



Government of India
Ministry of Earth Sciences
India Meteorological Department

Press Release

Date: 27th December, 2023

Time of Issue: 1315 hours IST

- Subject: i) Dense to very dense fog likely to continue over Northwest India during next 3-4 days.**
ii) Light isolated rainfall likely over Northwest & Central India during 31st December, 2023 to 02nd January, 2024.
iii) A fresh spell of light to moderate rainfall likely over south Tamil Nadu from 30th December, 2023 to 02nd January, 2024.

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

- **Minimum temperatures** are in the range of 7-10°C over most parts of Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, Madhya Pradesh, Rajasthan and 11-12°C over most parts of Bihar, Jharkhand, Chhattisgarh, Vidarbha and interior Odisha. **These are 2-3°C above normal** over some parts of Punjab, Delhi, West Rajasthan, Uttar Pradesh and over many parts of Bihar, Jharkhand, Gangetic West Bengal, Gujarat and northeast India.
- **Fog Observed (at 0830 hours IST of today):** Dense to very dense fog reported in most parts of Punjab, many parts of Haryana, Chandigarh & Delhi and some parts of Uttar Pradesh and in isolated pockets over Jammu & Kashmir, northwest Rajasthan and northwest Madhya Pradesh.
- **Visibility Recorded (at 0830 IST of today) (≤ 200 meters):** **Punjab:** Bhatinda-0; Amritsar, Ludhiana, Patiala-25; **Haryana:** Hissar, Bhiwani, Karnal-25; Ambala-50; **Delhi:** Palam, Ayanagar-25; Safdarjung-50; Ridge-200; **West Uttar Pradesh:** Agra, Bareilly-0; Meerut-50; **East Uttar Pradesh:** Lucknow, Varanasi-25; Fursatganj-50; Sultanpur-200; **West Madhya Pradesh:** Gwalior-0; **West Rajasthan:** Ganganagar-25; **Jammu & Kashmir:** Srinagar-25

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

Dense fog warning:

- **Dense to very dense fog** conditions very likely to continue during night/morning hours in many parts of Punjab, Haryana, Chandigarh, Delhi during 27th night to 29th morning and in some parts for subsequent 3 days. **Dense to very dense fog** conditions very likely to continue in some parts of Uttar Pradesh during 27th night to 29th morning and dense fog in isolated pockets for subsequent 3 days.
- **Dense Fog** conditions very likely to continue in isolated pockets of Odisha on 28th morning; over north Rajasthan, northwest Madhya Pradesh during morning hours on 28th & 29th and over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during morning hours of 28th-31st December, 2023.

Rainfall Forecast:

- A fresh Western Disturbance is likely to affect Northwest India from 30th December. Under its the influence and its interaction with lower level easterly winds, light isolated rainfall likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Vidarbha during 31st December, 2023 to 02nd January, 2024.
- Under the influence of a fresh easterly wave, a fresh spell of light to moderate rainfall very likely over south Tamil Nadu and Kerala from 30th December to 02nd January, 2024.
- Isolated **heavy rainfall** also likely over south Tamil Nadu on 30th & 31st December, 2023.

Minimum Temperatures Forecast:

- No significant change in Minimum Temperatures likely over northwest & east India during next 5 days.
- No significant change in Minimum Temperatures likely over central India during next 2 days and rise by 2-3°C thereafter.

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

Impact expected due to dense to very dense fog in the night/morning hours over Punjab, Haryana, Chandigarh, Delhi and Uttar Pradesh during 27th night to 29th morning.

❖ **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.

