



Government of India Ministry of
Earth Sciences
India Meteorological Department



Date: 28th February, 2025
Time of Issue: 1545 hours IST

Special Message (No.- 7)

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

Subject: 1) Due to active Western Disturbance, ongoing isolated heavy to very heavy rainfall/snowfall spell likely to continue over Himachal Pradesh & Uttarakhand and isolated heavy rainfall/snowfall over Jammu-Kashmir on today, the 28th February, 2025 and reduced significantly thereafter.

2) Thunderstorm accompanied with hailstorms & gusty winds likely over Northern parts of Punjab, Haryana and West Uttar Pradesh with isolated heavy rainfall over Punjab on today, the 28th February, 2025 and reduced significantly thereafter.

Realised Severe Weather (Rainfall/snowfall) due to ongoing Western Disturbance during past 24 hours till 0830 hours IST of today 28 Feb. 2025(States severely impacted) (Annexure I)

- ❖ Rainfall/Snowfall observed at most places with Heavy to very heavy rainfall with extremely heavy falls at isolated places over Jammu; Heavy to very heavy rainfall/snowfall at isolated places over Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand.
- ❖ Thunderstorm with lightning reported at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Punjab.
- ❖ Hailstorm recorded at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- ❖ Gusty winds observed at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and north Punjab.

Weather Systems, Forecast and warning (Annexure II):

- ❖ A Western Disturbance lay as a trough in lower to upper tropospheric levels with its axis at 3.1 km above mean sea level roughly along Long. 59°E to the north of Lat. 26°N.
- ❖ An induced low pressure area lay over west Rajasthan & adjoining parts of Pakistan with associated cyclonic circulation extending upto lower tropospheric levels.
- ❖ Under their influence, high moisture feeding is also taking place over northwest India in lower tropospheric levels from Arabian Sea. As a result:
 - ✓ **Widespread** light to moderate rainfall/snowfall accompanied with **thunderstorm & lightning** with **gusty winds (speed 40-50 kmph)** likely over Western Himalayan region on 28th February
 - ✓ **Heavy to very heavy rainfall/snowfall** at isolated places likely over Himachal Pradesh & Uttarakhand on 28th February; **heavy rainfall/snowfall** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad 28th February.

- ✓ **Widespread** light to moderate rainfall accompanied with thunderstorm & lightning likely over Punjab, Haryana, Chandigarh on 28th February; **Isolated to Scattered** light to moderate rainfall accompanied with thunderstorm & lightning likely over Uttar Pradesh & Rajasthan on 28th February & 01st March and Bihar on 01st March with **gusty winds (speed 30-40 kmph)** over Punjab, West Uttar Pradesh, West Rajasthan and Bihar on 28th February; Haryana Chandigarh on 28th February & 01st March.
- ✓ **Isolated heavy rainfall/snowfall** likely at isolated places likely over north Punjab on 28th February
- ✓ **Isolated Hailstorm activity also likely over Uttarakhand, Punjab, Haryana, Chandigarh, West Uttar Pradesh on 28th February.**

The state-wise forecast & warnings are given at ANNEXURE II

For weather summary and forecast, kindly refer National Weather Bulletin:

https://mausam.imd.gov.in/responsive/all_india_forcast_bulletin.php

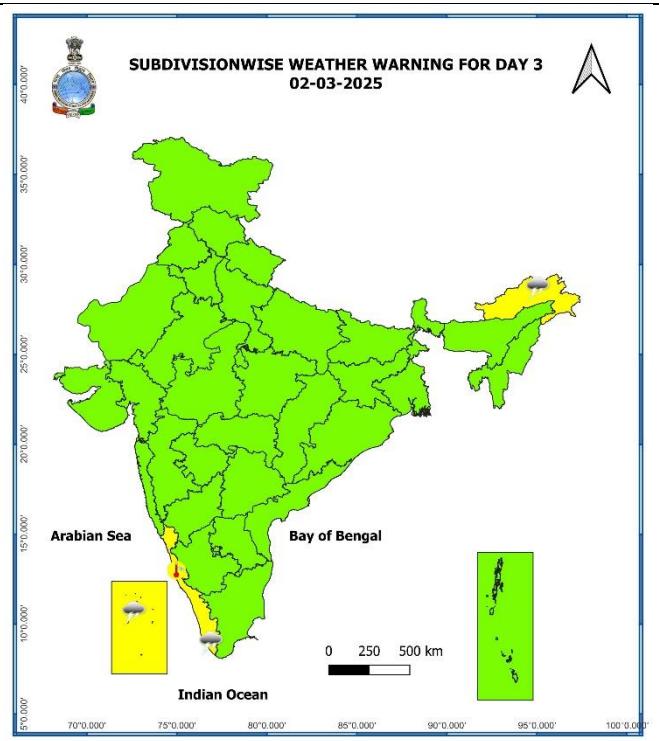
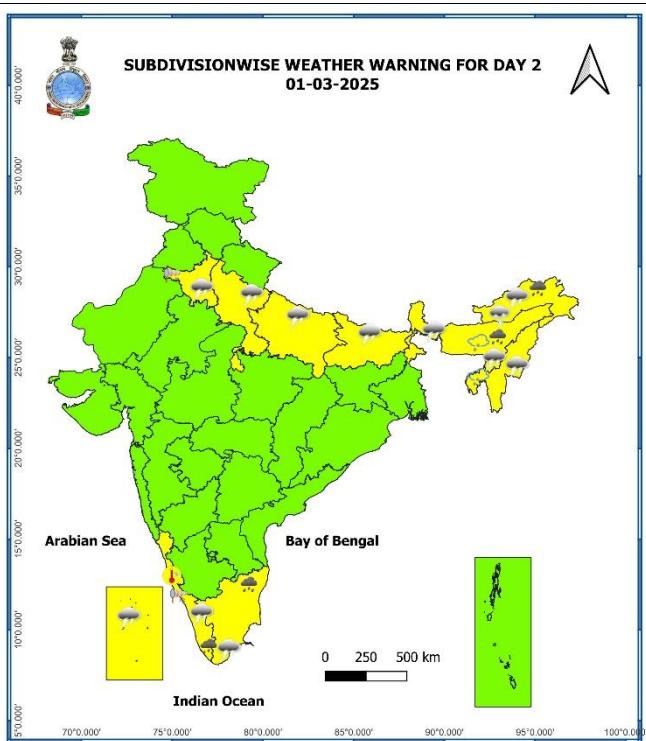
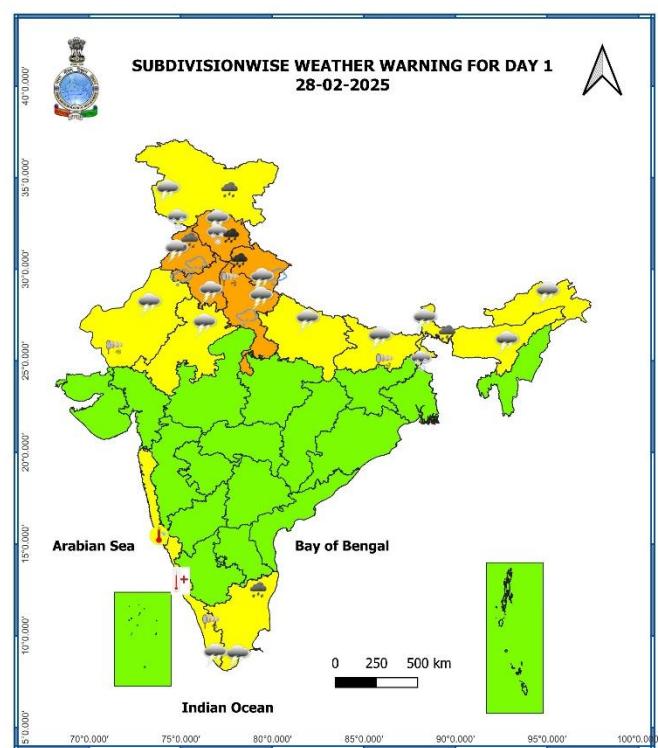
For District wise warnings refer: <https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php>

