



Government of India
Ministry of Earth Sciences
India Meteorological Department



Date: 16th February, 2024
Time of Issue: 1320 hours IST

Special Message

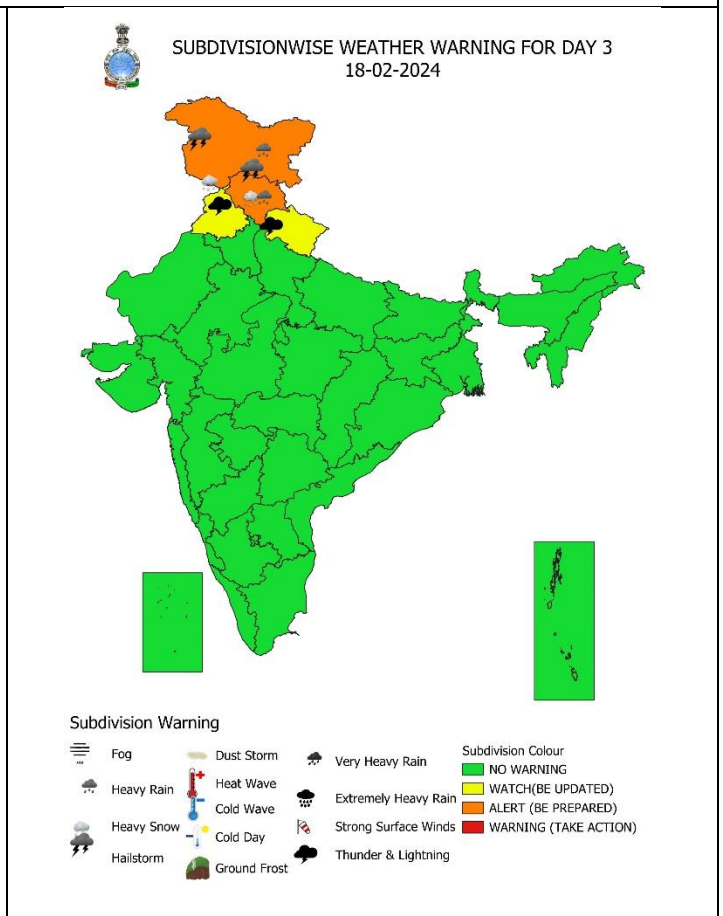
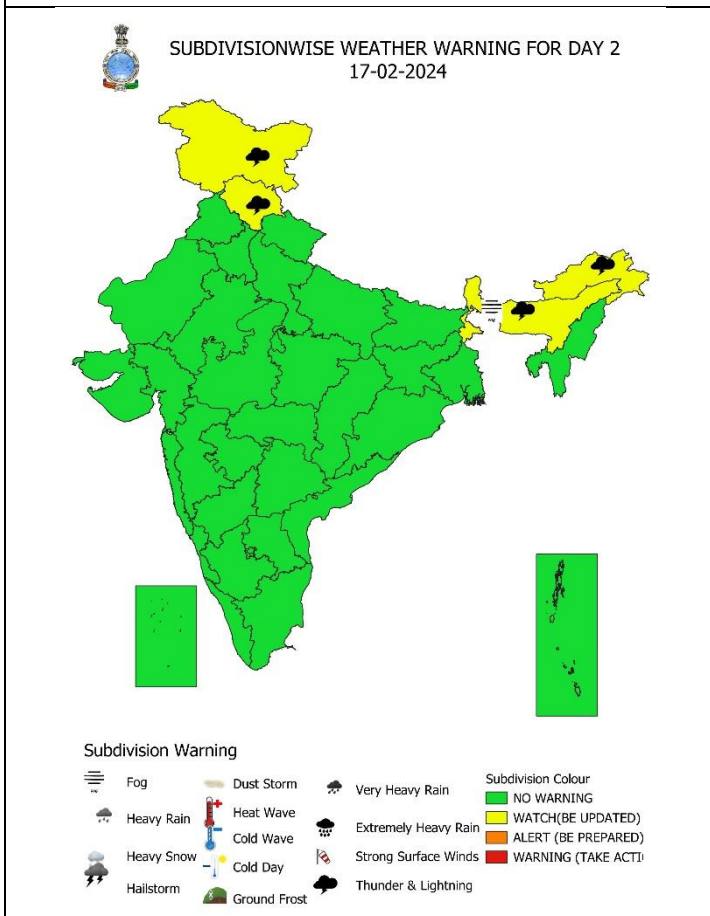
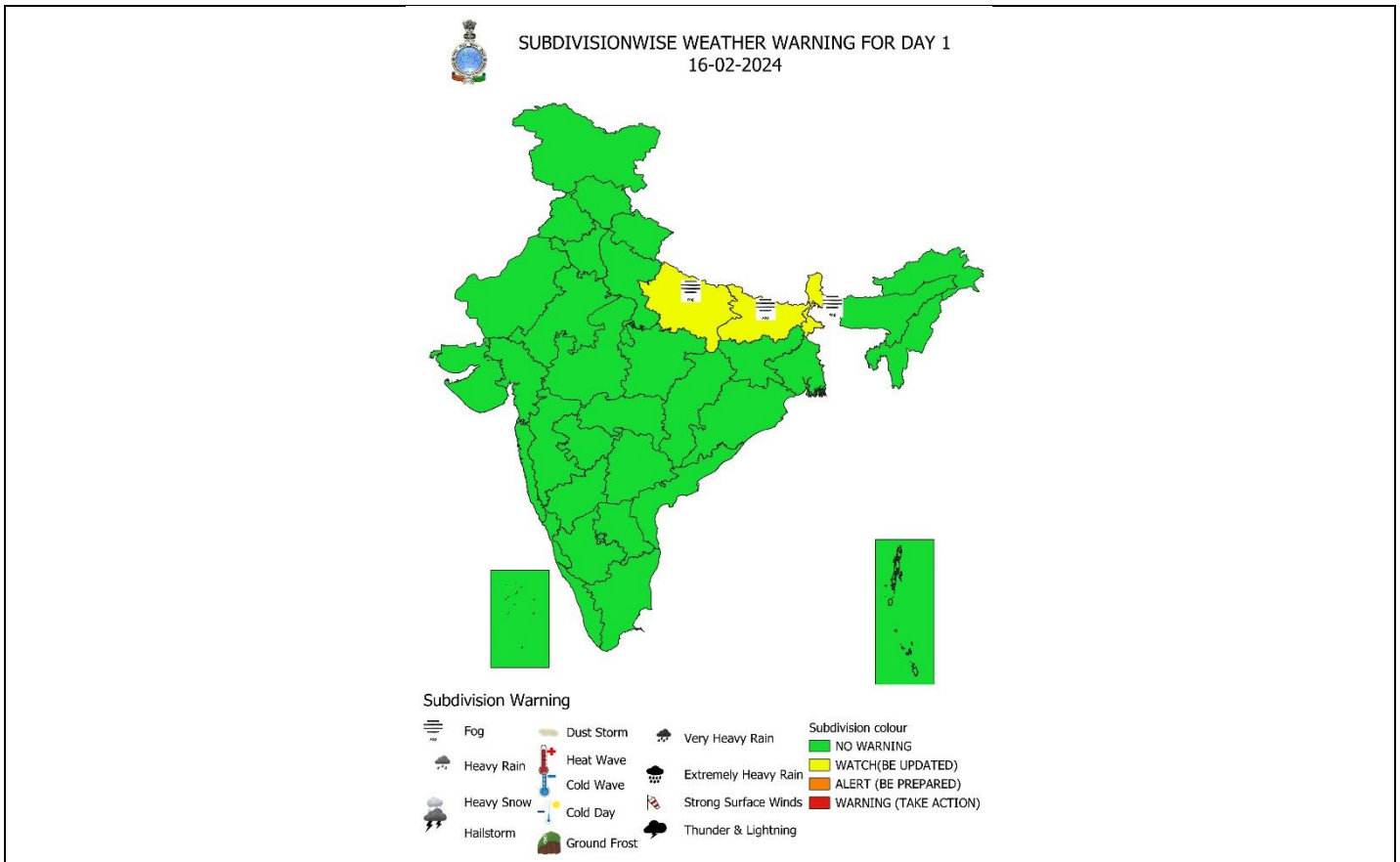
FROM: INDIA METEOROLOGICAL DEPARTMENT
TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS
CONTROL ROOM NDMA
SECRETARY, MOES
DIRECTOR GENERAL, DOORDARSHAN
DIRECTOR GENERAL, AIR
PIB MOES
CHIEF SECRETARY, GOVT. OF JAMMU & KASHMIR
CHIEF SECRETARY, GOVT. OF LADAKH
CHIEF SECRETARY, GOVT. OF HIMACHAL PRADESH
CHIEF SECRETARY, GOVT. OF UTTARAKHAND
CHIEF SECRETARY, GOVT. OF PUNJAB
CHIEF SECRETARY, GOVT. OF HARYANA
CHIEF SECRETARY, GOVT. OF CHANDIGARH
CHIEF SECRETARY, GOVT. OF DELHI
CHIEF SECRETARY, GOVT. OF UTTAR PRADESH
CHIEF SECRETARY, GOVT. OF RAJASTHAN
CHIEF SECRETARY, GOVT. OF MADHYA PRADESH