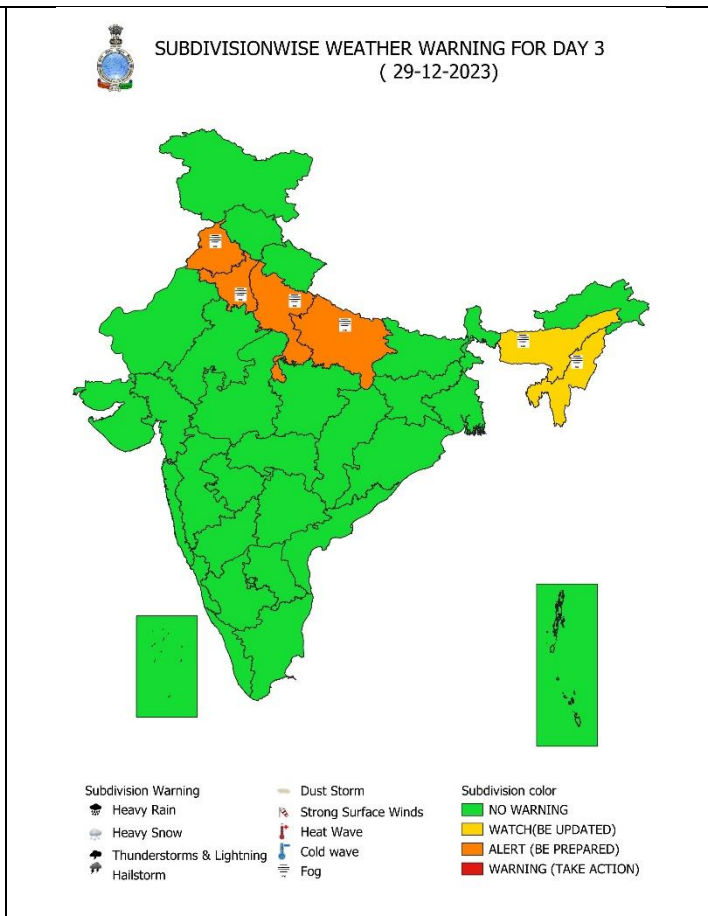
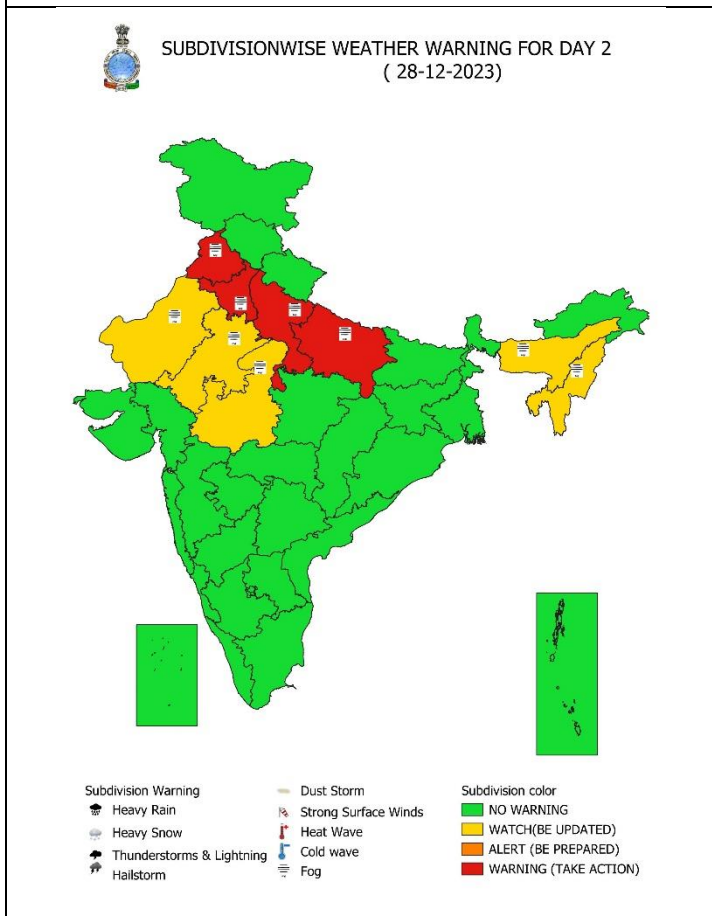
