Government of India
Ministry of Earth Sciences
India Meteorological Department

Press Release
Date: 05th February, 2024
Time of Issue: 1245 hours IST

Subject: Wet spell is likely to continue over Northwest and adjoining Central & East India today, the 05th February, 2024 and dry weather for subsequent 4-5 days.

Realized weather during past 24 hours till 0830 hours IST of today: (Details given in Annexure I)

- **Minimum temperatures**: Minimum temperatures are in the range of 10-14°C in many parts of northern plains & in some parts of Madhya Pradesh. These are above normal by 2-4°C in many parts of northern plains & adjoining central India. **Today, the lowest minimum temperature of 4.2 °C reported at Amritsar (Punjab).**
- **Fog conditions observed** (at 0530 & 0830 hours IST of today): **Dense to very dense fog** in many places of Punjab, in isolated pockets of northwest Rajasthan; **Dense fog** in isolated pockets of Bihar, Odisha, East Rajasthan, Haryana & Uttarakhand.
- Light to moderate rainfall/snowfall occurred **at most places** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand and **at a few places** over Arunachal Pradesh. Light to moderate rainfall occurred **at most places** over Uttar Pradesh; **at many places** over Punjab, East Rajasthan; **at a few places** over Bihar, Sub-Himalayan West Bengal & Sikkim, Haryana-Chandigarh-Delhi, East Madhya Pradesh and **at isolated places** over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Jharkhand, West Rajasthan, West Madhya Pradesh.
- Isolated **hailstorm** observed at isolated places over Himachal Pradesh, Uttarakhand & West Madhya Pradesh.

Weather Systems and Forecast & Warnings during next 5 days:

- **Under the influence of Western Disturbance, l**ight to moderate isolated to scattered rainfall/snowfall accompanied with thunderstorm & lightning at isolated places is very likely over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh and Uttarakhand on 05th February, 2024 and dry weather thereafter. Isolated **hailstorm** activity also very likely over Uttarakhand on 05th February.
- Light isolated rainfall at isolated places very likely over Uttar Pradesh, East Rajasthan & Madhya Pradesh 05th February, 2024 and dry weather thereafter.
- Light to moderate scattered to fairly widespread rainfall/snowfall very likely over Arunachal Pradesh and isolated to scattered rainfall over Sub-Himalayan West Bengal

& Sikkim, Assam & Meghalaya and Nagaland, Mizoram, Manipur & Tripura during 05th to 07th and over Gangetic West Bengal, Jharkhand & Bihar on 05th February, 2024.

- ❖ Isolated **heavy rainfall/snowfall** very likely over Arunachal Pradesh on 05th February, 2024.
- ❖ Isolated **thunderstorm accompanied with hail** also very likely over Sikkim on 05th February.

Dense fog warning: (graphics in Annexure II)

- ❖ **Dense to very dense fog** conditions very likely to prevail in morning hours in isolated pockets of Punjab on 06th February, 2024.
- ❖ **Dense fog** conditions very likely to prevail in morning hours in isolated pockets of Haryana, north Rajasthan, Jharkhand on 06th February and over Odisha on 06th & 07th February, 2024.

Minimum Temperature Forecast:

- ❖ Fall in minimum temperatures by 2-4°C very likely over many parts of Northwest India during next 3 days and no significant change thereafter.
- ❖ Gradual fall in minimum temperatures by 2-4°C very likely over many parts of Central India during next 5 days.
- ❖ No significant change in minimum temperatures very likely over rest parts north India.

For more details kindly refer: https://mausam.imd.gov.in/responsive/all_india_forcast_bulletin.php

Impact expected due to dense to very dense fog in morning hours over Punjab on 06th February, 2024:

- ❖ **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.

Impact & Action Suggested due to heavy rainfall/snowfall over Higher reaches of Arunachal Pradesh on 05th February, 2024:

Impacts Expected for Rain/Snow

- Disruption of Electricity.
- Landslide, rock fall and mudslides, Blocking/washout of roads/highways/bridges Nallahs.
- Disruption of traffic flow.
- Damage to Kuccha and unsecured structures.

