours. Smog/moderate fog is likely in the morning. The wind speed will gradually increase becoming 10-12 kmph from northwest direction during afternoon. It will decrease thereafter becoming less than 08 kmph from north direction during evening and night. Smog/ shallow fog is likely in the evening/night.

**18.11.2024:** Mainly clear sky. The predominant surface wind is likely to be from northwest direction with wind speed less than 08 kmph during morning hours. Smog/shallow to moderate fog in the morning. The wind speed will increase thereafter becoming 10-12 kmph from northwest direction during afternoon. It will gradually decrease becoming less than 08 kmph from northwest directions during evening and night. Smog/ shallow fog is likely in the evening/night.





## Main Weather Observations:

- Rainfall distribution (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Tamil Nadu, Puducherry & Karaikal, Rayalaseema, Coastal & South Interior Karnataka; at many places over Kerala & Mahe, North Interior Karnataka; at a few places over Konkan & Goa, Coastal Andhra Pradesh & Yanam; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Telangana.
- Significant amount of rainfall (from 0830 hours IST of yesterday to 0830 hours IST of today) (in cm): Tamil Nadu, Puducherry & Karaikal: Oothu (dist Tirunelveli), Nalumukku (dist Tirunelveli) 10 each, Kakkachi (dist Tirunelveli) 9, Vadakuthu (dist Cuddalore), Manjolai (dist Tirunelveli) 8 each,Neyyoor AWS (dist Kanyakumari), Kollidam (dist Mayiladuthurai) 7 each, Gummidipoondi (dist Tiruvallur), Tiruchendur (dist Thoothukudi), Cuddalore Collector Office(dist Cuddalore) 6 each; Kerala & Mahe: Kuppady (dist Wynad) 7, Thodupuzha (dist Idukki) 5, Kuppadi(dist Wynad) 5; Rayalaseema: Srikalahasti (dist Tirupati) 6, Thottambedu (dist Tirupati) 6, Tirupati Aero (dist Tirupati) 5, Sullurpeta (dist Tirupati) 4, Badvel (dist Ysr District) 4; Coastal Karnataka: Dharmasthala (dist Dakshina Kannada) 5, Puttur Hms (dist Dakshina Kannada) 5; South Interior Karnataka: Kalasa (dist Chikkamagaluru) 5; Coastal Andhra Pradesh & Yanam: Kandukur (dist Spsr Nellore) 5, Kavali (dist Spsr Nellore) 4, Veligandla (dist Prakasam) 4;
- Heavy rainfall recorded (from 0830 hours IST of yesterday to 0830 hours IST of today): Heavy rainfall occurred at isolated places over Kerala and Tamil Nadu.
- Fog Observed (at 0830 hours IST of today): Very dense fog reported in isolated pockets of Punjab and Haryana and Dense fog in isolated pockets of Chandigarh, east Bihar and East Uttar Pradesh.
- Visibility Recorded (at 0830 hours IST of today) (<500 meters): Punjab: Amritsar, Ludhiana & Patiala-0 each; Haryana-Chandigarh: Ambala, Bhiwani & Hissar-0 each, Chandigarh-200; East Uttar Pradesh: Lucknow-0, Prayagraj-200; Bihar: Purnea-200.
- Minimum Temperature Departures (as on 15-11-2024): Minimum temperatures are markedly above normal (5.1°C or more) at isolated places over Madhya Maharashtra; appreciably above normal (3.1°C to 5.0°C) at many places over Konkan & Goa; at a few places over North Interior Karnataka; at isolated places over Punjab, East Rajasthan, Telangana, Coastal Andhra Pradesh & Yanam, Marathwada; above normal (1.6°C to 3.0°C) at most places over South Interior Karnataka; at many places over Uttarakhand, West Uttar Pradesh, Bihar and Coastal Karnataka; at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, East Uttar Pradesh, East Rajasthan, Sub-Himalayan West Bengal & Sikkim and Kerala & Mahe; at isolated places over Gangetic West Bengal, Odisha, Chhattisgarh, West Madhya Pradesh, Gujarat Region and Tamil Nadu, Puducherry & Karaikal. These are below normal (-1.6°C to -3.0°C) at isolated places over East Madhya Pradesh, Vidarbha and near normal over rest parts of the country. Today, the lowest minimum temperature of 10.4°C is reported at Ambikapur (Chhattisgarh) over the plains of the country. (Fig.4)
- Maximum Temperature Departures (as on 14-11-2024): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over East Rajasthan and Assam & Meghalaya ; above normal (1.6°C to 3.0°C) at many places over Konkan & Goa; at a few places over East Uttar Pradesh, East Madhya Pradesh, West Rajasthan, Vidarbha and Kerala & Mahe; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, West Madhya Pradesh, Saurashtra & Kutch, West Bengal & Sikkim, Chhattisgarh, Odisha, Nagaland, Manipur, Mizoram & Tripura, Telangana, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal. These were appreciably below normal (-3.1°C to -5.0°C) at isolated places over Punjab; below normal (-1.6°C to -3.0°C) at isolated places over Haryana-Chandigarh and West Uttar Pradesh and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 37.2°C was reported at Karwar (Coastal Karnataka) over the country. (Fig. 2)