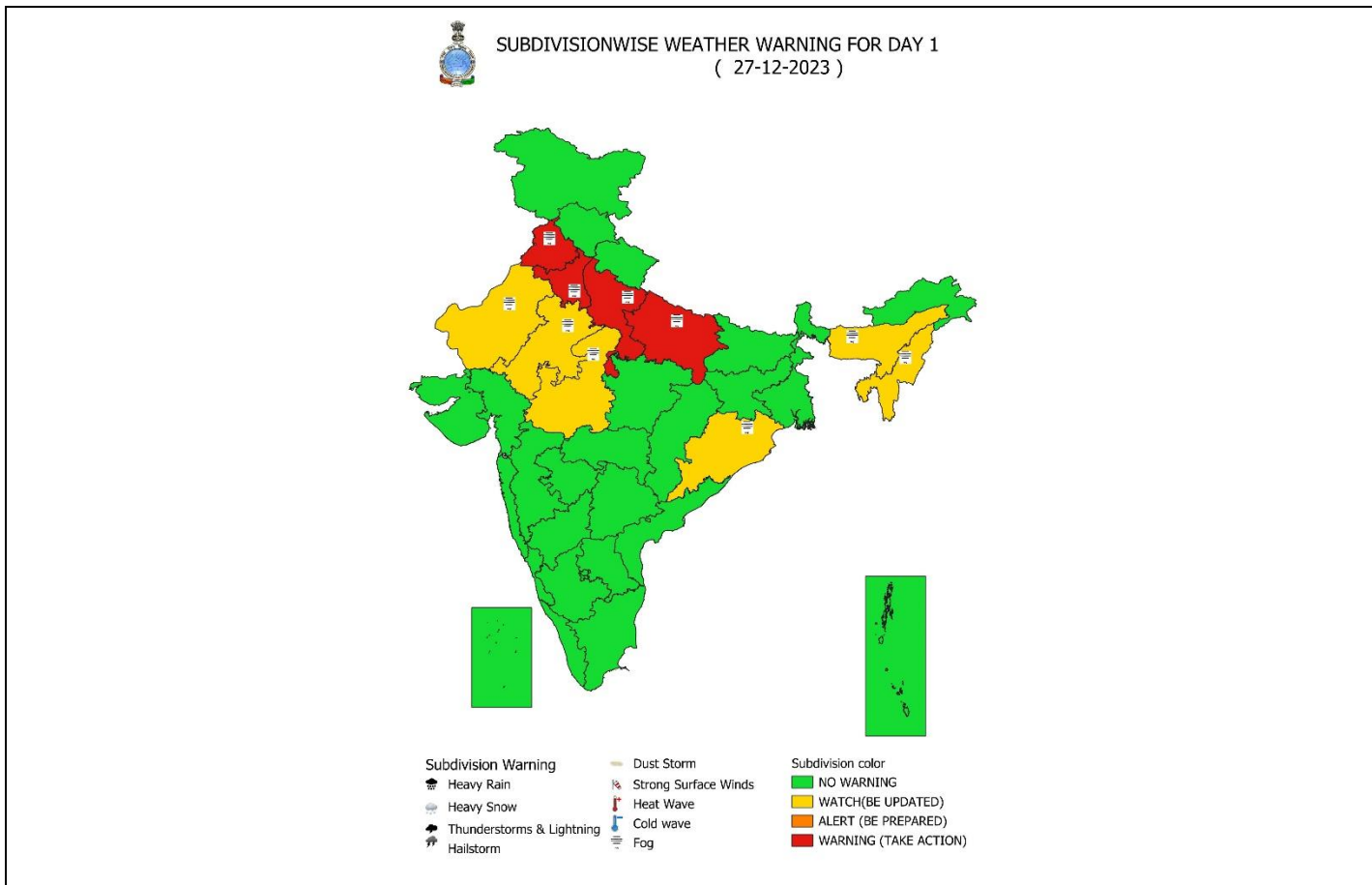
Action suggested:

❖ **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.

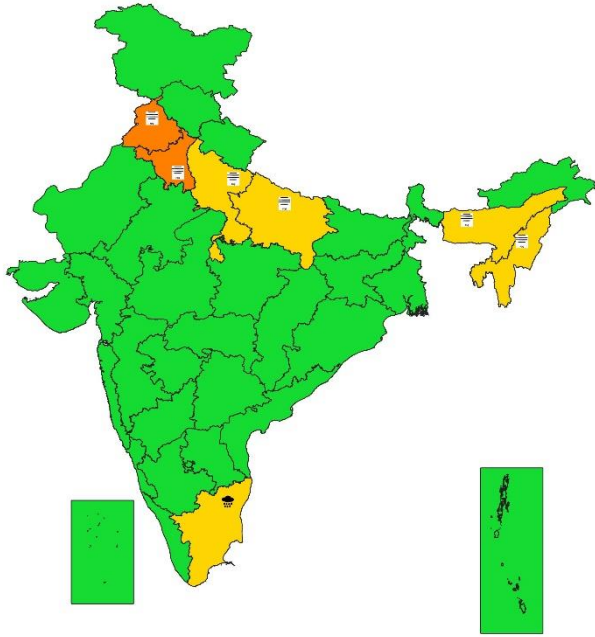
❖ **Power Sector:**

- To keep ready Maintenance Team
- Human Health: To avoid outing until unless emergency and to cover the face.





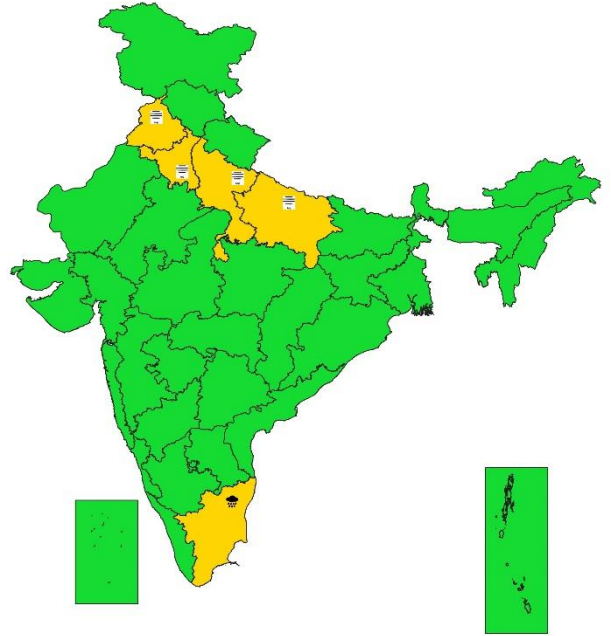
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
(30-12-2023)**



- | | | |
|----------------------------|----------------------|--------------------------|
| 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) |



**SUBDIVISIONWISE WEATHER WARNING FOR DAY 5
(31-12-2023)**



- | | | |
|----------------------------|----------------------|--------------------------|
| 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) |