Suggested Actions

- Avoid roadway underpasses, drainage ditches, low lying areas and areas where water collects – they can unexpectedly flood or overflow.
- Stay away from power lines or electrical wires.
- Don't stay in kuchcha houses during heavy rainfall as it may collapse anytime soon
- Drive carefully.

Impact expected and action suggested due to thunderstorm with Hail over Uttarakhand and Sub-Himalayan West Bengal & Sikkim on 05th February, 2024:

Impact expected:

- ❖ Strong wind/hail may damage plantation, horticulture and standing crops.
- ❖ Hail may injure people and cattle at open places.
- ❖ Partial damage to vulnerable structures due to strong winds.
- ❖ Minor damage to kutcha houses/walls and huts.
- ❖ Loose objects may fly.

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.

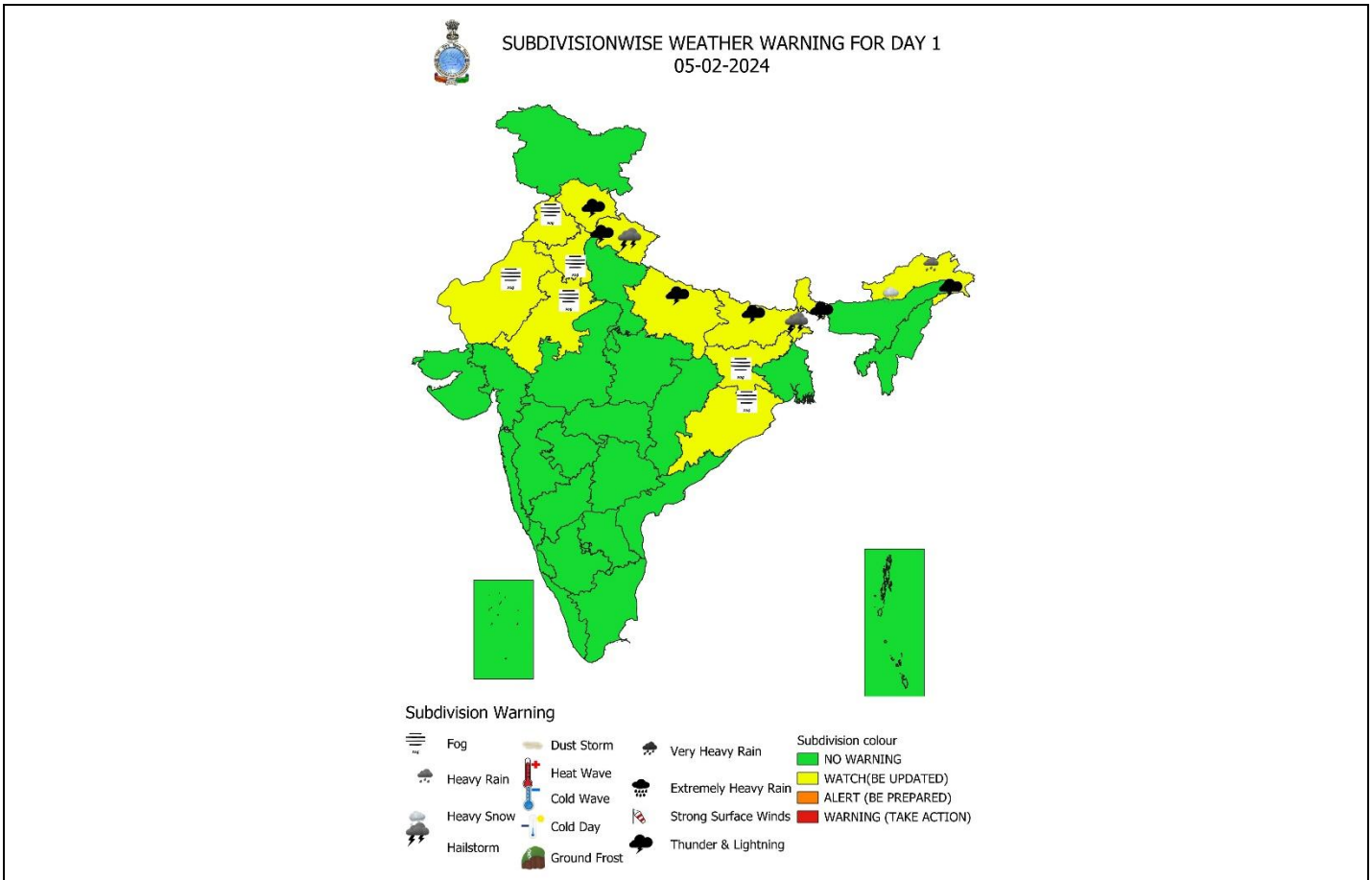
Realized weather during past 24 hours till 0830 hours IST of today:

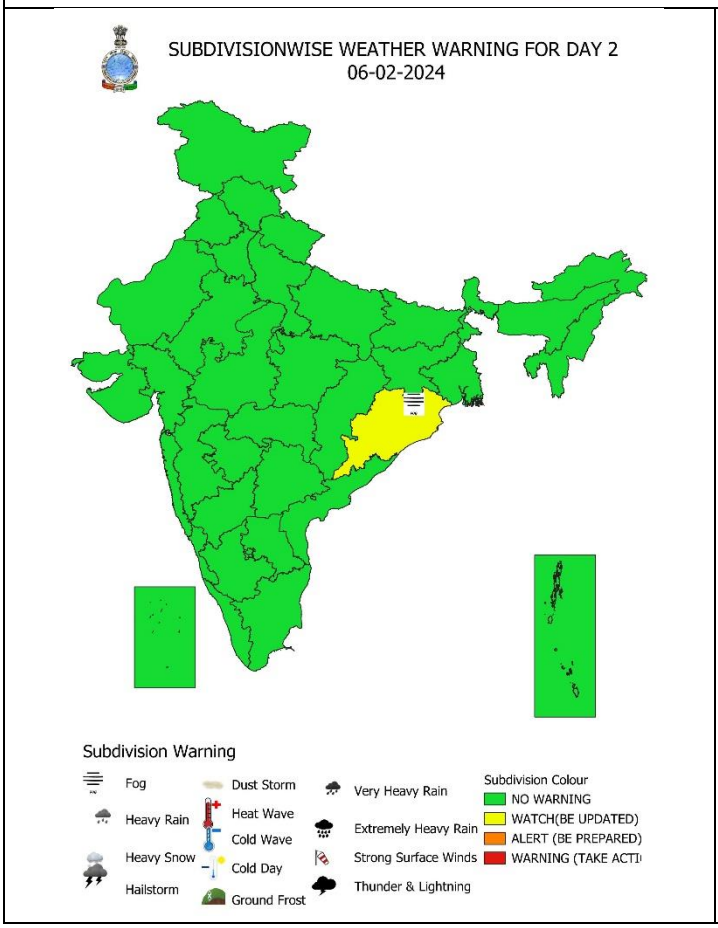
- Yesterday, **Maximum temperatures** were in the range of 15-20°C in many parts of Punjab, Haryana, Chandigarh, Delhi, plains of Uttarakhand and some parts of Uttar Pradesh which were below normal by 4-6°C. These were more than 20°C in rest of northern plains & central India and remained near normal.

