

Government of India Ministry of Earth Sciences India Meteorological Department



Press Release Date: 05th December, 2024 Time of Issue: 1230 hours IST

Subject: A fresh Western Disturbance is likely to affect Western Himalayan Region and adjoining plains of Northwest India from 08th December.

i. Realised weather during past 24 hours till 0830 hours IST of today

Rainfall realized over the country: (details in Annexure I)

• Heavy to very heavy rainfall has been recorded at isolated places over Tamil Nadu.

Fog conditions realized over the country:

- Dense fog (visibility 50-200 m) reported in isolated pockets of Meghalaya.
- Visibility reported (in metre): Meghalaya: Barapani 100.

Weather Systems and associated weather:

- Yesterday's Low pressure area over eastcentral & adjoining southeast Arabian sea has become less marked, however the associated cyclonic circulation now lay over southeast Arabian sea & neighbourhood extending upto middle tropospheric levels tilting southwestwards with height.
- A fresh Western Disturbance is likely to affect Western Himalayan Region and adjoining plains of Northwest India from 08th December. It is very likely to cause light/moderate rainfall/snowfall over Western Himalayan Region and light isolated rainfall over Punjab & Haryana on 08th & 09th December, 2024.

Forecast & Warnings (upto 7 days) (Annexure II & III):

✓ Dense fog conditions very likely to prevail during late night/early morning hours in isolated pockets of Punjab, Haryana and Chandigarh during 07th-10th December morning hours.

ii. Temperature conditions and Forecast:

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

Minimum temperatures are in the range of 10-15°C in the plain of Northwest India and 15-20°C over Central India, Gujarat State, Maharashtra and eastern parts of India. Minimum temperatures are **markedly above normal (5°C or more)** at many places over Telangana; at a few places over Madhya Maharashtra, Marathwada and Chhattisgarh; at isolated places over Odisha and Konkan & Goa; **appreciably above normal (3°C to 5°C)** at many places over Coastal Andhra Pradesh & Yanam, Vidarbha, Rayalaseema and North Interior Karnataka; and at isolated places over Uttar Pradesh, Bihar, Gujarat state and South Interior Karnataka; **above normal (1°C to 3°C)** at most

places over Coastal Karnataka; at many places over Madhya Pradesh, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal; at a few places over Jharkhand; at isolated places over Rajasthan, Punjab, Haryana, Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura and near normal over rest parts of the country. Today, **the lowest minimum temperature** of **6.0°C** is reported at **Hissar (Haryana)** over the plains of the country.

Forecast of temperature:

- Gradual fall in minimum temperatures by 2°C likely over Northwest India during next 3 days and no significant change thereafter.
- Gradual fall in minimum temperatures by 2°C likely over East India during next 2 days and gradual rise by 2-3°C thereafter.
- No significant change in minimum temperatures over Central India during next 5 days.

iii. Weather conditions and forecast over Delhi/NCR during 05th to 08th Dec. 2024 (Annexure IV)

For more details, kindly refer National Weather Bulletin: https://mausam.imd.gov.in/responsive/all_india_forcast_bulletin.php For District wise warnings refer: https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php

ANNEXURE I

Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 05.12.2024 (in cm):

* Tamil Nadu: Kalasapakkam (dist Tiruvannamalai) 12, Vaniyambadi (dist Tirupathur) 6,

7 Days Rainfall Forecast								
		05-	06-	07-	08-	09-	10-	11-
5. No	Subdivision	Dec						
NO.		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	FWS	FWS	FWS	WS	FWS	FWS	FWS
2	ARUNACHAL PRADESH	ISOL	ISOL	SCT	ISOL	ISOL	ISOL	ISOL
3	ASSAM & MEGHALAYA	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	DRY						
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	ISOL	ISOL	ISOL	SCT	SCT	ISOL	DRY
6	GANGETIC WEST BENGAL	DRY	DRY	DRY	DRY	ISOL	DRY	DRY
7	ODISHA	ISOL	DRY	DRY	ISOL	ISOL	DRY	DRY
8	JHARKHAND	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
9	BIHAR	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
10	EAST UTTAR PRADESH	DRY						
11	WEST UTTAR PRADESH	DRY						
12	UTTARAKHAND	DRY	DRY	DRY	ISOL	SCT	DRY	DRY
13	HARYANA CHANDIGARH & DELHI	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
14	PUNJAB	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
15	HIMACHAL PRADESH	DRY	DRY	DRY	SCT	SCT	DRY	DRY
16	JAMMU & KASHMIR AND LADAKH	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
17	WEST RAJASTHAN	DRY						
18	EAST RAJASTHAN	DRY						
19	WEST MADHYA PRADESH	DRY						
20	EAST MADHYA PRADESH	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
21	GUJARAT REGION	DRY						
22	SAURASHTRA & KUTCH	DRY						
23	KONKAN & GOA	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
25	MARATHAWADA	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
26	VIDARBHA	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
27	CHHATTISGARH	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
28	COASTAL ANDHRA PRADESH & YANAM	ISOL						
29	TELANGANA	ISOL						
30	RAYALASEEMA	FWS	SCT	SCT	ISOL	ISOL	ISOL	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	SCT	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	SCT	SCT	SCT	ISOL	ISOL	DRY	DRY
33	NORTH INTERIOR KARNATAKA	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
34	SOUTH INTERIOR KARNATAKA	SCT	SCT	SCT	ISOL	ISOL	DRY	DRY
35	KERALA & MAHE	FWS	SCT	SCT	SCT	SCT	SCT	SCT
36	LAKSHADWEEP	SCT						