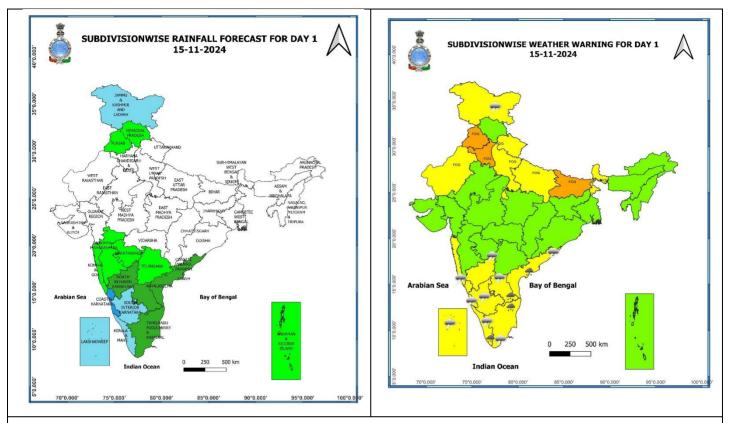
## Meteorological Analysis (Based on 0830 hours IST)

- The cyclonic circulation over south Tamilnadu & neighbourhood now lies over Gulf of Mannar & adjoining Sri Lanka coast and extends upto 1.5 km above mean sea level.
- The Western Disturbance as a cyclonic circulation over north Afghanistan and adjoining Pakistan at 3.1 Km above mean sea level has become less marked. However, the trough aloft in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 65°E to the north of Lat. 30°N persists.
- ✤ Jet Stream Winds of the order upto 120 knots at 12.6 km above mean sea level are prevailing over Northwest India.
- The cyclonic circulation over Lakshadweep and adjoining southeast Arabian Sea extending upto
   3.1 km above mean sea level has become less marked.



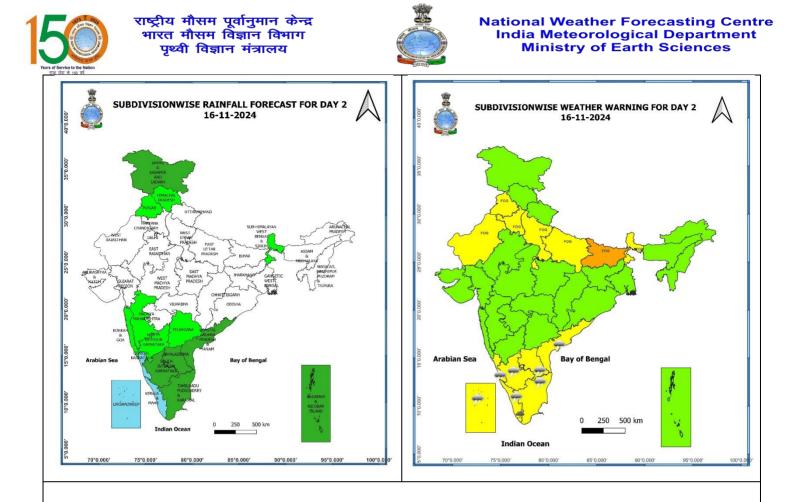


Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 22<sup>nd</sup> November, 2024)



