



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 16th February, 2024

Time of Issue: 1315 hours IST

Subject: An intense spell of rainfall/snowfall activity likely over Western Himalayan Region during 17th-22nd and adjoining plains of northwest India during 19th-22nd February 2024.

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

- ❖ **Minimum temperatures:** Minimum temperatures are in the range of 7-12°C over most parts of Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh and north Rajasthan which are normal to below normal by 1-4°C and above normal over rest parts of north India. **Today, the lowest minimum temperature of 3.2°C reported at Hisar (Haryana).**
- ❖ **Hailstorm** recorded at isolated places over Madhya Pradesh and Vidarbha.
- ❖ **Cold wave conditions** observed in isolated pockets over Haryana.
- ❖ **Fog conditions observed** (at 0530 & 0830 hours IST of today): **Dense fog** in isolated pockets of Punjab, Uttar Pradesh, East Madhya Pradesh, West Bengal & Sikkim, Bihar and Jharkhand.
- ❖ **Light to moderate rainfall** occurred at a few places over Gangetic West Bengal and Arunachal Pradesh at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Odisha, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura and Tamil Nadu.

Weather Systems and Forecast & Warnings during next 5 days: (graphics in Annexure I)

- ❖ A trough runs from North interior Karnataka to central parts of Chhattisgarh across north Telangana and south Vidarbha in the lower tropospheric levels. Additionally, on account of the anticyclone over the north Bay of Bengal, moisture is penetrating into eastcentral and east India from the Bay of Bengal in the lower tropospheric levels. Under their influence:
 - ✓ Light isolated rainfall accompanied with **thunderstorms, lightning activity** in isolated places very likely over Vidarbha and Chhattisgarh on 16th February, 2024.
 - ✓ Under the influence of cyclonic circulation lies over central Assam & neighbourhood in lower tropospheric levels; isolated light to moderate rainfall very likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland on 16th & 17th February, 2024.
 - ✓ Under the influence of a fresh cyclonic circulation/trough in lower levels; fairly widespread to widespread light/moderate rainfall/snowfall over Northeast India during 21st 24th February, 2024.
- ❖ A fresh active Western Disturbance is likely to affect northwest India from 17th February and under its influence:
 - Fairly widespread to widespread light/moderate rainfall/snowfall accompanied with **thunderstorms, lightning** over Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand) **during 17th-22nd February, 2024.**
 - **Heavy rainfall** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh during 18th & 20th and over Uttarakhand on 20th February, 2024.
 - **Very Heavy rainfall** also very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand on 19th February, 2024.

- **Hailstorm activity** very likely at isolated places over Jammu division on 18th; over Himachal Pradesh on 18th & 19th and over Uttarakhand during 18th-20th February, 2024.
 - Scattered light/moderate rainfall very likely over Punjab and Haryana-Chandigarh-Delhi during 19th-21st; West Uttar Pradesh during 19th-22nd; East Uttar Pradesh & north Madhya Pradesh during 20th-22^{ns} and over north Rajasthan during 19th-20th February, 2024.
 - Isolated **thunderstorms, lightning and gusty winds** (speed reaching 30-40 gusting to 50 kmph) very likely over Punjab during 18th-20th and over Haryana-Chandigarh-Delhi, West Uttar Pradesh & north Rajasthan during 19th-20st February, 2024.
 - **Hailstorm activity** very likely at isolated places over Punjab, Haryana and West Uttar Pradesh during 19th-20th February, 2024.
 - Scattered to fairly widespread light/moderate rainfall accompanied with **thunderstorms, lightning and gusty winds** (speed reaching 30-40 gusting to 50 kmph) very likely over Punjab during 18th-20th; Haryana-Chandigarh, West Uttar Pradesh during 19th-20st February, 2024.
- ❖ **Dense fog** conditions very likely to prevail in morning hours in isolated pockets of Sub-Himalayan West Bengal & Sikkim on 17th & 18th February and over Bihar & East Uttar Pradesh on 17th February, 2024.

