

Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release

Date: 19<sup>th</sup> February, 2024

Time of Issue: 1330 hours IST

**Subject: Intense spell of rainfall/snowfall activity likely to continue over Western Himalayan Region till 21<sup>st</sup> & rainfall activity likely over plains of Northwest India during 19<sup>th</sup>-21<sup>st</sup> February, 2024.**

**Realised weather during past 24 hours till 0830 hours IST of today:**

- ❖ **Minimum temperatures:** Minimum temperatures are in the range of 10-14°C over most parts of northern plains which are near normal. **Today, the lowest minimum temperature of 9.5°C reported at Motihari (Bihar).**
- ❖ **Light to moderate rainfall/snowfall (refer Annexure I)** occurred at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at a few places over Arunachal Pradesh and at isolated places over Himachal Pradesh and Sikkim; **Light to moderate rainfall** at isolated places over Andaman & Nicobar Islands, Odisha and Assam & Meghalaya.

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

- ❖ **Two Western Disturbances**, one as a trough in middle tropospheric westerlies runs along Long. 65°E to the north of Lat. 30°N and another as a cyclonic circulation lies over north Pakistan & neighbourhood in lower levels. These are likely to merge by evening today. An induced cyclonic circulation lies over central Pakistan in lower tropospheric levels. In addition, there is high moisture feeding from Arabian Sea over northwest India. Under the influence of these systems:
  - Fairly widespread to widespread light to moderate rainfall/snowfall accompanied with **thunderstorms, lightning** very likely over Western Himalayan Region during 19<sup>th</sup>-21<sup>st</sup> February, 2024.
  - **Heavy rainfall/snowfall very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 19<sup>th</sup> & 20<sup>th</sup> and over Uttarakhand on 19<sup>th</sup> February, 2024.**
  - **Very Heavy rainfall/snowfall also very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 19<sup>th</sup> February, 2024.**
  - **Hailstorm activity** very likely at isolated places over Himachal Pradesh, Uttarakhand, Punjab and Haryana-Chandigarh on 19<sup>th</sup> & 20<sup>th</sup>; over West Uttar Pradesh and Rajasthan on 19<sup>th</sup> February, 2024.
  - Scattered to fairly widespread light/moderate rainfall very likely over Punjab, Haryana-Chandigarh and West Uttar Pradesh during 19<sup>th</sup>-21<sup>st</sup>; East Uttar Pradesh during 20<sup>th</sup>-22<sup>nd</sup> and isolated light/moderate rainfall over north Rajasthan during 19<sup>th</sup>-21<sup>st</sup> and over northwest Madhya Pradesh during 20<sup>th</sup> -23<sup>rd</sup> February, 2024.
  - Partly cloudy sky with strong surface winds accompanied with gusty winds (speed 40-50 kmph) likely over Delhi on 19<sup>th</sup>; generally cloudy sky with very light rain/thundershowers

at a few places on 20th and partly cloudy sky with possibility of very light rain/drizzle on 21st February, 2024.

- Isolated **thunderstorms, lightning with gusty winds** (speed reaching 40-50 kmph gusting to 60 kmph) very likely over Himachal Pradesh and Uttarakhand on 19<sup>th</sup> & 20<sup>th</sup>; over Punjab and Haryana-Chandigarh during 19<sup>th</sup>-21<sup>st</sup>; over West Uttar Pradesh on 20<sup>th</sup> & 21<sup>st</sup>; over Rajasthan on 20<sup>th</sup> and over East Uttar Pradesh during 20<sup>th</sup>-22<sup>nd</sup> February, 2024.
- **Isolated heavy rainfall** also likely over north Punjab on 19<sup>th</sup> February 2024.
- ❖ Fairly widespread to widespread light/moderate rainfall/snowfall with thunderstorms & lightning very likely over Northeast India during 20<sup>th</sup> to 23<sup>rd</sup> February, 2024. **Isolated heavy rainfall/snowfall** also likely over Arunachal Pradesh on 21<sup>st</sup> & 22<sup>nd</sup>; over Assam & Meghalaya on 22<sup>nd</sup> and over Nagaland, Manipur, Mizoram & Tripura on 22<sup>nd</sup> & 23<sup>rd</sup> February, 2024.
- ❖ Isolated **thunderstorms, lightning with gusty winds** (speed reaching 30-40 kmph gusting to 60 kmph) likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 21<sup>st</sup> February, 2024.
- ❖ Isolated to scattered light/moderate rainfall with thunderstorms & lightning likely over West Bengal & Sikkim and Bihar on 21<sup>st</sup> & 22<sup>nd</sup> February. Isolated heavy rainfall likely over Sub-Himalayan West Bengal & Sikkim on 21<sup>st</sup> & 22<sup>nd</sup> February.
- ❖ Isolated **thunderstorms, lightning with gusty winds** (speed reaching 30-40 kmph gusting to 60 kmph) likely over Sub-Himalayan West Bengal & Sikkim and Bihar on 21<sup>st</sup>; over Gangetic West Bengal on 22<sup>nd</sup> February, 2024.