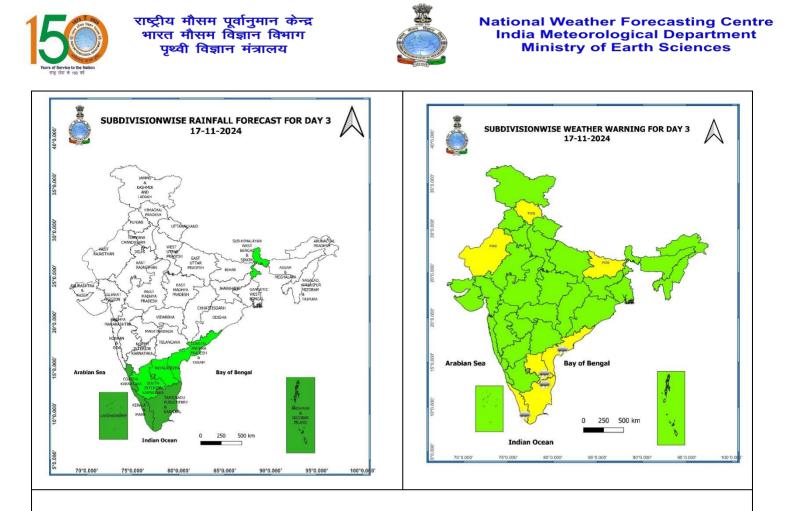
## 15 November (Day 1):

- ✤ Heavy rainfall (≥ 7 cm) very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema.
- Dense to Very dense fog conditions very likely in a few pockets of Punjab, Haryana-Chandigarh-Delhi; at isolated pockets over East Uttar Pradesh, Bihar; Dense fog conditions very likely in a few pockets over Uttarakhand; at isolated pockets of West Uttar Pradesh, West Rajasthan Sub-Himalayan West Bengal & Sikkim in the morning hours.
- Thunderstorm accompanied with lightning very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Konkan & Goa, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka.
- Squally weather with wind speed 35-45 kmph gusting to 55 kmph over Gulf of Mannar and adjoining Comorin Area. Fishermen are advised not to venture into these areas.



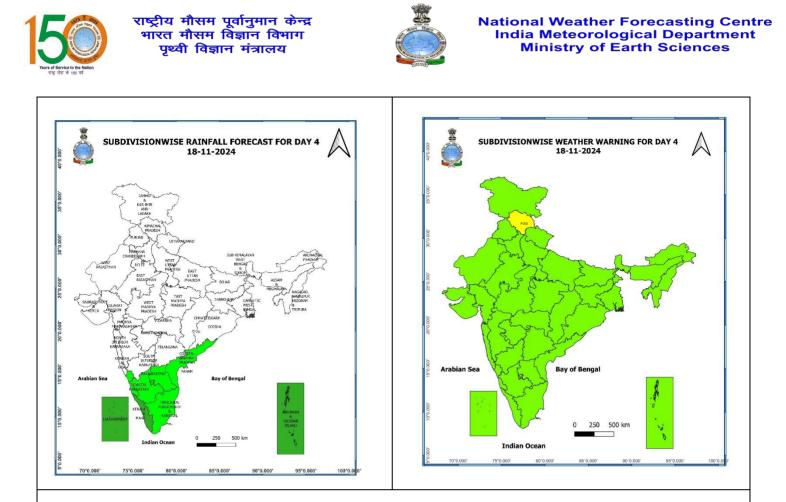
## 16 November (Day 2):

- ◆ Heavy rainfall (≥ 7 cm) very likely at isolated places over Kerala & Mahe.
- Dense to Very dense fog conditions very likely in isolated pockets over Punjab, Haryana-Chandigarh-Delhi, Bihar; Dense fog conditions very likely in isolated pockets of Uttar Pradesh, West Rajasthan, Sub-Himalayan West Bengal & Sikkim in the morning hours.
- Thunderstorm accompanied with lightning very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep, Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal & South Interior Karnataka.



