



**Government of India
Ministry of Earth Sciences
India Meteorological Department**

**Press Release
Date: 31st December, 2021
Time of Issue: 1330 hrs IST**

Subject:

- I. **Cold Wave Conditions over Northwest India during next 2 days.**
- II. **Isolated heavy to very heavy rainfall activity over coastal Tamilnadu, Puducherry & Karaikal during next 2 days and decrease thereafter.**
- III. **A fresh spell of rainfall/snowfall activity over Western Himalayan Region during 04th to 07th (with possibility of isolated heavy falls on 05th & 06th) and over plains of northwest India during 05th to 07th January, 2022.**

Weather Observed during past 24 hours ending at 0830 hrs IST of today:

- **Fairly widespread rainfall with heavy to very heavy rainfall at many places with isolated extremely heavy rainfall** over north coastal Tamilnadu.
- **Significant amount of Rainfall** (in cm): **Tamil Nadu: Chennai:** DGP office-24; MGR Nagar & Chennai (N)-20; Anna University-19; Anna University ARG, Perambur & Chennai AP-15; Sholinganallur-12; **Tiruvallur:** Ambathur & Poonamallee-20; Chembarabakkam-19; Koratur-12; Poondi & Red Hills-10; Cholavaram & Thamarapakkam-9; **Mayiladuthurai:** Sirkali-11; Kollidam-10; Mayiladuthurai-7; **Kancheepuram:** Sriperumbudur-9; **Chengalpattu:** Kelambakkam-9; **Cuddalore:** Chidambaram AWS-7.
- **Cold wave to Severe Cold Wave conditions observed** in isolated pockets over East Rajasthan and **Cold wave conditions observed** in isolated pockets over Jammu & Kashmir, Himachal Pradesh, Haryana & Delhi, West Rajasthan and Madhya Pradesh.
- Yesterday, **Cold Day Conditions** in some parts with **Severe Cold Day Conditions** in isolated pockets over Madhya Pradesh.
- **Very Dense fog** observed in isolated pockets over West Madhya Pradesh and **Dense fog** in isolated pockets over Uttar Pradesh and Odisha.

I. Isolated heavy to very heavy rainfall activity over coastal Tamilnadu, Puducherry & Karaikal during next 2 days and decrease thereafter.

- Strong northeasterly winds are prevailing off the coast off Tamilnadu in the lower levels.
- A cyclonic circulation lies over southwest Bay of Bengal off Sri Lanka coast at middle tropospheric level.
Under its influence, fairly widespread rainfall with isolated **heavy to very heavy rainfall** activity is very likely to continue over coastal Tamilnadu during next 2 days and decrease thereafter.

II. Minimum Temperatures, Cold Wave and Fog:

- i) Minimum temperatures are in the range of 2-6°C over Punjab, north Rajasthan, Haryana and adjoining West UP. During last 24-hours, no significant change has been observed over these areas.

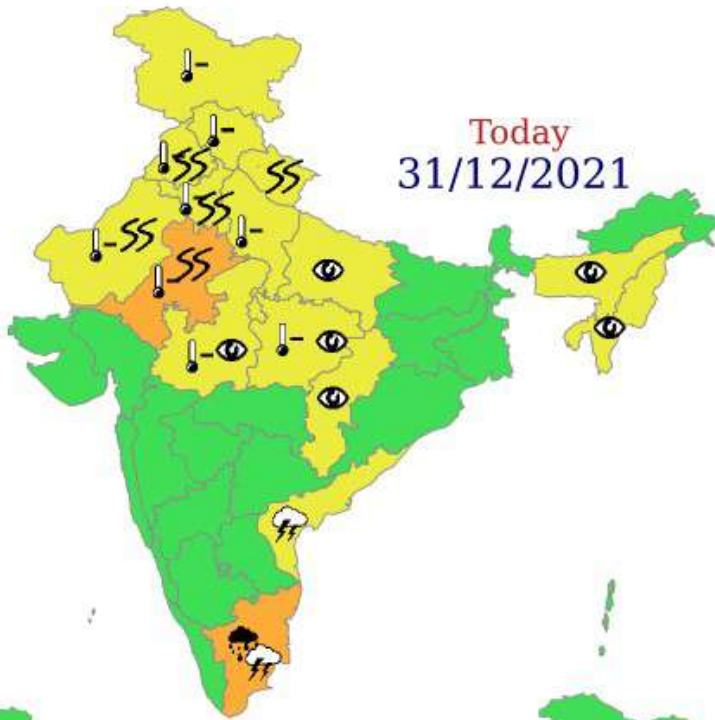
- ii) No significant change in minimum temperatures over Northwest India very likely during next 2 days & over Madhya Pradesh till tomorrow and gradual rise by 2-4°C thereafter.
- iii) Gradual fall in minimum temperatures by 3-5°C over East India during next 4-5 days.
- iv) Gradual rise in minimum temperatures by 2-4°C over Gujarat during next 3-4 days.
- v) No significant change in minimum temperatures over rest parts of the country during next 5 days.
- vi) **Cold Wave** conditions in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and Rajasthan during next 2 days and over Jammu & Kashmir & Himachal Pradesh during next 24 hours.
- vii) **Cold Day** conditions in isolated pockets very likely over Madhya Pradesh during next 2 days.
- viii) **Dense fog** in isolated pockets in night/morning hours very likely over East Uttar Pradesh, Madhya Pradesh, Chhattisgarh and northeast India next 2 days.