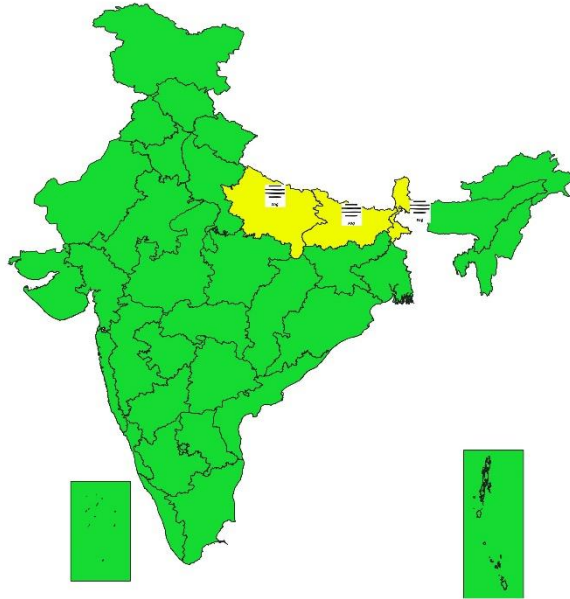
Minimum Temperature Forecast:

- ❖ No significant change in minimum temperatures very likely over Northwest India during next 24 hours and rise by 3-5 °C thereafter.
- ❖ Fall in minimum temperatures by 2-3°C very likely over East India during next 24 hours and rise by 2-4°C thereafter.
- ❖ Gradual Rise in minimum temperatures by 2-3°C very likely over West India during next 5 days.

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



SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
16-02-2024

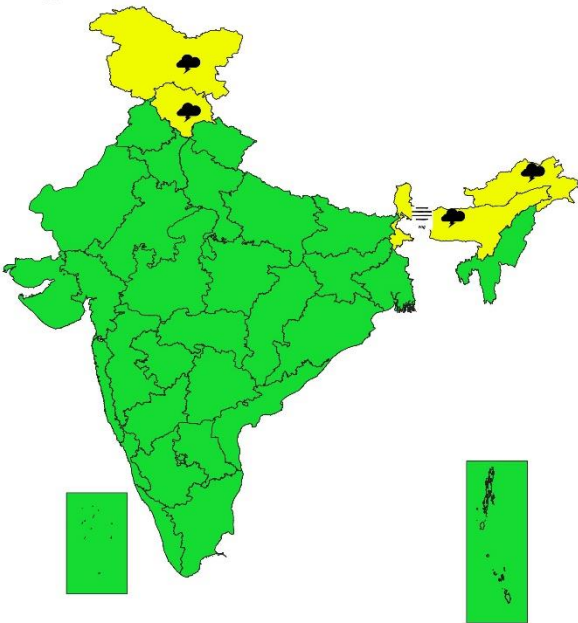


Subdivision Warning

- | | | | |
|------------|--------------|----------------------|---------------------------|
| Fog | Dust Storm | Very Heavy Rain | Subdivision colour |
| Heavy Rain | Heat Wave | Extremely Heavy Rain | NO WARNING |
| Heavy Snow | Cold Wave | Strong Surface Winds | WATCH(BE UPDATED) |
| Hailstorm | Cold Day | Thunder & Lightning | ALERT (BE PREPARED) |
| | Ground Frost | | WARNING (TAKE ACTION) |



SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
17-02-2024

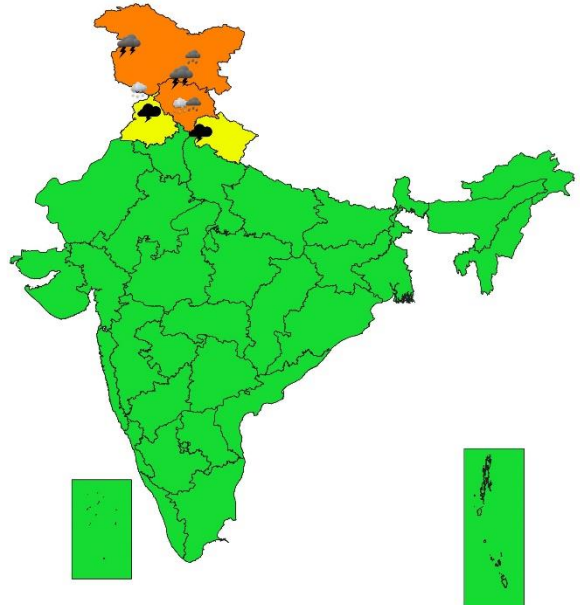


Subdivision Warning

- | | | | |
|------------|--------------|----------------------|---------------------------|
| Fog | Dust Storm | Very Heavy Rain | Subdivision Colour |
| Heavy Rain | Heat Wave | Extremely Heavy Rain | NO WARNING |
| Heavy Snow | Cold Wave | Strong Surface Winds | WATCH(BE UPDATED) |
| Hailstorm | Cold Day | Thunder & Lightning | ALERT (BE PREPARED) |
| | Ground Frost | | WARNING (TAKE ACTION) |