Districtwise Dense fog warning for Punjab, Haryana and Uttar Pradesh

भारत सरकार
पृथ्वी विज्ञान मंत्रालय
भारत मौसम विज्ञान विभाग
मौसम केंद्र चंडीगढ़

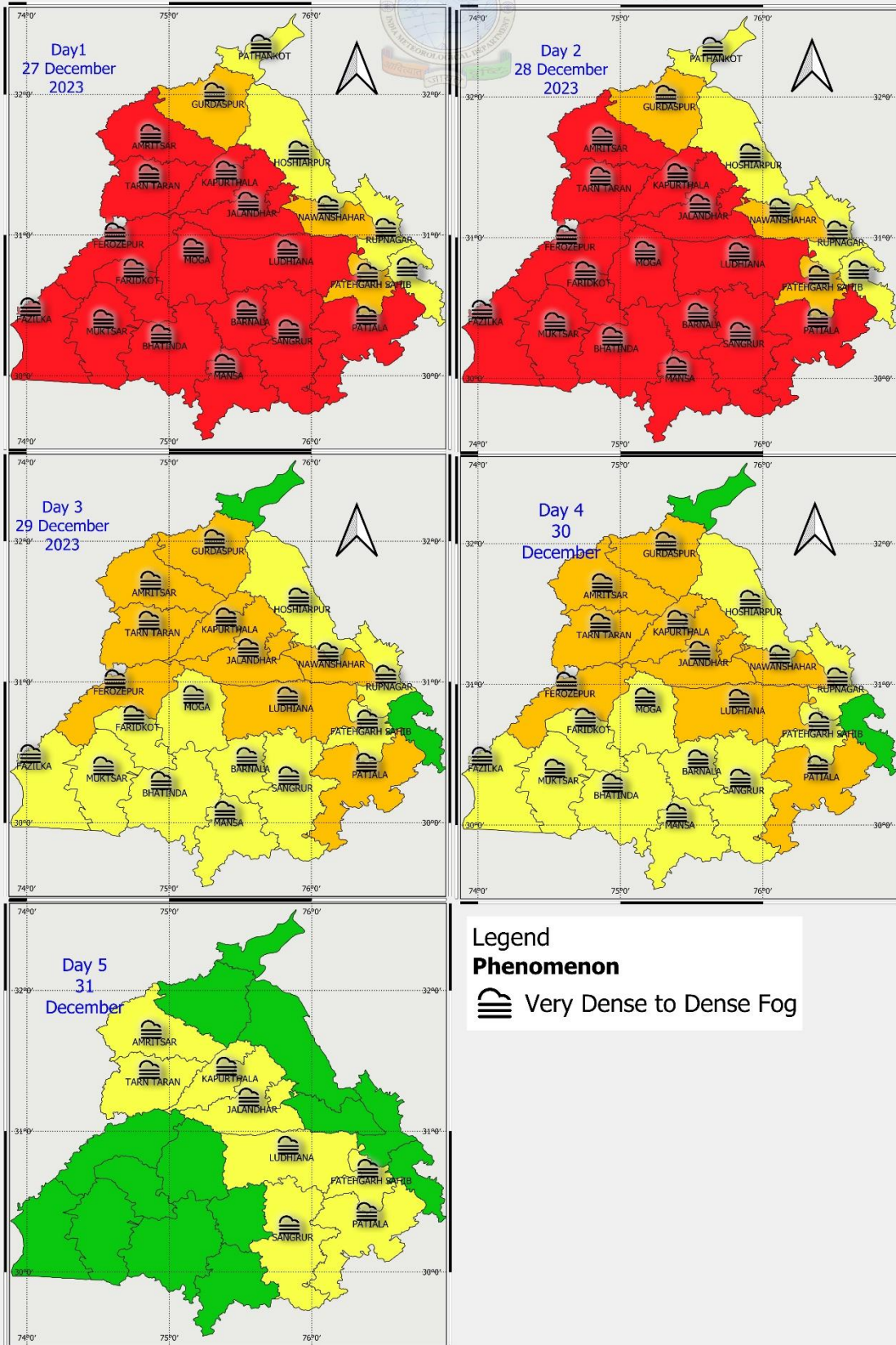
District wise weather warnings for Punjab

Date 27 December 2023

ਪੰਜਾਬ ਕੇ ਲਿਏ ਜ਼ਿਲੇਵਾਰ ਮੌਸਮ ਚੇਤਾਵਨੀ

Government of India
Ministry of Earth Sciences
India Meteorological Department
Meteorological Centre, Chandigarh

Note: Warning for any day is valid from 0830 hours IST of that day till 0830 hours IST of next day
ਨਿੱਚੀ ਥੀ ਡਿਨ ਕੀ ਚੇਤਾਵਨੀ ਉਸ ਡਿਨ ਕੇ 0830 ਘੰਟੇ IST ਮੇ ਖ਼ਤਮ ਡਿਨ ਕੇ 0830 ਘੰਟੇ IST ਤਕ ਮਾਨਵ ਹੈ