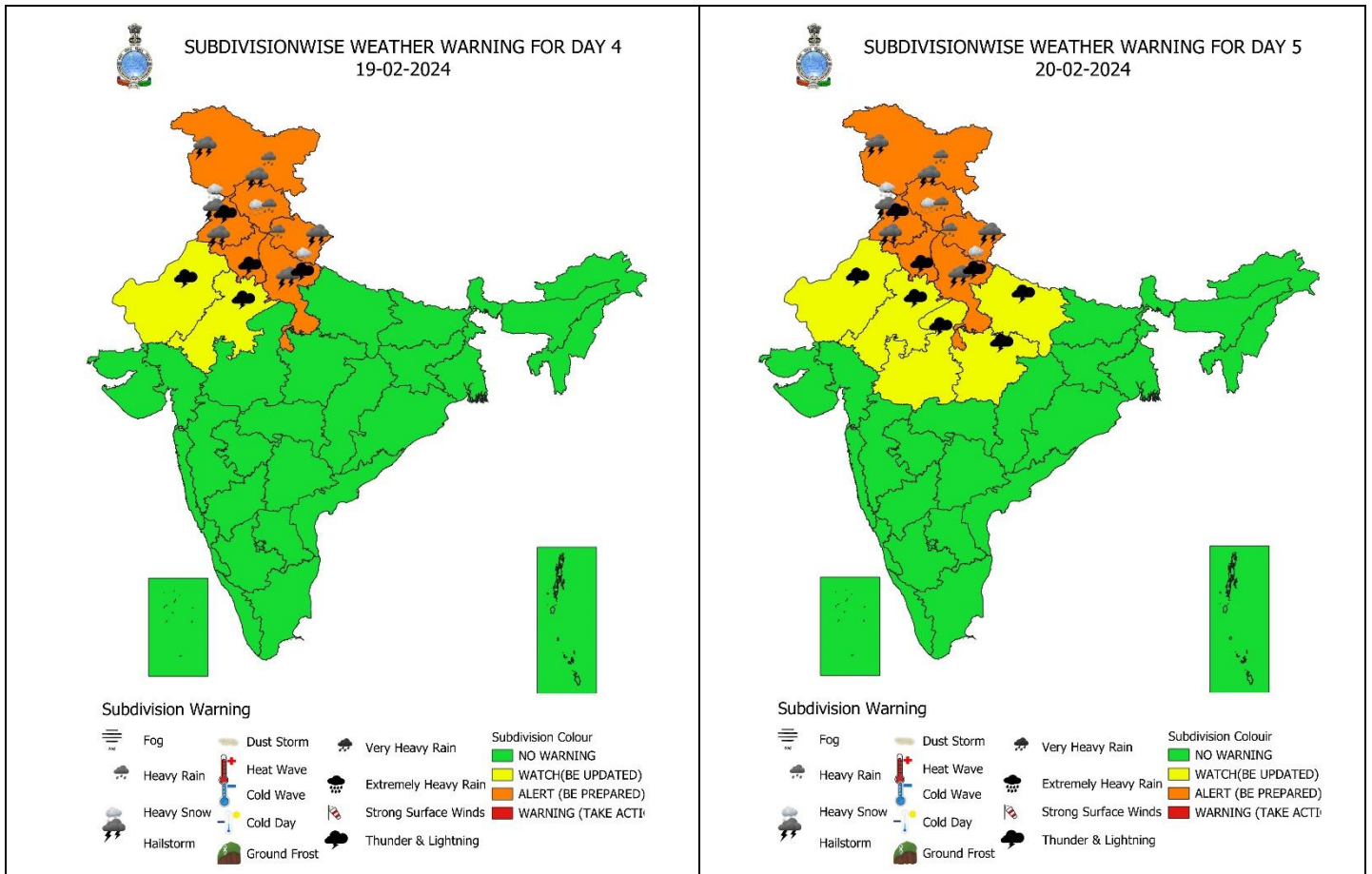
Subject: An intense spell of rainfall/snowfall activity likely over Western Himalayan Region during 17th-22nd and adjoining plains of northwest India during 19th-22nd with peak activity on 19th & 20th February 2024.

