



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

**Press Release**

**Date: 20<sup>th</sup> January, 2022**

**Time of Issue: 1400 hrs IST**

**Subject: Wet spell over Northwest and adjoining Central India during 21<sup>st</sup>-24<sup>th</sup>; over East India during 22<sup>nd</sup> -24<sup>th</sup> and over Northeast India during 23<sup>rd</sup> -25<sup>th</sup> January, 2022.**

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

- **Cold Day to Severe Cold Day conditions** prevailed in many parts of Uttar Pradesh and Bihar and in isolated pockets over Punjab, Northwest & East Madhya Pradesh and **Cold Day conditions** in isolated pockets over Haryana and Delhi.
- Minimum temperatures are below normal by 2-4°C at many places over Madhya Pradesh and Odisha and at isolated places over West Bengal, Chhattisgarh and Jharkhand and above normal by 2-4°C at many places over Northwest India.
- **Very Dense Fog** in isolated pockets over Uttar Pradesh & Bihar and **Dense Fog** in some pockets over Haryana and in isolated pockets West Punjab, East Rajasthan, Assam & Meghalaya and Northwest Madhya Pradesh.
- **Thunderstorm accompanied with lightning & Hail** observed in isolated places over Meghalaya.

**Synoptic Situations:**

- **The Western Disturbance as a cyclonic circulation lies over north Pakistan & neighbourhood at 3.1 km above mean sea level.**
- **An induced cyclonic circulation lies over central parts of Rajasthan and extends upto 0.9 km above mean sea level.**
- **A fresh active Western Disturbance is likely to affect Northwest India from 21<sup>st</sup> January onwards. An induced cyclonic circulation is very likely to form over southwest Rajasthan on 22<sup>nd</sup> January, 2022.**

**Forecast & Warnings:**

- ✓ Isolated to scattered rainfall/snowfall very likely over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh & Uttarakhand during next 2 days and increase thereafter with fairly widespread to widespread rainfall/snowfall on 22<sup>nd</sup> & 23<sup>rd</sup> January and reduction thereafter. Isolated **heavy rainfall/snowfall** very likely over above sub-divisions on 22<sup>nd</sup> & 23<sup>rd</sup> January.
- ✓ Isolated to scattered rainfall very likely over Punjab, Haryana, Chandigarh, Delhi, West Uttar Pradesh & East Rajasthan on 20<sup>th</sup> & 21<sup>st</sup> and increase thereafter with fairly widespread to widespread rainfall on 22<sup>nd</sup> & 23<sup>rd</sup> January. Isolated to scattered rainfall over East Rajasthan during 20<sup>th</sup>-23<sup>rd</sup>; East Uttar Pradesh & Chhattisgarh

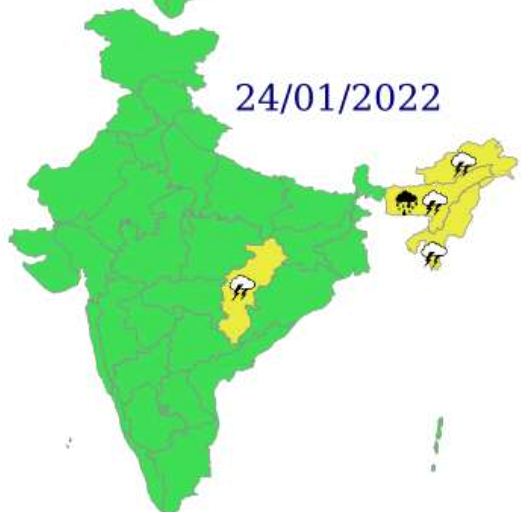
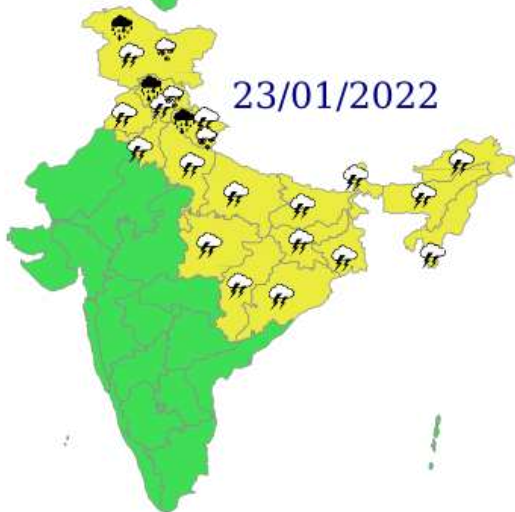
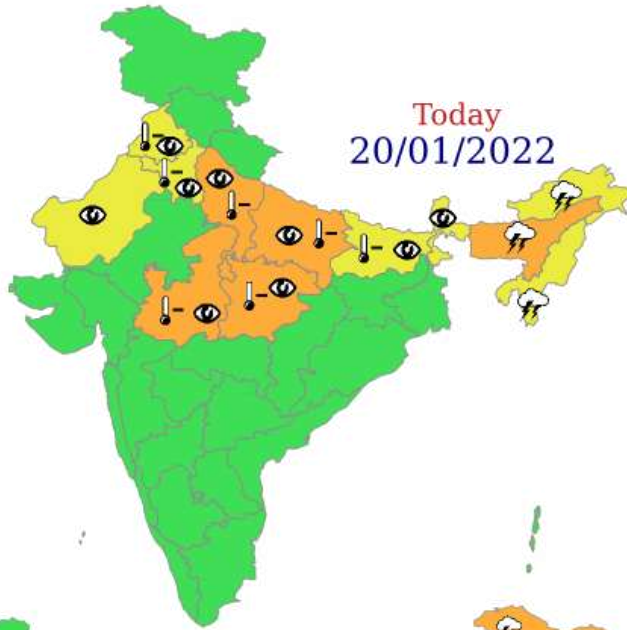
during 22<sup>nd</sup>-24<sup>th</sup> and Madhya Pradesh on 22<sup>nd</sup> & 23<sup>rd</sup> January. Isolated **heavy rainfall** likely over Punjab on 22<sup>nd</sup> January.