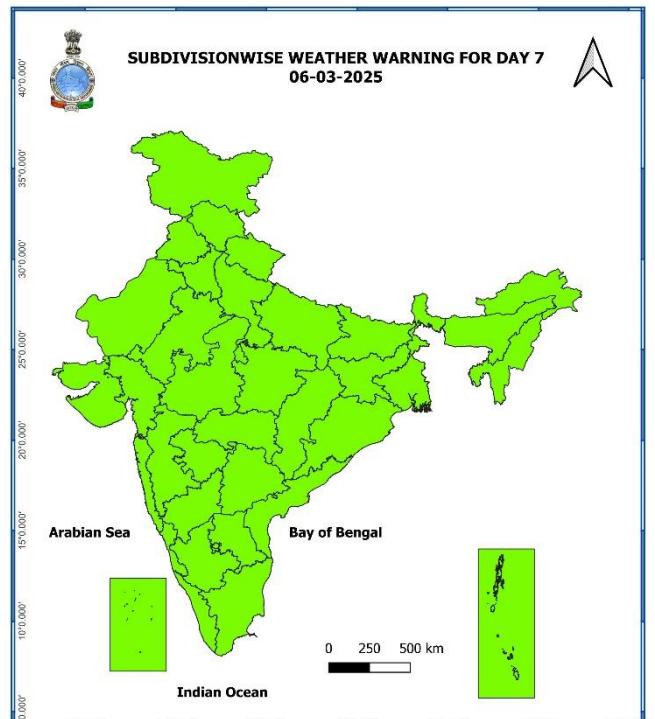
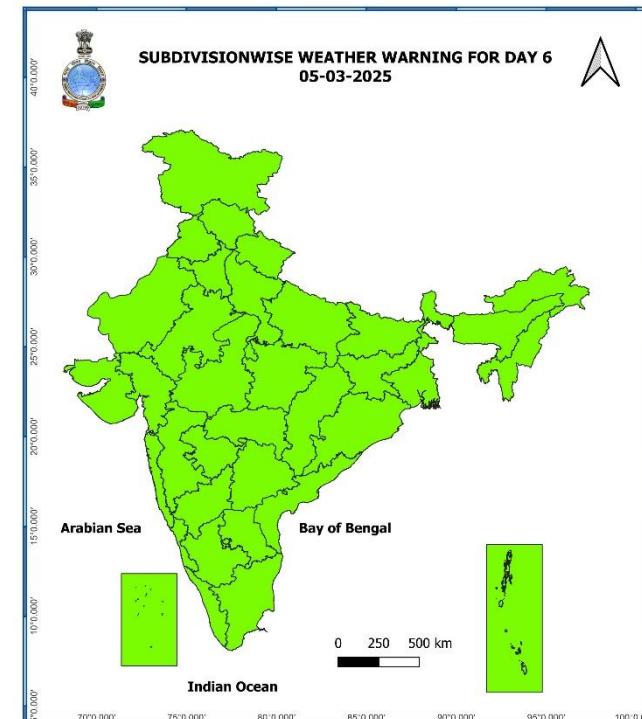
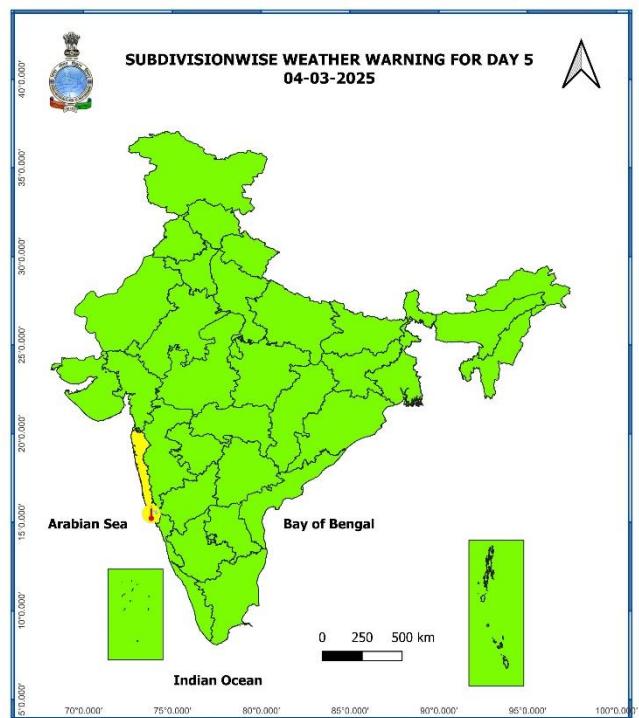
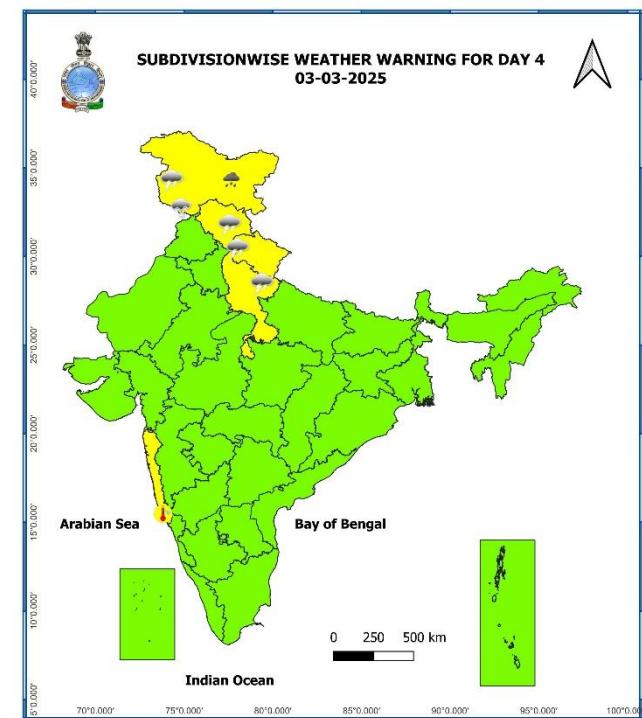
Dr. Shashi Kant
Scientist 'D'
NWFC, IMD, New Delhi