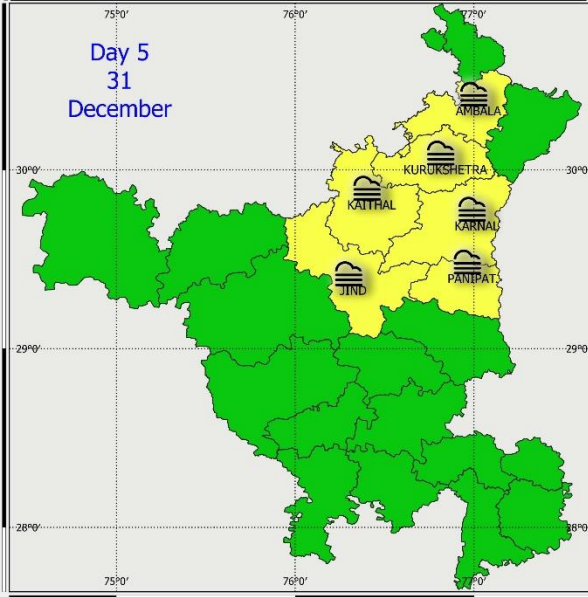
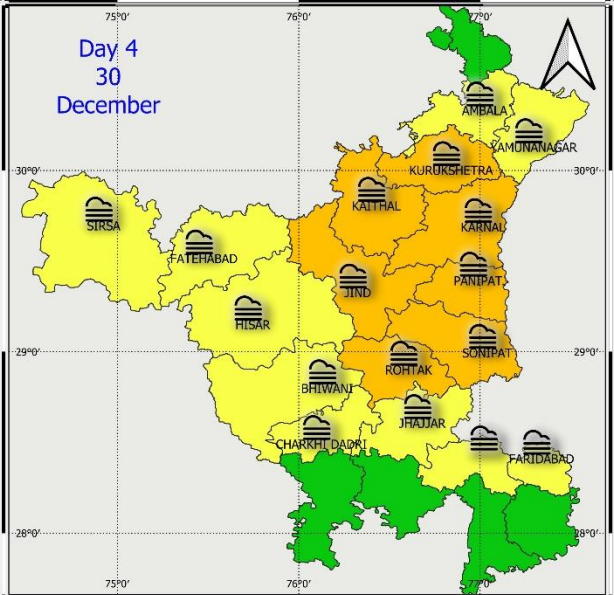
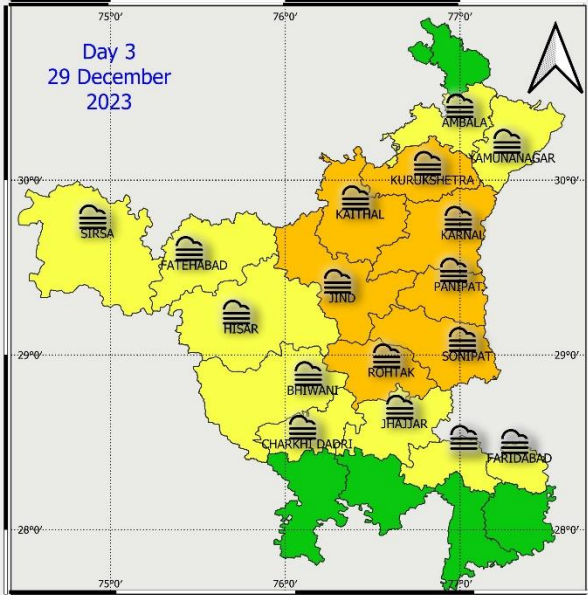