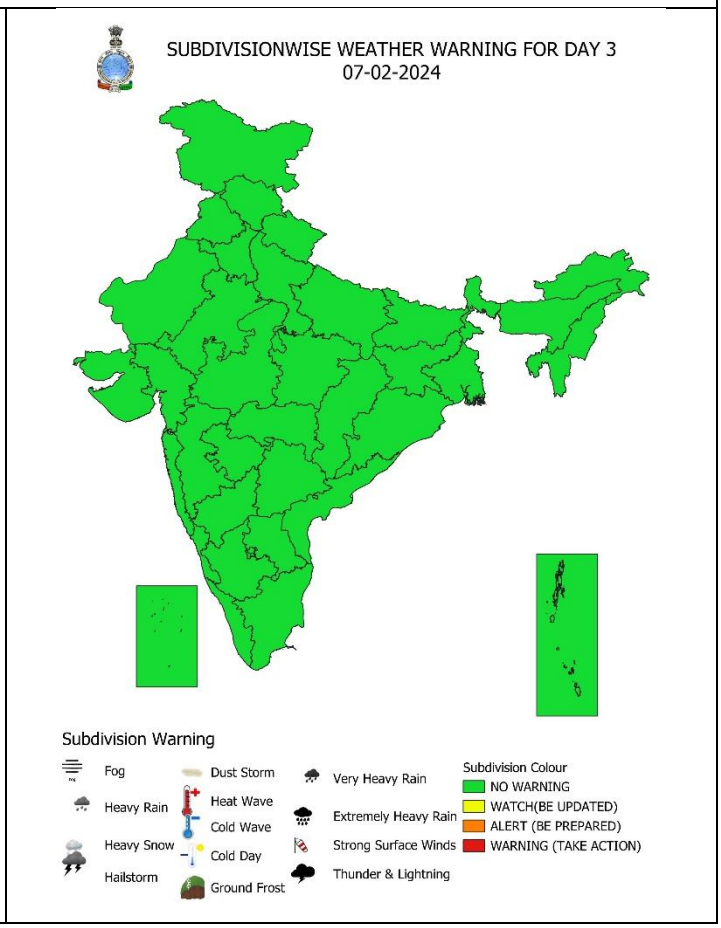
- **Visibility recorded (at 0530 hours IST of today) (≤200 metres): West Rajasthan**: Ganganagar-25 and Jaislamer-200; **Punjab**: Amritsar-100.

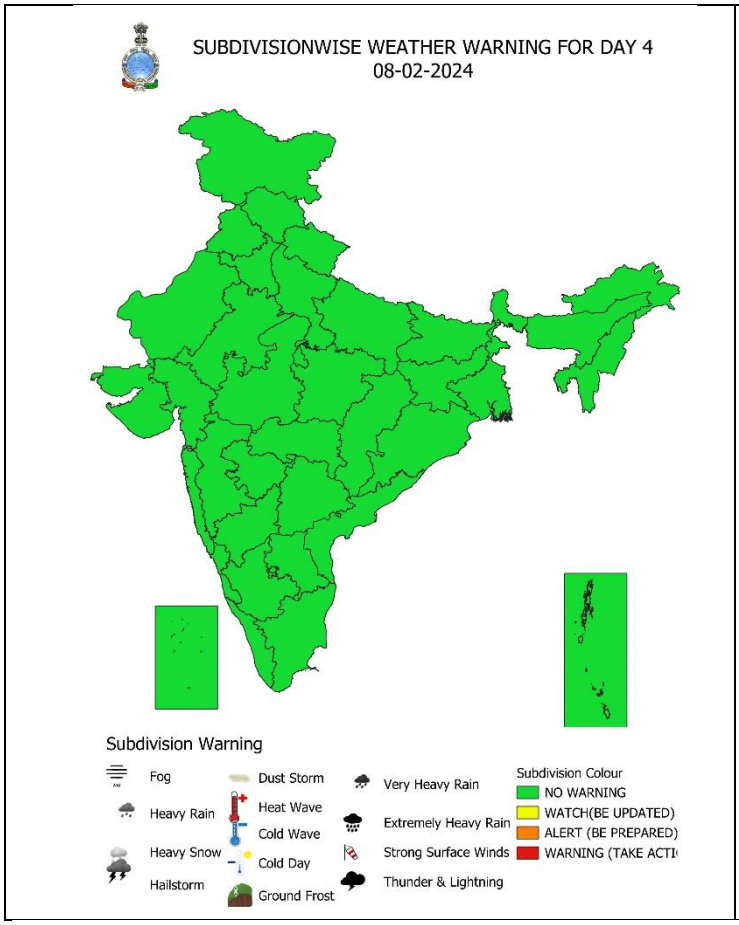
- **Visibility recorded (at 0830 hours IST of today) (≤200 metres): West Rajasthan:** Ganganagar-25, Bikaner-50; **Punjab:** Amritsar-50, Bhatinda-100, Ludhiana-200; **Haryana-Chandigarh:** Ambala-50, Chandigarh & Karnal-200 each; **Uttarakhand:** Tehri & Mukteshwar-50 each; **Himachal Pradesh:** Una-200; **Delhi:** Palam-200; **Sikkim:** Gangtok-200; **Odisha:** Balasore-200.