ANNEXURE I

Significant rainfall/snowfall recorded during past 24 hours till 0830 hours IST of today (in cm):

- ❖ **Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad:** Udhampur(iaf) (dist Udhampur) 21, Batote (dist Ramban) 16, Katra (dist Reasi) 12, Banihal (dist Ramban) 10, Reasi Arg (dist Reasi) 9, Burmal Arg (dist Kathua) 9, Govindpura Aws (dist Ramban) 9, Jammu Aws (dist Jammu) 8, Reasi Kvk Aws (dist Reasi) 8, Raj Pura Arg (dist Poonch) 8, Jammu (dist Jammu) 8, Kathua (dist Kathua) 7, Kathua Arg (dist Kathua) 7, Rajouri Arg (dist Rajouri) 7, Bakore Arg (dist Jammu) 7, Badarwah (dist Doda) 7, Rajouri (dist Rajouri) 7, Kukernag (dist Anantnag) 7;
- ❖ **Himachal Pradesh:** Kothi (dist Kullu) 13, Seo Bagh (dist Kullu) 12, Khadrala (dist Shimla) 11, Bhuntar (dist Kullu) 11, Banjar (dist Kullu) 11, Jogindarnagar (dist Mandi) 11, Saloni (dist Chamba) 11, Palampur (dist Kangra) 10, Chamba (dist Chamba) 10, Rampur (dist Shimla) 10, Shillaro (dist Shimla) 8, Baijnath (dist Kangra) 7, Keylong (dist Lahaul & Spiti) 7, Kangra (dist Kangra) 7, Karsog (dist Mandi) 7, Rohru (dist Shimla) 7, Theog (dist Shimla) 7;
- ❖ **Uttarakhand:** Devprayag 9, Tehri (Cwc) 9, Joshimath 8, Mussoorie 8, Chamoli 7, Tehri 7, Sama 7, Dhanaulti 7, Karnprayag 6, Purola 6, Mori 5, Loharkhet 5, Munsiyari 5, Srinagar 5, Chakrata 5, Jakholi 5, Rudraprayag 5, Kapkot 5, Tyuni 5, Pauri 5, Uttarkashi 5, Nainital 5, Almora 5, Ranikhet 5, Ghansali 5, Keertinagar 5;
- ❖ **Punjab:** Pathankot Iaf (dist Pathankot) 12, Ranjit Sagar Dam Site (dist Pathankot) 8, Madhopur (dist Pathankot) 7, Phangota (dist Pathankot) 7





- Action may be taken based on ORANGE AND RED COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

Impact & Action Suggested due to heavy to very heavy rainfall/ snowfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh & Uttarakhand on 28th February.

A. Impact Expected

- ❖ Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- ❖ Occasional reduction in visibility due to heavy rainfall.
- ❖ Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- ❖ Minor damage to kutcha roads.
- ❖ Possibilities of damage to vulnerable structure.
- ❖ Localized Landslides/Mudslides
- ❖ Damage to horticulture and standing crops in some areas due to inundation.
- ❖ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC).

B. Action Suggested

- ❖ Check for traffic congestion on your route before leaving for your destination.
- ❖ Follow any traffic advisories that are issued in this regard.
- ❖ Avoid going to areas that face the water logging problems often.
- ❖ Avoid staying in vulnerable structure.

Impact expected and action suggested due to isolated thunderstorm with lightning/gusty winds & Hailstorm over Northwest India on 28th February.

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 likely impact of Heavy Rainfall / Snowfall / Hailstorm

- Use hail nets or hail caps in fruit orchards and vegetable plants to protect them from mechanical damage in **Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana and West Uttar Pradesh.**
Make provision for draining out excess water from the standing crop fields in **Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Punjab.** In the regions of heavy snowfall, shake the fruit bearing trees to remove snow immediately from the branches.

- Keep the harvested produce in safer places or cover the produce with tarpaulin sheets in the fields.
- Provide mechanical support to horticultural crops and staking to vegetables to avoid lodging.

Livestock

- Keep the animals inside the shed during heavy rainfall/ hailstorm and provide them balanced feed.
- Store feed and fodder in a safe place to prevent spoilage.

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		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		