#### **Minimum Temperature Forecast:**

- ❖ No significant change in minimum temperatures very likely over most parts of the country during next 5 days.

**For more details, kindly refer:** [https://mausam.imd.gov.in/responsive/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php)

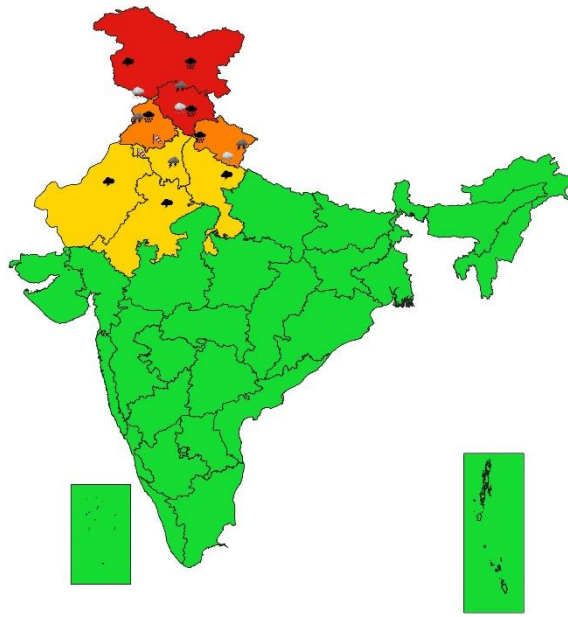
#### **ANNEXURE I**

**Significant rainfall (from 0830 hours IST of yesterday to 0830 hours IST of today) (in cm):**  
**Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad:** Banihal (dist. Ramban) 6, Govindpura AWS (dist. Ramban) 5, Rajpura ARG (dist. Poonch) 4, Batote (dist. Ramban) 4, Kupwara (dist. Kupwara) 4, Nowgam (dist. Kupwara) 3, Bandipora AWS (dist. Bandipore) 3, Baramula AWS, Gulamarg R.S (dist. Baramula) 4 each, Tengmarg, Baramula KVK (dist. Baramula) 3 each, Badarwah (dist. Doda) 3, Rajouri ARG (dist. Rajouri) 3, Rajouri (dist. Rajouri) 2, Pahalgam (dist. Anantnag) 2, Charari Sharief, Harran AWS, Srinagar aero (dist. Badgam) 2 each, Ganderbal (dist. Ganderbal) 2, Buhama (dist. Kupwara) 2, Lolab (dist. Kupwara) 2, Shalimar agro (dist. Srinagar) 2, Kulgam AWS (dist. Kulgam) 1, Qazi gund (dist. Kulgam) 1; **Himachal Pradesh:** Kukumsheri AWS (dist. Lahaul & Spiti) 5, Tissa (dist. Chamba) 4, PTO Gondla (dist. Lahaul & Spiti) 3, Keylong (dist. Lahaul & Spiti) 2.