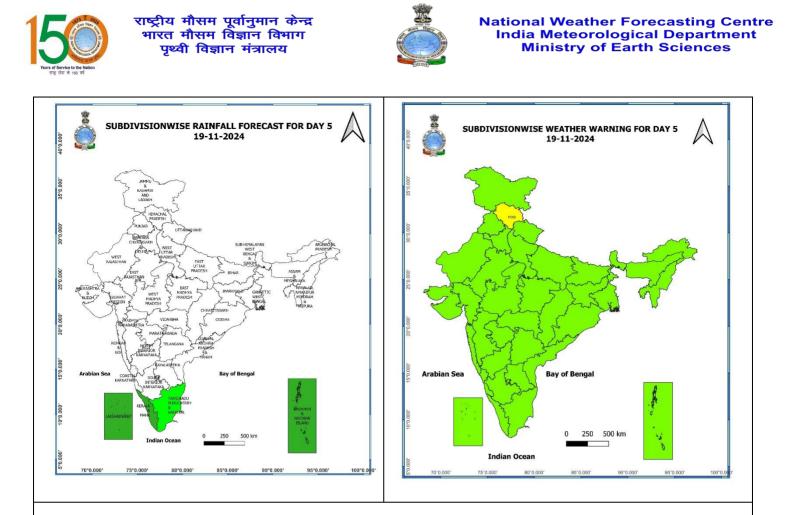
## 17 November (Day 3):

- Dense fog conditions likely in isolated pockets of West Rajasthan, Himachal Pradesh, Bihar in the morning hours.
- Thunderstorm accompanied with lightning very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema.



## 18 November (Day 4):

**Dense fog conditions** likely in isolated pockets of Himachal Pradesh in the morning hours.



## 19 November (Day 5):

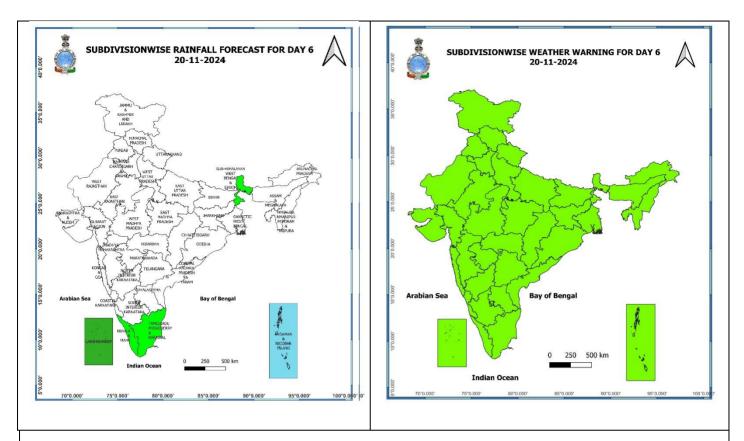
**Dense fog conditions** likely in isolated pockets of Himachal Pradesh in the morning hours.



#### राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विज्ञान विभाग पृथ्वी विज्ञान मंत्रालय

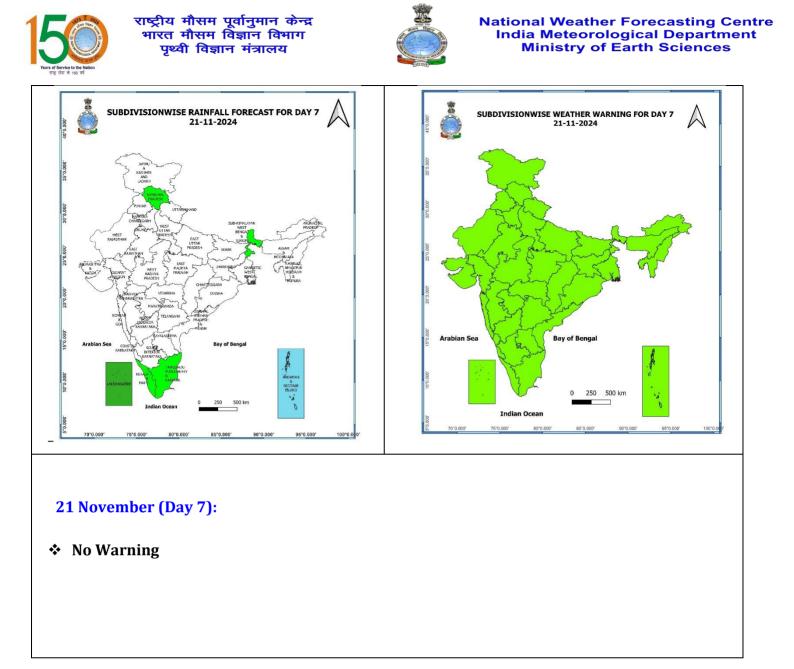


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## 20 November (Day 6):

## \* No Warning



## Weather Outlook for subsequent 3 days (During 22<sup>nd</sup> November – 24<sup>th</sup> November, 2024)

- Isolated to Scattered light rainfall likely over some parts of western Himalayan region and south peninsular India.
- Mainly dry weather will prevail over rest parts of country.
- Action may be taken based on **ORANGE** AND **RED** COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.





## Agromet advisories for Heavy Rainfall likely over various parts of the country:

- ✓ Make arrangements to drain out excess water from the standing crop fields and fruit orcahrds in Tamil Nadu, Kerala, South Interior Karnataka, Coastal Andhra Pradesh and Rayalaseema.
- ✓ Keep the harvested produce at safer places.
- ✓ Provide mechanical support to horticultural crops and staking to vegetables.

## Impact expected due to dense to very dense fog in the late night /morning hours over.

- 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.

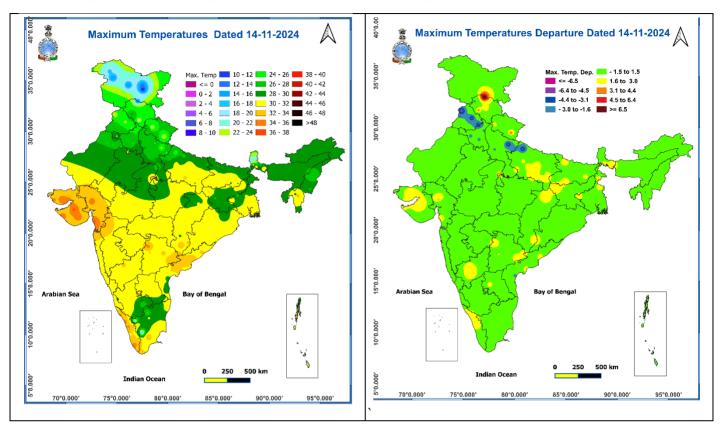


राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विज्ञान विभाग पृथ्वी विज्ञान मंत्रालय



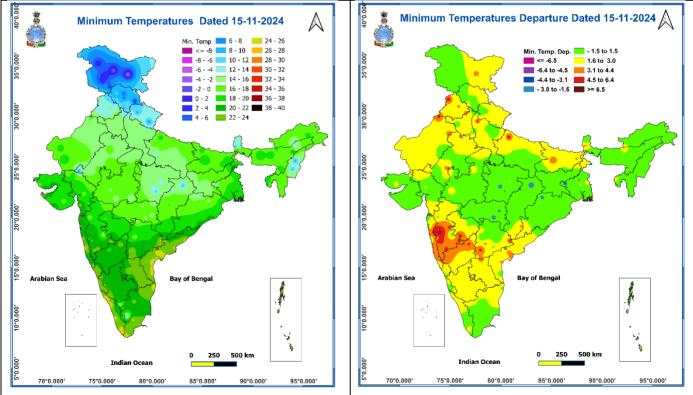
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**Fig. 1: Maximum Temperatures** 