• As the lead period increases forecast accuracy decreases.

ANNEXURE III





- 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.

Weather Realised (past 24 hours) & forecast (during 05th Dec. to 08th Dec. 2024) over Delhi/NCR

Past Weather:

There has been a fall in minimum temperature upto 04°C and slight fall in maximum temperature over Delhi/NCR during past 24hr. The Maximum and Minimum temperature over Delhi is in the range of 25 to 28°C and 08 to 11°C respectively. The maximum temperature was above normal by 01 to 04 °C and minimum temperature was near normal over most places. Mainly smog/ mist condition with predominant surface wind from northwest direction with wind speed reaching 12 to 18 kmph prevailed on 04.12.2024. Mainly clear sky condition with wind speed less than 16 kmph northwest direction prevailed over the region in the forenoon today.

Weather Forecast:

05.12.2024: Mainly clear sky. The predominant surface wind is likely to be northwest direction with wind speed less than 16 kmph till evening. It would decrease thereafter becoming less than 10 kmph from northwest direction during night. Smog/mist is likely in the evening/night.

06.12.2024: Mainly clear sky. The predominant surface wind is likely to be from northwest direction with speed less than 08 kmph during morning hours. Smog/mist is likely in the morning. The wind speed will increase thereafter becoming less than 14 kmph from northwest direction during afternoon. It will decrease thereafter becoming less than 06 kmph from northwest direction during and night. Smog/mist is likely in the evening/night.

07.12.2024: Mainly clear sky. The predominant surface wind is likely to be from northwest direction with speed less than 04 kmph during morning hours. Smog/shallow fog is likely in the morning. The wind speed will gradually increase becoming 04-06 kmph from variable direction during afternoon. It will decrease thereafter becoming less than 06 kmph from east direction during evening and night. Smog/mist is likely in the evening/night.

08.12.2024: Mainly clear sky. The predominant surface wind is likely to be from southeast 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 08-12 kmph from southeast direction during afternoon. It will gradually decrease becoming less than 06 kmph from southeast direction during and night. Smog/ shallow fog is likely in the evening/night.

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

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.

Legends & abbreviations:

- Heavy Rain:64.5-115.5mm; Very Heavy Rain:115.6-204.4mm; Extremely Heavy Rain: >204.4mm.
- Obsy: Observatory; AWS: Automatic Weather Station; ARG: Automatic Rain Gauge; dist: District: NH: National Highway; KVK: Krishi Vigyan Kendra; DVC: Damodar Valley Corporation; PTO: Part Time Office, Aero: Aerodrome, IAF: Indian Air Force.
- ***** 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, Konkan & Goa, Madhya Maharashtra and Marathawada.
 - South India: Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.



राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विज्ञान विभाग पृथ्वी विज्ञान मंत्रालय