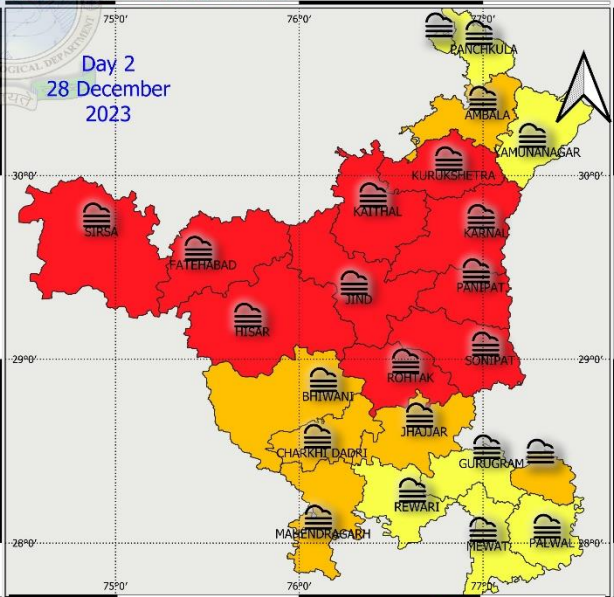
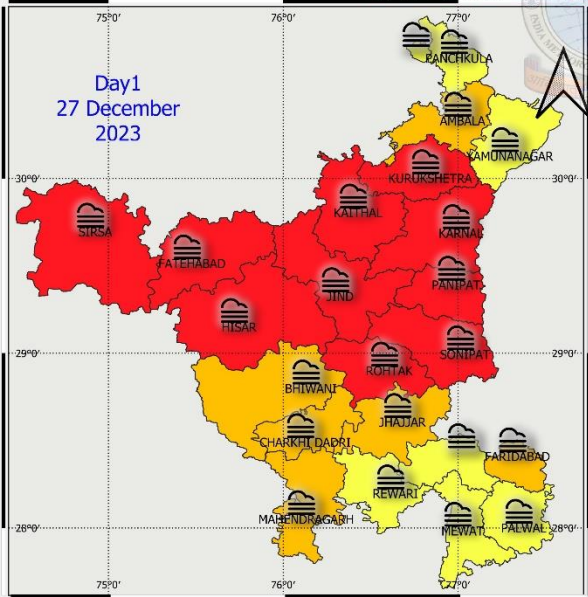
भारत सरकार
पृथ्वी विज्ञान मंत्रालय
भारत मौसम विज्ञान विभाग
मौसम केंद्र चंडीगढ़