#### **Fig. 3: Minimum Temperatures**

#### Fig. 4: Departure of Minimum Temperatures



\* Red colour warning does not mean "Red Alert", Red colour 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. 2: Departure of Maximum Temperatures

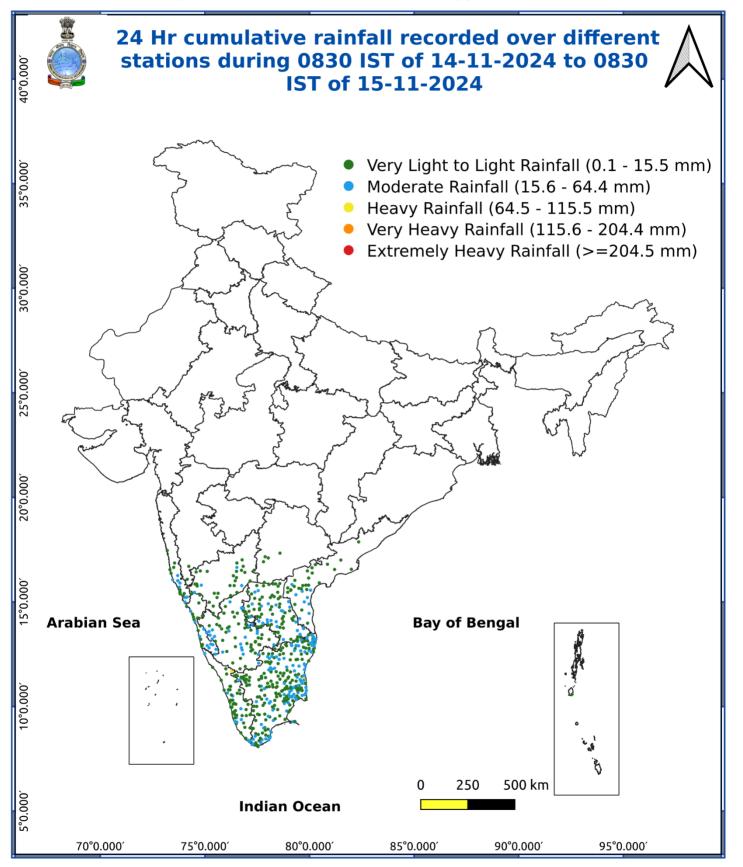


राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विज्ञान विभाग पृथ्वी विज्ञान मंत्रालय



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



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## **LEGENDS**

/		
1. अंडमान और निकोबार द्वीपसमूह	1. Andaman & Nicobar Islands	
2. अरुणाचल प्रदेश	2. Arunachal Pradesh	
3. असम और मेघालय	3. Assam & Meghalaya	
4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा	4. Nagaland, Manipur, Mizoram & Tripura	
5. उप-हिमालयी पश्चिम बंगाल और सिक्किम	5. Sub-Himalayan West Bengal & Sikkim	
6. गंगीय पश्चिम बंगाल	6. Gangetic West Bengal	
7. ओडिशा	7. Odisha	
8. झारखंड 💦 🔰 🖓	8. Jharkhand	
9. बिहार	9. Bihar	
10. पूर्वी उत्तर प्रदेश 🥂 🚺	10. East Uttar Pradesh	
11. पश्चिम उत्तर प्रदेश	11. West Uttar Pradesh	
12. उत्तराखंड	12. Uttarakhand	
13. हरियाणा, चंडीगढ़ और दिल्ली 17 200 11	13. Haryana, Chandigarh & Delhi	
14. पंजाब	14. Punjab	
15. हिमाचल प्रदेश	15. Himachal Pradesh	
16. जम्मू और कश्मीर और लद्दाख 🔨 र्19 🏅 20 🏹 🖁 🎸 🚺 🦷	16. Jammu & Kashmir and Ladakh	
17. पश्चिम राजस्थान (22)	17. West Rajasthan	
18. पूर्वी राजस्थान	18. East Rajasthan	
19. पश्चिम मध्य प्रदेश 23 (24 25)	19. West Madhya Pradesh	
20. पूर्वी मध्य प्रदेश	20. East Madhya Pradesh	
21. गुजरात 🔰 33 🕹 🖓 28	21. Gujarat	
22. सौराष्ट्र 🖓 🖓 🖓	22. Saurashtra	
23. कोंकण और गोवा	23. Konkan & Goa	
24. मध्य महाराष्ट्र 🦾 🥀	24. Madhya Maharashtra	
25. मराठवाड़ा 25. मराठवाड 25	25. Marathwada	
26. विदर्भ 36 🦾 👘	26. Vidarbha	
27. छत्तीसगढ़	27. Chhattisgarh	
28. तटीय आंध्र प्रदेश और यनम	28. Coastal Andhra Pradesh & Yanam	
29. तेलंगाना	29. Telangana	
30. रायलसीमा	30. Rayalaseema	
31. तमिलनाडु, पुडुचेरी और कराईकल	31. Tamilnadu, Puducherry & Karaikal	
32. तटीय कर्नाटक	32. Coastal Karnataka	
33. आतंरिक उत्तरी कर्नाटक	33. North Interior Karnataka	
34. आतंरिक दक्षिणी कर्नाटक	34. South Interior Karnataka	
35. केरल और माहे	35. Kerala & Mahe	
36. लक्षद्वीप	36. Lakshadweep	
SPATIAL DISTRIBUTION (% of Sto	ations reporting)	
JEANAL DISTRIBUTION (# 01 00		

