



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

**Press Release
Date: 30th December, 2021
Time of Issue: 1330 hrs IST**

Subject:

- I. **Cold Wave to Severe Cold Wave Conditions over Northwest India & Madhya Pradesh during next 3-4 days.**
- II. **Increased rainfall activity over Southeast peninsular India during next 3 days and decrease thereafter.**
- III. **An intense Western Disturbance is likely to affect 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:

- **Cold Wave to Severe Cold Wave Conditions** prevailed in some parts over Punjab and in isolated pockets over Haryana, Chandigarh & Delhi and **Cold Wave Conditions** observed in isolated pockets over West Uttar Pradesh & north Rajasthan.
- **Scattered to fairly widespread rainfall with isolated hailstorm** occurred over Vidarbha, Odisha & Sub-Himalayan West Bengal and **isolated heavy rainfall** over Chhattisgarh.
- **Rainfall/thundershower** occurred at **most places** over Bihar, Jharkhand, Sub-Himalayan West Bengal; at **many places** over Gangetic West Bengal, Chhattisgarh; **at a few places** over East Uttar Pradesh and Odisha.
- **Significant amount of Rainfall** (in cm): **Chhattisgarh:** Durg-10, Patan, Basana, Saraipali,-7 each, Bagbahara-6, Balod, Raigarh, Raipur-5 each, Rajnandgaon-2; **Odisha:** Sambalpur-6, Hirakud, Jharsiguda-3 each.

- I. **Minimum Temperatures, Cold Wave and Fog:** Cold Wave to Severe Cold Wave Conditions over Northwest India & Madhya Pradesh during next 3-4 days
 - i) Minimum temperatures are in the range of 2-6°C over Punjab, north Rajasthan, Haryana and adjoining West UP and **3 to 5°C fall in Minimum Temperatures** occurred **over Haryana, north Rajasthan, UP and MP during past 24 hours.** Cold Wave to Severe Cold Wave Conditions over Northwest India & Madhya Pradesh during next 3-4 days.
 - ii) No significant change in minimum temperatures over Northwest India during next 3 days and gradual rise by 2-4°C during subsequent 3 days.
 - iii) Fall in minimum temperatures by 2-4°C over Central India during next 3 days and rise by 2-3°C during subsequent 2 days.
 - iv) Fall in minimum temperatures by 3-5°C over East India during next 3 days and no significant change thereafter.
 - v) No significant change in minimum temperatures over rest parts of the country during next 5 days.

- vi) **Cold Wave/Severe Cold Wave** conditions in some/many parts of Punjab during 31st December to 03rd January and in isolated/some parts over Haryana, Chandigarh & Delhi and Rajasthan during 31st December to 03rd January; over Madhya Pradesh during 31st December to 02nd January and over Uttar Pradesh during next 3 days.
- vii) **Dense fog** in isolated pockets in night/morning hours very likely over Uttar Pradesh during next 5 days and over East & Northeast India during next 2-3 days.