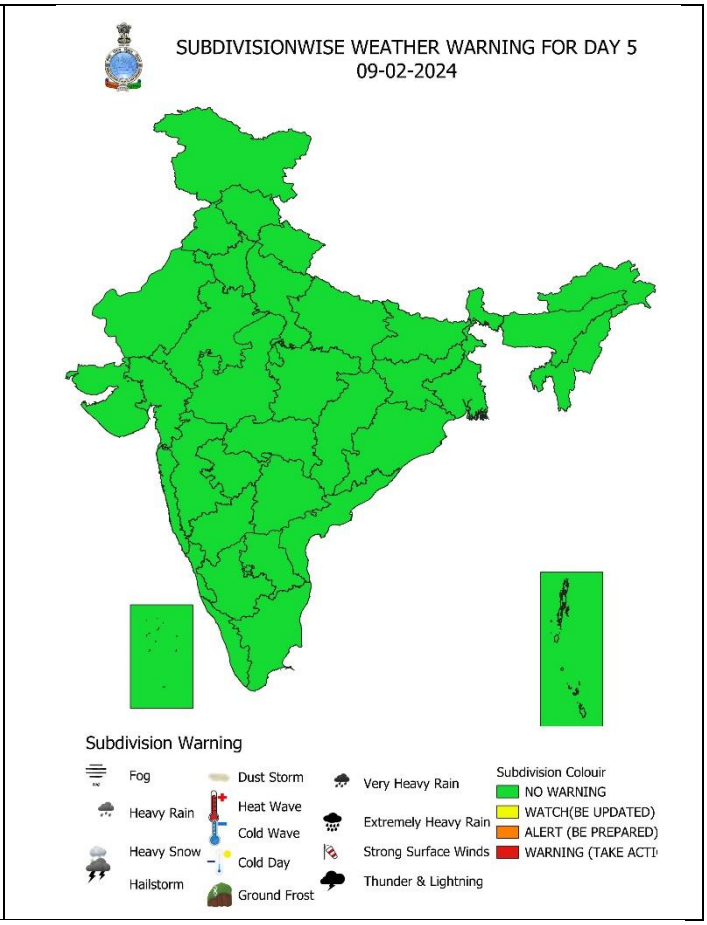
- **Rainfall recorded (in cm): Himachal Pradesh:** Sundernagar & Solan 6 each, Bhuntar 5, Mandi 4, Manali 3, Shimla 2; **Haryana-Chandigarh:** Tajewala (dist Yamuna Nagar) & Chandigarh IAF (dist Chandigarh) 4 each, Naraingarh (dist Ambala) & Sadhaura (dist Yamuna Nagar) 3 each; **Jammu & Kashmir:** Batote 3, Pahalgaon, Qazi Gund, Banihal & Kokarnag 1 each; **East Uttar Pradesh:** Fatehpur Obsy (dist Fatehpur) 4, Kanpur Iaf (dist Kanpur City) 3, Kanpur Obsy (dist Kanpur City) 3, Fursatganj (dist Amethi) 3; **West Uttar Pradesh:** Kalpi Tehsil (dist Jalaun) 3, Nakur (dist Saharanpur) 2, Hamirpur Obsy (dist Hamirpur) 2, Etah (dist Etah) 2, Behat (dist Saharanpur) 2, Shikohabad (dist Firozabad) 2; **West Rajasthan:** Dholpur & Jaipur 3 each, Ajmer & Sawai Mahopur 2 each; **East Madhya Pradesh:** Rajnagar (dist Chhatarpur) 3; **West Madhya Pradesh:** Gormi (dist Bhind), Porsa (dist Morena), Bhind-aws (dist Bhind), Dabra (dist Gwalior) 2 each; **Uttarakhand:** Dehradun & Tehri 2 each; **Punjab:** Nangal (dist Rupnagar) 2, Samrala (dist Ludhiana) 2, Payal Rev (dist Ludhiana) 2, Phangota (dist Pathankot) 2; **East Rajasthan:** Jodhpur & Nagaur 1 each; **Sikkim:** Kabi, Gyalsing & Gangtok 1 each.


SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
05-02-2024
Subdivision Warning
Fog
Heavy Rain
Heavy Snow
Hailstorm
Dust Storm
Heat Wave
Cold Wave
Cold Day
Ground Frost
Very Heavy Rain
Extremely Heavy Rain
Strong Surface Winds
Thunder & Lightning
Subdivision colour
NO WARNING
WATCH(BE UPDATED)
ALERT (BE PREPARED)
WARNING (TAKE ACTION)


SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
06-02-2024
Subdivision Warning
Fog
Heavy Rain
Heavy Snow
Hailstorm
Dust Storm
Heat Wave
Cold Wave
Cold Day
Ground Frost
Very Heavy Rain
Extremely Heavy Rain
Strong Surface Winds
Thunder & Lightning
Subdivision Colour
NO WARNING
WATCH(BE UPDATED)
ALERT (BE PREPARED)
WARNING (TAKE ACTI


SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
07-02-2024
Subdivision Warning
Fog
Heavy Rain
Heavy Snow
Hailstorm
Dust Storm
Heat Wave
Cold Wave
Cold Day
Ground Frost
Very Heavy Rain
Extremely Heavy Rain
Strong Surface Winds
Thunder & Lightning
Subdivision Colour
NO WARNING
WATCH(BE UPDATED)
ALERT (BE PREPARED)
WARNING (TAKE ACTION)


SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
08-02-2024
Subdivision Warning
Fog
Heavy Rain
Heavy Snow
Hailstorm
Dust Storm
Heat Wave
Cold Wave
Cold Day
Ground Frost
Very Heavy Rain
Extremely Heavy Rain
Strong Surface Winds
Thunder & Lightning
Subdivision Colour
NO WARNING
WATCH(BE UPDATED)
ALERT (BE PREPARED)
WARNING (TAKE ACTI


SUBDIVISIONWISE WEATHER WARNING FOR DAY 5
09-02-2024
Subdivision Warning
Fog
Heavy Rain
Heavy Snow
Hailstorm
Dust Storm
Heat Wave
Cold Wave
Cold Day
Ground Frost
Very Heavy Rain
Extremely Heavy Rain
Strong Surface Winds
Thunder & Lightning
Subdivision Colouir
NO WARNING
WATCH(BE UPDATED)
ALERT (BE PREPARED)
WARNING (TAKE ACTI

Legends:

- **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- **Obsy:** Observatory; **AWS:** Automatic Weather Station; **dist:** District: **NH:** National Highway; **KVK**: Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation
- **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 Marathwada.
  - **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 Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)

Subdivision Warning		Subdivision color
Heavy Rain	Dust Storm	NO WARNING
Heavy Snow	Strong Surface Winds	WATCH(BE UPDATED)
Thunderstorms & Lightning	Heat Wave	ALERT (BE PREPARED)
Hailstorm	Cold wave	WARNING (TAKE ACTION)
	Fog	

Probabilistic Forecast

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

Flash Flood Risk
High Risk (Take Action)
Moderate Risk (Be Prepared)
Low Risk (Be Updated)

Definition of Cold wave, Cold Day and Fog Conditions:

Cold Wave

When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions.

(a). Based on departure

- **Cold Wave:** Minimum Temperature Departure from normal -4.5 °C to -6.4 °C.
- **Severe Cold Wave:** Minimum Temperature Departure from normal ≤ -6.5 °C

(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:** Maximum Temperature Departure from normal -4.5 °C to -6.4 °C.
- **Severe Cold Day:** Maximum Temperature Departure from normal ≤ -6.5 °C

Fog

Phenomenon of small droplets suspended in air and the horizontal visibility < 1km

- **Moderate Fog:** When the visibility between 500-200 metres
- **Dense Fog:** when the visibility between 50- 200 metres
- **Very Dense Fog:** when the visibility < 50 metres