#### **ANNEXURE II**



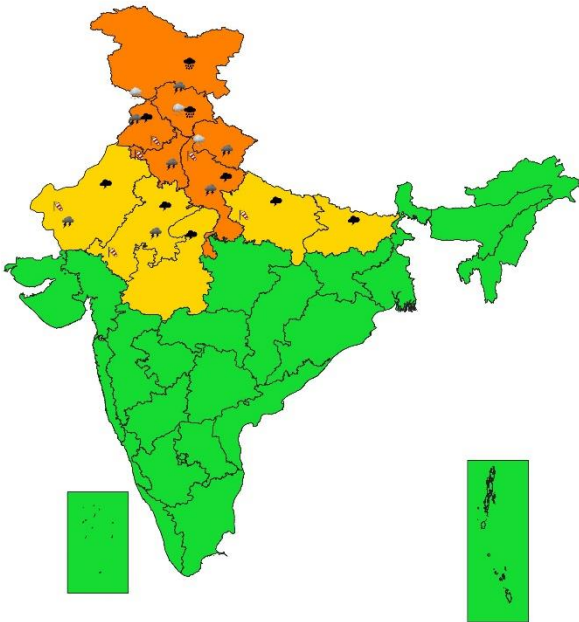
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 1**  
19-02-2024



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <b>Subdivision Warning</b> | Dust Storm           | <b>Subdivision color</b> |
| 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)    |



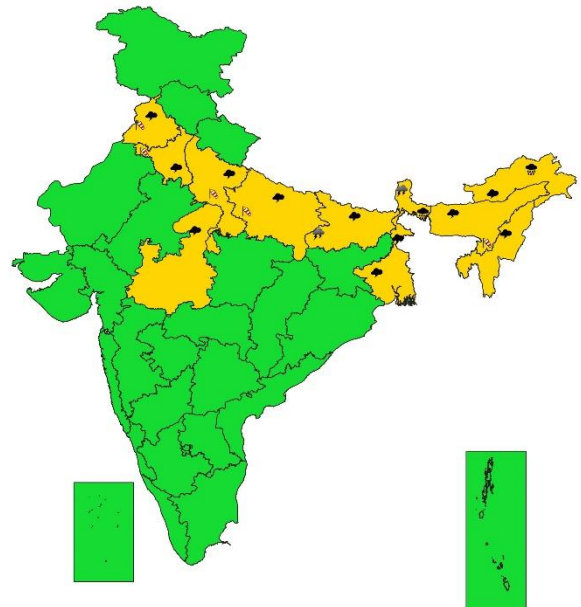
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 2**  
20-02-2024