- ❖ 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.

The state-wise forecast is given below:

S.No.	State/sub-division	Forecast
1.	Jammu, Kashmir and Ladakh	<ul style="list-style-type: none"> • Light to moderate rain/snowfall accompanied with thunderstorm & lightning at a few places on 17th and at most places during 18th-20th February. • Very heavy rainfall/snowfall likely at isolated places on 19th; heavy rainfall/snowfall at isolated places on 18th & 20th February. • Hailstorm at isolated places likely over Jammu Division on 18th February.
2.	Himachal Pradesh	<ul style="list-style-type: none"> • Light to moderate rain/snowfall accompanied with thunderstorm & lightning at isolated places on 17th ; at many places on 18th; at most places on 19th & 20th February. • Very heavy rainfall/snowfall likely at isolated places on 19th; heavy rainfall/snowfall at isolated places on 18th & 20th February. • Hailstorm at isolated places likely on 18th & 19th February.
3.	Uttarakhand	<ul style="list-style-type: none"> • Light to moderate rain/snowfall accompanied with thunderstorm & lightning at most places on 19th & 20th; at a few places on 18th; at isolated places on 17th February. • Very heavy rainfall/snowfall likely at isolated places on 19th; heavy rainfall/snowfall at isolated places on 20th February. • Hailstorm at isolated places likely during 18th-20th February.
4.	Punjab	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning with gusty winds (40-50 kmph) at many places on 19th & 20th; at isolated places on 18th February. • Hailstorm at isolated places likely on 19th & 20th February.
5.	Haryana, Chandigarh & Delhi	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning with gusty winds (40-50 kmph) at many places on 19th & 20th February. • Hailstorm at isolated places likely over Haryana on 19th & 20th February
6.	West Uttar Pradesh	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning with gusty winds (30-40 kmph) at many places on 20th; at a few places on 19th February. • Hailstorm at isolated places likely over West Uttar Pradesh on 19th & 20th February
7.	East Uttar Pradesh	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning at a few places on 20th; at isolated places on 19th February.
8.	West Rajasthan	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning at isolated places on 19th & 20th February.
9.	East Rajasthan	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning at isolated places on 19th & 20th February.
10	North Madhya Pradesh	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning at isolated places on 19th & 20th February.





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: over Western Himalayan Region and Punjab during 18th-20th; Haryana & West Uttar Pradesh on 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		Flash Flood Risk	
Terms	Probability of Occurrence (%)		
Unlikely	< 25		High Risk (Take Action)
Likely	25 - 50		Moderate Risk (Be Prepared)
Very Likely	50 - 75		Low Risk (Be Updated)
Most Likely	> 75		

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