- ✓ Scattered to fairly widespread rainfall very likely over Bihar, Jharkhand and West Bengal & Sikkim during 22<sup>nd</sup>-24<sup>th</sup> January.
- ✓ **Isolated thunderstorm with lightning & hail** very likely over West Madhya Pradesh on 21<sup>st</sup> & 22<sup>nd</sup> ; over Uttarakhand, Punjab, Haryana, Chandigarh, Delhi, West Uttar Pradesh, north Rajasthan, East Madhya Pradesh and Sub-Himalayan West Bengal & Sikkim on 22<sup>nd</sup> January; over Bihar on 22<sup>nd</sup> & 23<sup>rd</sup> and over Jharkhand and Gangetic West Bengal on 23<sup>rd</sup> January, 2022.
- ✓ Strong surface winds (20-30 kmph) very likely over Punjab, Haryana, Chandigarh & Delhi, Rajasthan and west Uttar Pradesh on 21<sup>st</sup> & 22<sup>nd</sup> January, 2022.
- ✓ Fairly widespread to widespread rainfall very likely over northeast India during 23<sup>rd</sup>-25<sup>th</sup> January. **Isolated thunderstorm with lightning & hail** very likely over Assam & Meghalaya on 20<sup>th</sup> January. Isolated **heavy rainfall** likely over Assam & Meghalaya on 24<sup>th</sup> January, 2022.

### **Fog and Cold Day:**

- ✓ Minimum temperatures are likely to rise by 2-4° C over Northwest India during next 2-3 days and fall by 3-5°C thereafter.
- ✓ No significant change in minimum temperatures over Madhya Pradesh during next 3 days and fall by 3-4°C thereafter.
- ✓ No significant change in minimum temperatures over Maharashtra during next 3 days and fall by 2-3°C thereafter.
- ✓ No significant change in minimum temperatures over Gujarat state during next 2 days and fall by 3-5°C thereafter.
- ✓ Gradual rise in minimum temperatures by 2-4°C over East India during next 5 days.
- ✓ **Very Dense Fog** very likely in isolated pockets over Uttar Pradesh and **Dense Fog** in isolated pockets over Punjab, Chandigarh & Delhi, Haryana, West Rajasthan, north Madhya Pradesh and Sub-Himalayan West Bengal & Sikkim on night of 20<sup>th</sup> and morning hours of 21<sup>st</sup>. It is likely to persist over east Uttar Pradesh and Bihar during subsequent 24 hours.
- ✓ **Cold Day to Severe Cold Day Conditions** very likely to prevail in isolated pockets of Madhya Pradesh and **Cold Day Conditions** in isolated pockets over Punjab, Haryana, Uttar Pradesh during next 24 hours and over Bihar during next 2 days.

**For more details refer:** [https://mausam.imd.gov.in/imd\\_latest/contents/subdivisionwise-warning.php](https://mausam.imd.gov.in/imd_latest/contents/subdivisionwise-warning.php)



**Impact expected and action suggested due to Dense/Very Dense fog in the night/morning hours very likely over West Uttar Pradesh, Punjab, Haryana, Chandigarh & Delhi, West Rajasthan, north Madhya Pradesh and Sub-Himalayan West Bengal & Sikkim during next 24 hours and over East Uttar Pradesh & Bihar during 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.

**Impact expected and action suggested due to Cold Day/Severe Cold Day conditions in** over Madhya Pradesh, Punjab, Haryana, Uttar Pradesh during next 24 hours and over Bihar 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, crop, livestock, water supply, transport and power sector at some places.

**Action suggested:**

- Wear several layers of loose fitting, light weight; warm woolen clothing.
- Cover your head, neck, hands and toes adequately as majority of heat loss occurs through these body parts. Wear several layers of loose fitting, light weight; warm woolen clothing rather than one layer of heavy cloth.
- 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.
- Extreme care needed for vulnerable people.
- Seek medical attention as soon as possible for someone suffering from frostbite/Hypothermia.
- Protect livestock from cold weather. (For details kindly refer NDMA guidelines: [https://ndma.gov.in/Resources/awareness/Cold\\_Wave](https://ndma.gov.in/Resources/awareness/Cold_Wave))

**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.

<b>SPATIAL DISTRIBUTION</b> (% 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.)



Heavy Rain

Strong Winds

<b>WARNING</b>	
WARNING (TAKE ACTION)	ALERT (BE PREPARED)
WATCH (BE UPDATED)	NO WARNING (NO ACTION)

<b>Probabilistic Forecast</b>	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

**Thunderstorm with Lightning**

**Visibility/Fog**

**Cold wave/Cold day**

**Frost**