



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

**Press Release**  
**Date: 28<sup>th</sup> December, 2021**  
**Time of Issue: 1230 hrs IST**

**Subject:**

- I. **Wet spell over northwest India on 28<sup>th</sup>; over central India on 28<sup>th</sup> & 29<sup>th</sup> and over east India during 28<sup>th</sup> - 30<sup>th</sup> December, 2021.**
- II. **Dense fog in isolated pockets over plains of Northwest India during 29<sup>th</sup>-31<sup>st</sup> December, Central India on 30<sup>th</sup> & 31<sup>st</sup> December and East India on 31<sup>st</sup> December, 2021 & 1<sup>st</sup> January, 2022 .**
- III. **Cold Wave Conditions over Punjab, Haryana, and Chandigarh during 30<sup>th</sup> December-01<sup>st</sup> January and over north Rajasthan on 31<sup>st</sup> December, 2021 & 1<sup>st</sup> January, 2022.**

**Significant amount of Rainfall** (from 0830 hours IST of yesterday to 0830 hours IST of today)(2 cm or more): **East Rajasthan:** Baran: (Shahabad-3, Baran, Kishanganj, Mangrol-2); Bundi: (Bundi and Nainwa-2); Chittorgarh: (Nimbahera-4, Kapasan, Bhopalsagar-3, Bega, Chittorgarh, Dungla-2); Jhalawar: (Jhalarapatan, Pachpahar-3, Asnawar-2); Kota: (Sangod-3); Udaipur: ( Mavli-5, Gogunda-4); **West Madhya Pradesh:** Neemuch (Manasa, Jawad and Marukheda-3); Mandsaur: (Bhanpura-3, Shamgarh, Garoth, Suwasra-2); Sheopur: (Baroda-2).

**I. Wet spell over northwest India on 28<sup>th</sup>; over central India on 28<sup>th</sup> & 29<sup>th</sup> and over east India during 28<sup>th</sup> - 30<sup>th</sup> December, 2021.**

- The Western Disturbance seen as a cyclonic circulation over north Pakistan & neighbourhood at lower tropospheric levels with a trough aloft roughly along Long. 68°E to the north of Lat. 26°N in middle tropospheric levels.
- An induced cyclonic circulation lies over southwest Rajasthan & neighbourhood and a trough runs from the cyclonic circulation to north Telangana at lower tropospheric levels.
- A cyclonic circulation lies over central parts of Uttar Pradesh at lower tropospheric levels.
- Under the influence of above systems:
  - i) Light/moderate isolated to scattered rainfall/snowfall very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad and Himachal Pradesh on 28<sup>th</sup>; and over Uttarakhand on 28<sup>th</sup> & 29<sup>th</sup> December, 2021.
  - ii) Light isolated rainfall very likely over Haryana, Chandigarh & Delhi, Rajasthan on 28<sup>th</sup> and scattered to fairly widespread rainfall over Uttar Pradesh on 28<sup>th</sup> & 29<sup>th</sup> December, 2021. Isolated thunderstorm, lightning & **hailstorm** also likely over East & adjoining West Uttar Pradesh on 28<sup>th</sup> December, 2021.
  - iii) Light/moderate isolated to scattered rainfall very likely over Madhya Pradesh, Vidarbha, Odisha, Gangetic West Bengal and Chhattisgarh; scattered to fairly widespread rainfall over Bihar, Jharkhand and Sub-Himalayan West Bengal & Sikkim during 28<sup>th</sup> to 30<sup>th</sup> December.
  - iv) Isolated thunderstorm, lightning & **hailstorm** also likely over East Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim on 28<sup>th</sup> & 29<sup>th</sup>; over West Madhya Pradesh, Vidarbha, Jharkhand on 28<sup>th</sup>; over Chhattisgarh on 29<sup>th</sup>; over Arunachal Pradesh, Assam & Meghalaya on 29<sup>th</sup> & 30<sup>th</sup> and over Nagaland on 30<sup>th</sup> December, 2021.

## II) Minimum Temperatures, Cold Wave, Cold Day and Fog:

- i) Minimum temperatures are 2-5°C above normal over many parts of Northwest, Central, East, Northeast and north peninsular India.
- ii) No significant change in minimum temperatures very likely over most parts of Northwest India during next 24 hours and fall by 2-4°C for subsequent 2 days and no significant change thereafter.
- iii) No significant change in minimum temperatures over most parts of central & East India during next 2 days and fall by 2-4°C thereafter.
- iv) Gradual fall in minimum temperatures by 2-4°C over Gujarat state during next 2 days and rise by 2-4°C thereafter.
- v) **Cold Wave Conditions** likely to prevail over Punjab, Haryana and Chandigarh during 31<sup>st</sup> December- 02<sup>nd</sup> January and over north Rajasthan on 01<sup>st</sup> & 02<sup>nd</sup> January, 2022.
- vi) **Cold Day Conditions** likely to prevail over Bihar on 29<sup>th</sup> & 30<sup>th</sup> December.
- vii) **Dense fog** in isolated pockets very likely over Punjab, Haryana and north Rajasthan in night/morning hours during next 3 days; over Madhya Pradesh, Chhattisgarh on 30<sup>th</sup> & 31<sup>st</sup> December and over East India during 31<sup>st</sup> December & 01<sup>st</sup> January.

**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 Thunderstorm, Lightning & Hail over East Rajasthan, Uttar Pradesh, Madhya Pradesh, Vidarbha, Bihar, Jharkhand and Sub-Himalayan West Bengal & Sikkim during next 24 hours.**

**Impact expected:**

- ☐☐ Hail may damage plantation, horticulture and standing crops.
- ☐☐ Hail may injure people and cattle at open places.

**Action suggested:**

- ☐☐ Stay indoors, close windows & doors and avoid travel if possible.
- ☐☐ Take safe shelters; do not take shelter under trees.
- ☐☐ Do not lie on concrete floors and do not lean against concrete walls.
- ☐☐ Unplug electrical/ electronic appliances.
- ☐☐ Immediately get out of water bodies.
- ☐☐ Keep away from all the objects that conduct electricity.

## 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)



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