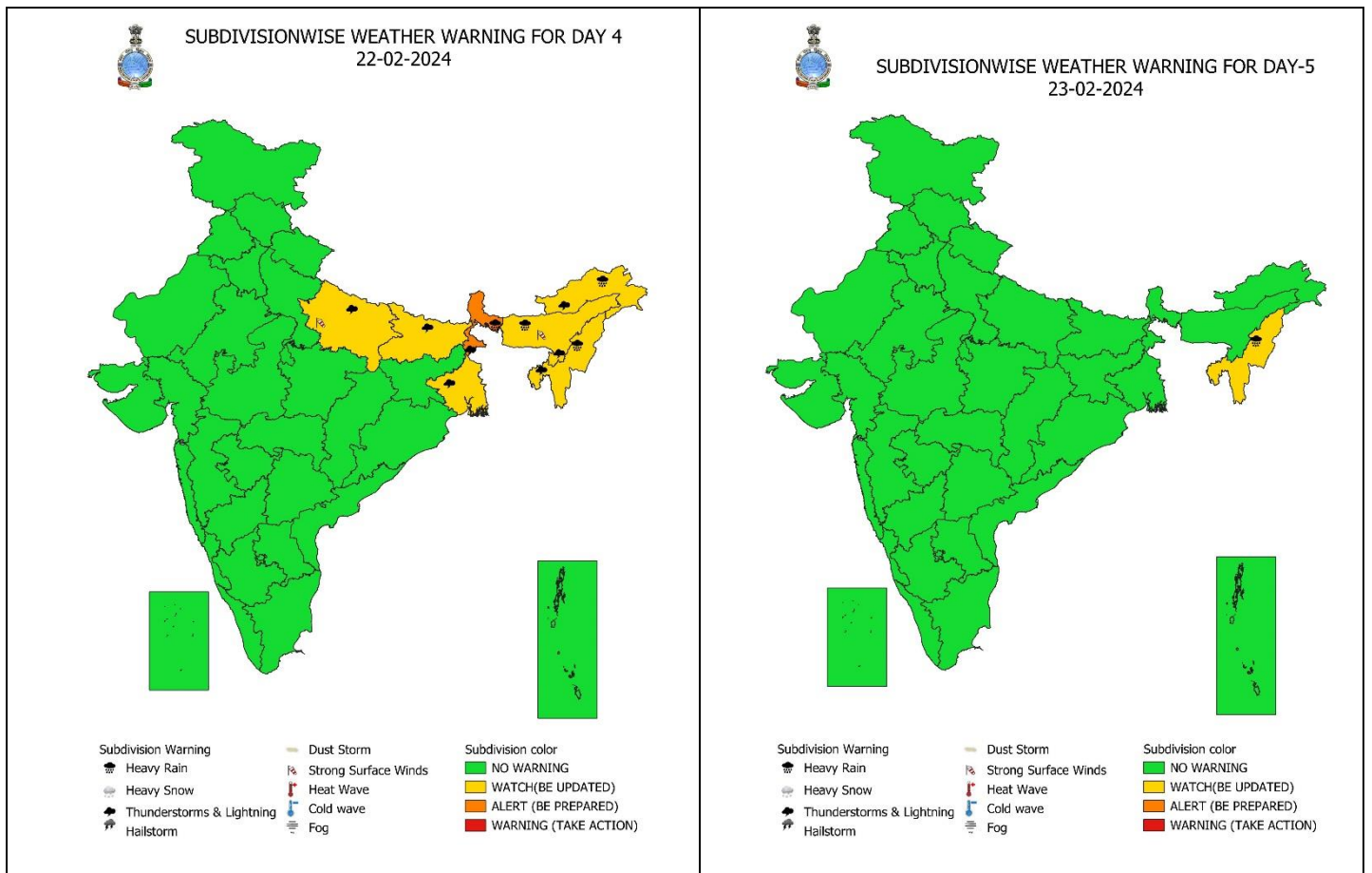
- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <b>Subdivision Warning</b> | Dust Storm           | <b>Subdivision color</b> |
| Heavy Rain                 | Strong Surface Winds | NO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



**SUBDIVISIONWISE WEATHER WARNING FOR DAY 3**  
21-02-2024



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <b>Subdivision Warning</b> | Dust Storm           | <b>Subdivision color</b> |
| 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)    |



**Impact & Action Suggested due to heavy/very heavy rainfall/snowfall:** Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 19<sup>th</sup> & 20<sup>th</sup>; over Uttarakhand & Punjab on 19<sup>th</sup> February, 2024.

### Impacts Expected:

- 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.

### Action Suggested:

- 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:** Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh on 19th & 20<sup>th</sup>; over north Rajasthan and West Uttar Pradesh on 20<sup>th</sup>; over Sub-Himalayan West Bengal & Sikkim and Bihar on 21st 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.

**Agromet advisories for rainfall accompanied with Heavy rainfall, Gusty winds and hailstorms likely over various parts of the country**

- Drain out excess water from crop fields to avoid water stagnation in Jammu & Kashmir and Himachal Pradesh.
- Make necessary arrangements to drain out excess water from the crop fields in Uttarakhand, Punjab, Arunachal Pradesh and Sub Himalayan West Bengal & Sikkim.
- Remove snow immediately from the branches and crotches in Jammu & Kashmir and Himachal Pradesh.
- Postpone sowing of French bean & Potato in Uttarakhand and direct sowing of vegetables in Jammu & Kashmir.
- Use hail nets or hail caps in fruit orchards to protect them from mechanical damage in Himachal Pradesh, Uttarakhand, Punjab, Haryana, West Uttar Pradesh and north Rajasthan.
- Keep harvested produce in safe places.
- Provide mechanical support to horticultural crops and staking to vegetables.

**Legends & abbreviations:**

- ❖ **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; **PTO:** Part Time Office.
- ❖ **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)