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

1. अंडमान और निकोबार द्वीपर 2. अरुणाचल प्रदेश 3. असम और मेघालय 4. नागालैंड, मणिपुर, मिजोरम	ममूह और त्रिपुरा		1. Andaman & Nicobar Islands 2. Arunachal Pradesh 3. Assam & Meghalaya 4. Nagaland, Manipur, Mizoram & Tripu
5. उप-हिमालयी पश्चिम बंगाल उ 6. गंगीय पश्चिम बंगाल 7. ओडिशा	और सिक्किम		5. Sub-Himalayan West Bengal & Sikkir 6. Gangetic West Bengal 7. Odisha
8. झारखंड 9. बिहार 10. पर्वी उत्तर प्रदेश	16		8. Jharkhand 9. Bihar 10. Fast Littar Pradesh
11. पश्चिम उत्तर प्रदेश 12. उत्तराखंड 13. हरियाणा. चंडीगढ और दिल		man B of	11. West Uttar Pradesh 12. Uttarakhand 13. Harvana, Chandigarh & Delhi
14. पंजाब 15. हिमाचल प्रदेश 16. जम्म और कश्मीर और लहा		0 9 3 8 6 0	14. Punjab 15. Himachal Pradesh 16. Jammu & Kashmir and Ladakh
17. पश्चिम राजस्थान 18. पूर्वी राजस्थान 19. पश्चिम मध्य पटेल		The state of the s	17. West Rajasthan 18. East Rajasthan 19. West Madwa Bradesh
12. पाञ्चन मध्य प्रदेश 20. पूर्वी मध्य प्रदेश 21. गुजरात 22. गौगम	23 24 29 29 33 28	and the second s	20. East Madhya Pradesh 21. Gujarat
22. साराष्ट्र 23. कोंकण और गोवा 24. मध्य महाराष्ट्र 25. मराठवाड़ा			22. Saurashtra 23. Konkan & Goa 24. Madhya Maharashtra 25. Marathwada
26. विदर्भ 27. छत्तीसगढ़ 28. तटीय आंध्र प्रदेश और यनम	36		26. Vidarbha 27. Chhattisgarh 28. Coastal Andhra Pradesh & Yanam
29. तेलगाना 30. रायलसीमा 31. तमिलनाडु, पुडुचेरी और कर् २०	राईकल		29. Telangana 30. Rayalaseema 31. Tamilnadu, Puducherry & Karaikal
32. तटाय कनाटक 33. आतंरिक उत्तरी कर्नाटक 34. आतंरिक दक्षिणी कर्नाटक 35. केरल और माहे			32. Coastal Karnataka 33. North Interior Karnataka 34. South Interior Karnataka 35. Kerala & Mahe
36. लक्षद्वीप SPAT	IAL DISTRIBU	TION (% of St	36. Lakshadweep tations reporting)
% Stations	Category	% Stations	Category
76-100 Widespre	ead (WS/Most Places)	26-50	Scattered (SCT/A Few Places)
51-75 Fairly Mideo	proad (EWS/Many Places)	1-25	Isolated (ISOL)
ST / S Fully Wides	predu (rws/many ruces,	1-25	
Fog	Heavy Snow	– Cold Wave	COLOUR CODED WARNING
Fog Heavy Rain	Heavy Snow	- Cold Wave	COLOUR CODED WARNING No Warning (No Action) Watch (Be Aware)
Fog Heavy Rain Very Heavy Rain	Heavy Snow 은 Dust Storm 나 Heat Wave	- Cold Wave - Cold Day Ground Frost	COLOUR CODED WARNING No Warning (No Action) Watch (Be Aware) Alert (Be Prepared To Take Action)
Fog Heavy Rain Very Heavy Rain Extremely Heavy Rain	Heavy Snow Dust Storm + Heat Wave + Warm Night	- Cold Wave - Cold Day	COLOUR CODED WARNING No Warning (No Action) Watch (Be Aware) Alert (Be Prepared To Take Action) Warning (Take Action) Probabilistic Forecast
Fog Fog Very Heavy Rain Extremely Heavy Rain Thunder & Lightning	Heavy Snow Heavy Snow Dust Storm + Heat Wave + Warm Night + Hot Day Hot & Humid	- Cold Wave - Cold Day Ground Frost	COLOUR CODED WARNING No Warning (No Action) Watch (Be Aware) Alert (Be Prepared To Take Action) Warning (Take Action) Probabilistic Forecast Terms Probability of Occurrence (%) Unlikely <25

* 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)





National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

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 *
	When maximum temperature of a station reaches $\geq 40^{\circ}$ C for plains and $\geq 30^{\circ}$ C for hilly regions (a) Based on Departure from normal
	Heat Wave: Maximum Temperature Departure from normal 4.5° C to 6.4° C.
Heat 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 departure is >4.5°C from normal. Heat Wave may be described provided maximum temperature ≥37°C
	When maximum temperature remains 40°C
Warm 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 $\leq 10^{\circ}$ C for plains and $\leq 0^{\circ}$ C for hilly regions. (a). Based on departure
	Cold Wave: Minimum Temperature Departure from normal -4.5 °C to -6.4 °C.
Cold Wave	(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	Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5 ^{\circ}$ C
	Phenomenon of small dronlets suspended in air and the horizontal visibility < 1km
_	Moderate Fog: When the visibility between 500-200 metres
Fog	Dense Fog: when the visibility between 50- 200 metres
	Very Dense Fog. when the visibility soo medies
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.
Erect	Ice deposits on ground
FIOST	Air temperature ≤4°C (over Plains)
	A strong wind that rises suddenly, lasts for atleast 1 minute.
Squall	Severe: Wind speed 62-87 kmph
	Very Severe: Wind speed >87 kmph
	Effect of various waves in the sea over specific area
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
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)
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 88-117 kmph (48-63 knots) Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)
Sea State Cyclone	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)

For a colour warning uses not mean ked Alert, ked colour warning means "Take Action". For cast 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)