III. A fresh spell of rainfall/snowfall activity over Western Himalayan Region during 04th to 07th (with possibility of isolated heavy falls on 05th & 06th) and over plains of northwest India during 05th to 07th January, 2022:

A fresh deep Western Disturbance and its associated induced cyclonic circulation is likely to affect Northwest Indian region from 04th January 2022. Under its influence

- a. Fairly widespread rainfall/snowfall during 04th to 07th with **possibility of isolated heavy falls on 05th & 06th January, 2022 over Jammu & Kashmir and Himachal Pradesh.**
- b. Light/moderate scattered to fairly widespread rainfall over Punjab, Haryana, Chandigarh & Delhi, north Rajasthan & West Uttar Pradesh during 05th to 07th and light isolated rainfall is also likely over Madhya Pradesh, south Rajasthan & Gujarat on 06th & 07th January, 2022.

For more details refer: https://mausam.imd.gov.in/imd_latest/contents/subdivisionwise-warning.php



EXPECTED IMPACT & ACTION SUGGESTED due to Isolated Very Heavy Rainfall over Tamilnadu, Puducherry & Karaikal during next 2 days.

A. Impact Expected

- Localized Flooding of roads, inundation and water logging in low lying areas and closure of underpasses mainly in urban areas of the affected region.
- Occasional reduction in visibility due to heavy rainfall.
- Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- Minor damage to kutcha roads.
- Possibilities of damage to vulnerable structure.
- Localized Landslides/Mudslides
- Damage to horticulture and standing crops in some areas due to inundation.
- It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

B. Action Suggested

- Check for traffic congestion on your route before leaving for your destination.
- Follow any traffic advisories that are issued in this regard.
- Avoid going to areas that face the water logging problems often.
- Avoid staying in vulnerable structure.
- Harvest the ripen crops like Paddy & Horticultural crops and also secure the harvested crops securely from the damage due to rain and strong winds.

Impact expected and action suggested due to Cold Wave conditions in isolated pockets over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and north Rajasthan during next 2 days.

Impact expected:

- An increased likelihood of various illnesses like flu, running/ stuffy nose or nosebleed, which usually set in or get aggravated due to prolonged exposure to cold.
- Do not ignore shivering. It is the first sign that the body is losing heat. Get Indoors.
- Frostbite can occur due to prolonged exposure to cold. The skin turns pale, hard and numb and eventually black blisters appear on exposed body parts such as fingers, toes, nose and or earlobes. Severe frostbite needs immediate medical attention and treatment.
- Impact on agriculture (Wheat, Potato, Mustard and other Rabi crops), water supply, transport and power sector at some places.

Action suggested:

- Moisturize your skin regularly with oil/cream.
- Eat vitamin-C rich fruits & vegetable and drink sufficient fluids preferably warm fluids to maintain adequate immunity.
- Avoid or limit outdoor activities.
- Keep dry, if wet, change cloths immediately to prevent loss of body heat. Wear insulated/waterproof shoes.
- Warm the affected area of the body slowly with lukewarm water; do not rub the skin vigorously.
- If the affected skin area turns black, immediately consult a doctor.
- Maintain ventilation while using Heaters to avoid inhaling toxic fumes.
- Take safety measures while using electrical and gas heating devices.

Impact and action suggested due to low temperature and Ground Frost in Agriculture Sector

- Low temperature and ground frost have varying impacts on *rabi* crops. Following general measures are issued to prevent the impacts of low temperature and ground frost on crops.
- Application of light and frequent irrigation / sprinkler irrigation in the evening hours to protect the crops from cold injury.
- Cover young fruit plants with sarkanda / straw / polythene sheets / gunny bags.
- Keep cattle inside the sheds during night and provide dry bedding to protect them from cold.
- In Poultry, keep the chicks warm by providing artificial light in the poultry sheds.

Impact expected and action suggested due to Dense Fog in the morning hours at isolated pockets over East Uttar Pradesh, Madhya Pradesh, Chhattisgarh and northeast India next 2 days.

Impact expected:

➤ **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.
- 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.
- Causes 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:**

- Careful while driving or outing through any transport.
- Use fog lights during driving.
- Be in touch with airlines and Railway 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:

Heavy Rain: 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4 mm.

Region wise classification of meteorological Sub-Divisions:

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

SPATIAL DISTRIBUTION (% of Stations reporting)			
% Stations	Category	% Stations	Category
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)



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