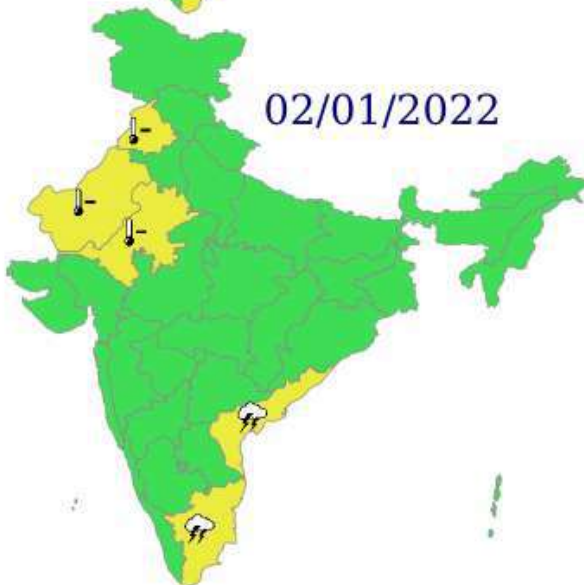
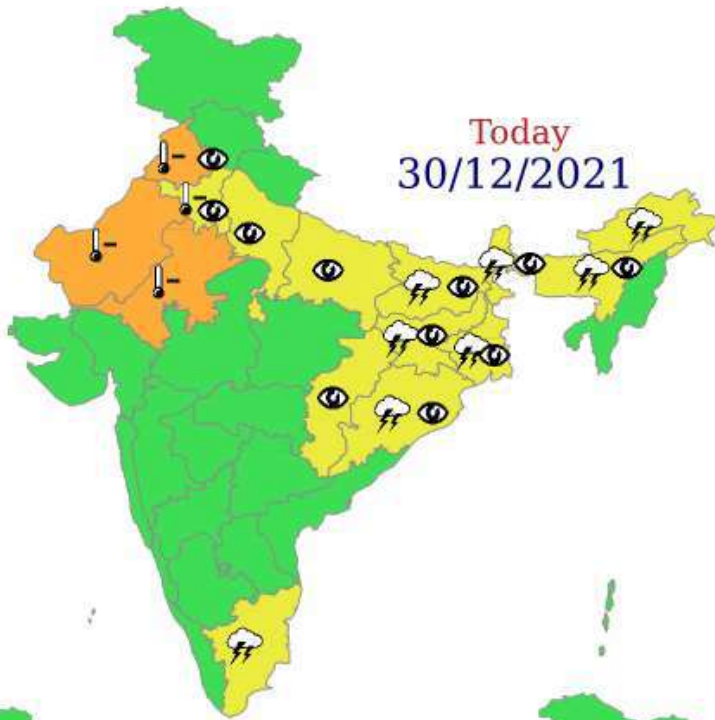
II. Increased rainfall activity over Southeast peninsular India during next 3 days and decrease thereafter.

- The Western Disturbance as a cyclonic circulation lies over East Uttar Pradesh & adjoining Bihar upto 3.1 km above mean sea level with the trough aloft with its axis at 5.8 km above mean sea along Long. 85°E to the north of Lat. 20°N in middle & upper tropospheric levels.
- Under the influence of the above system:
 - ✓ Light to moderate isolated to scattered rainfall very likely over Arunachal Pradesh, Assam & Meghalaya, West Bengal & Sikkim, Odisha, Jharkhand, Bihar and Chhattisgarh during next 24 hours and dry weather over the region thereafter. Isolated thunderstorm also likely over Arunachal Pradesh and Assam & Meghalaya during next 24 hours.
 - ✓ Increased rainfall activity over Southeast peninsular India during next 3 days and decrease thereafter. Light to moderate scattered to fairly widespread rainfall very likely over Tamilnadu, Puducherry & Karaikal and adjoining south Andhra Pradesh during next 3 days. **Isolated Heavy Rainfall** over coastal Tamilnadu, Puducherry & Karaikal on 31st December, 2021 & 01st January, 2022 and over south Coastal Andhra Pradesh on 01st January, 2022.

III. An intense Western Disturbance is likely to affect 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. Isolated to scattered rainfall/snowfall likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad & Himachal Pradesh on 01st to 03rd January, 2022.
- b. A fresh active Western Disturbance and its induced cyclonic circulation is very likely to cause fairly widespread rainfall/snowfall during 04th to 07th with **possibility of isolated heavy falls on 05th & 06th over Jammu & Kashmir and Himachal Pradesh.**
- c. 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



Impact expected and action suggested due to Cold Wave/Severe Cold Wave conditions in some/many parts of Punjab during 31st December to 03rd January and in isolated/some parts over Haryana, Chandigarh & Delhi and Rajasthan during 31st December to 03rd January; over Madhya Pradesh during 31st December to 02nd January and over Uttar Pradesh during next 3 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.

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