#### SPATIAL DISTRIBUTION (% of stations rep ıg,

% Stations	s Category		% Stations	Cate	Category	
76-100	Widespre	ad (WS/Most Places)	26-50	Scattered (SCT/A Few Places)		
51-75	Fairly Widesp	oread (FWS/Many Places	) 1-25	Isolated (ISOL)		
= Fog		🚙 Heavy Snow	– Cold Wa	ve COLOUR CO	COLOUR CODED WARNING	
			J		ng (No Action)	
		🚊 Dust Storm 🗕	– 🔽 Cold Da	y Watch (B	Watch (Be Aware)	
🗭 Very Heav	Very Heavy Rain		and Ground	Frost Alert (Be	Alert (Be Prepared To Take Action)	
Extremely	/ Heavy Rain	+ Warm Night		Warning	Warning (Take Action)	
-	Let Day			Proba	<b>Probabilistic Forecast</b>	
Thunder & Lightning		+ Hot Day		Terms	Probability of Occurrence (%	
				Unlikely	< 25	
P Hailstorm	า	📘 Hot & Humid		Likely	25 - 50	
2.	aising Winds Strong Surface Winds		the de	Very Likely Most Likely	50 - 75 > 75	





+	Heavy: 64.5 to 115.5 mm/cm *
Rain/ Snow *	Very Heavy: 115.6 to 204.4 mm/cm* Extremely Heavy: > 204.4 mm/cm *
	When maximum temperature of a station reaches $\geq$ 40° C for plains and $\geq$ 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
leat Wave	(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 ≥47°C When maximum temperature departure is >4.5°C from normal. Heat Wave may be described provided maximum temperature ≥37°C
	When maximum temperature remains 40°C
arm Night	Warm Night: When minimum temperature departure 4.5 °C to 6.4 °C.
	Severe Warm Night: When minimum temperature departure >6.4 °C.
	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.
Cold Wave	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 $\leq 4.0$ °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
	When minimum temperature of a station $\le 10^\circ$ C for plains and $\le 0^\circ$ C for hilly regions Based on departure
Cold Day	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
	Phenomenon of small droplets suspended in air and the horizontal visibility < 1km
Fog	Moderate Fog: When the visibility between 500-200 metres Dense Fog: when the visibility between 50- 200 metres
, og	Very Dense Fog: when the visibility < 50 metres
understorm	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.
	Ice deposits on ground
Frost	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
	Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)
	Severe Cyclonic Storm: Wind speed 62-67 Kingh (34-47 Kinds) Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)
Cyclone	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)
	Cuper Cyclone Stront. Wind Speed 220 Milph (2113 MID(S)