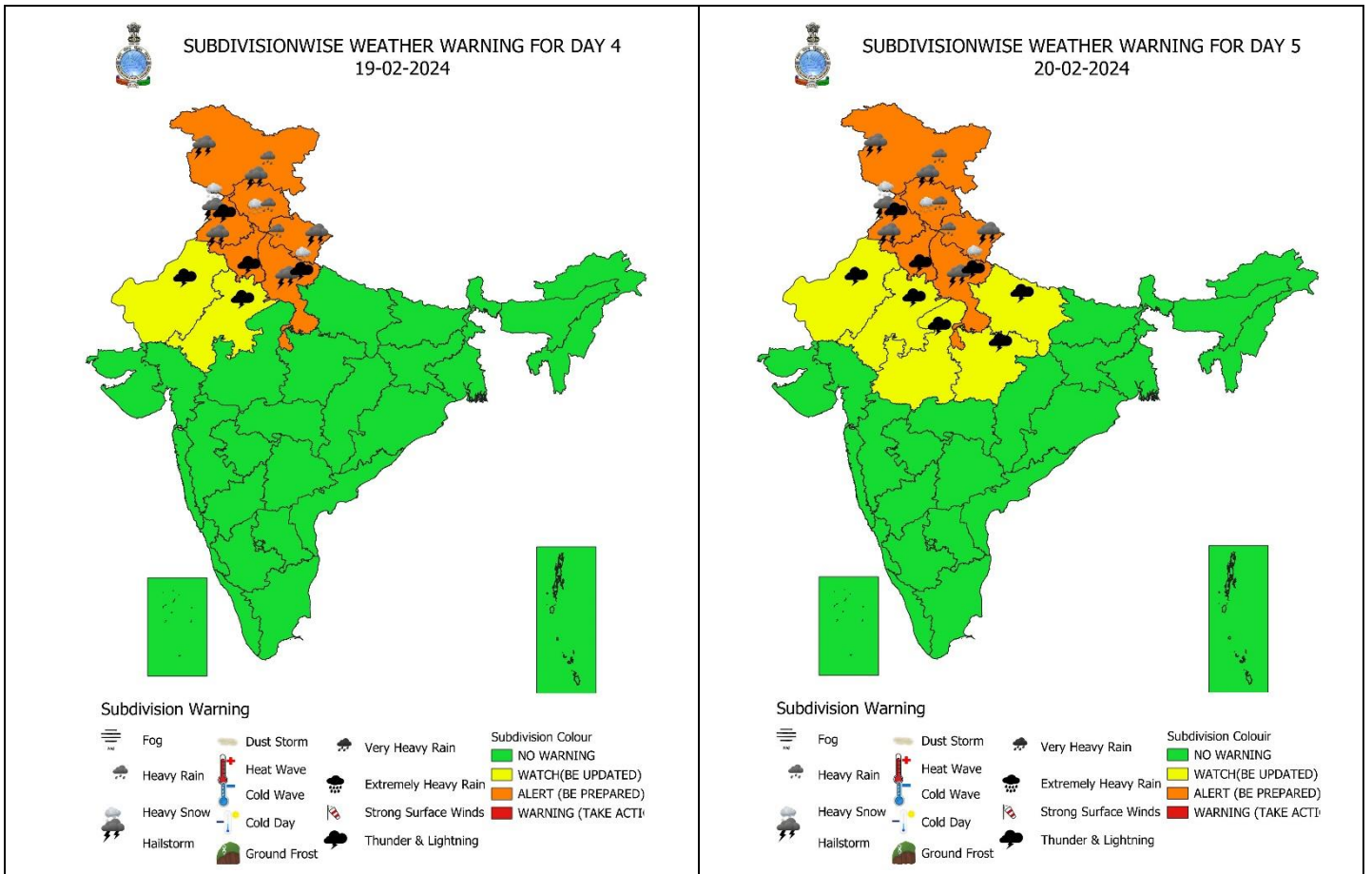


SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
18-02-2024



Subdivision Warning

- | | | | |
|------------|--------------|----------------------|---------------------------|
| Fog | Dust Storm | Very Heavy Rain | Subdivision Colour |
| Heavy Rain | Heat Wave | Extremely Heavy Rain | NO WARNING |
| Heavy Snow | Cold Wave | Strong Surface Winds | WATCH(BE UPDATED) |
| Hailstorm | Cold Day | Thunder & Lightning | ALERT (BE PREPARED) |
| | Ground Frost | | WARNING (TAKE ACTION) |



Impact & Action Suggested due to heavy rainfall/snowfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 18th-20th; over Uttarakhand on 19th & 20th 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 lightning/gusty winds & Hailstorm: Jammu division on 18th; over Himachal Pradesh on 18th & 19th; over Uttarakhand during 18th -20th; over Punjab, Haryana and West Uttar Pradesh during 19th -20th 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.

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 Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)

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

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)