District wise weather warnings for Haryana Dated 27 December 2023

Government of India
Ministry of Earth Sciences
India Meteorological Department
Meteorological Centre, Chandigarh

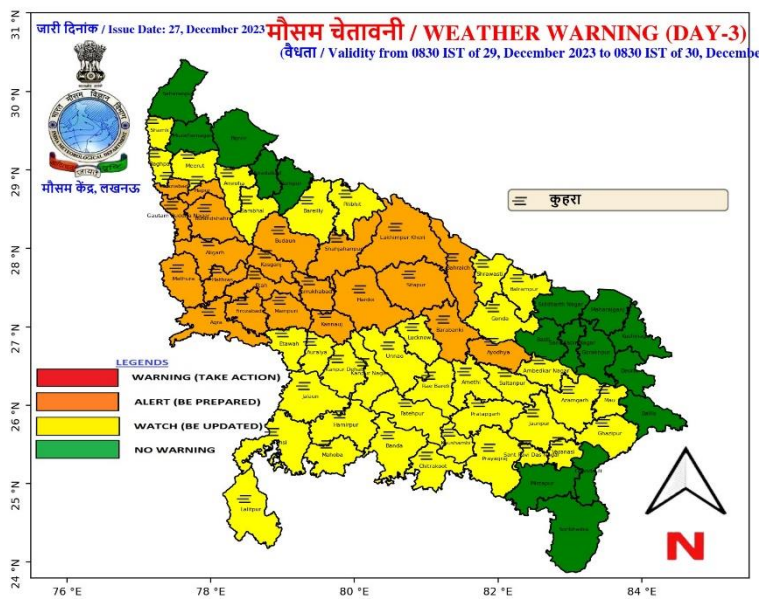
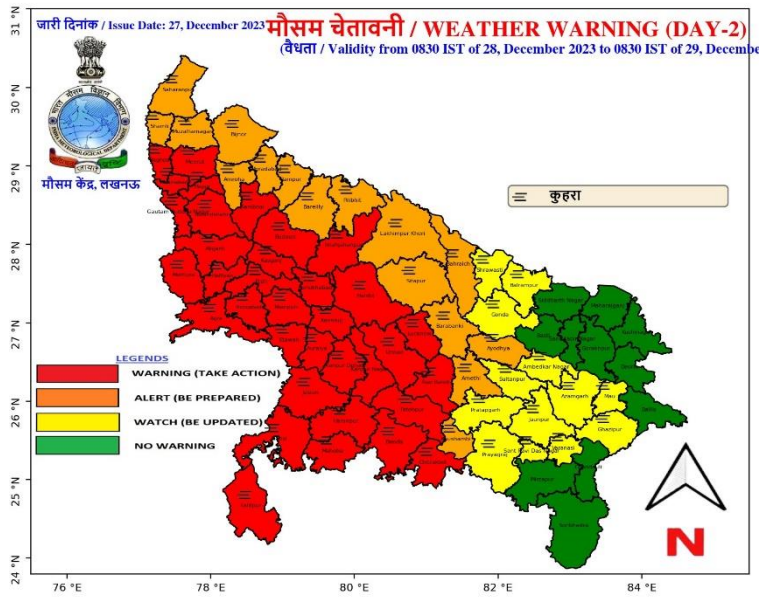
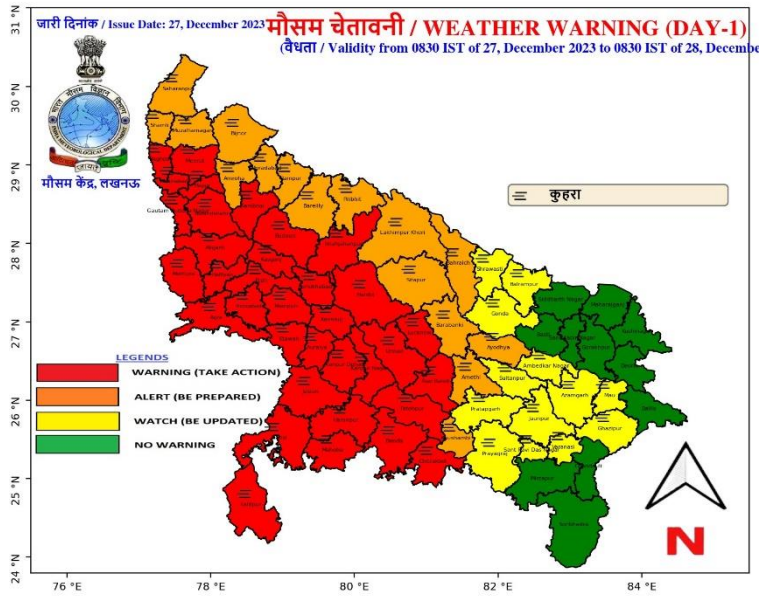
हरियाणा के लिए जिलेवार मौसम चेतावनी

Note: Warning for any day is valid from 0830 hours IST of that day till 0830 hours IST of next day
किन्हीं भी दिन की चेतावनी उस दिन के 0830 बजे IST से अगले दिन के 0830 बजे IST तक मान्य है



Legend
Phenomenon
☁ Very Dense to Dense Fog














■ No Warning कोई चेतावनी नहीं
■ Be Updated निगरानी
■ Be Prepared सचेत(तैयार रहे)
■ Take Action चेतावनी(कार्रवाई करें)





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)

Definition of Cold wave, Cold Day and Fog Conditions:

 Cold Wave	<p>When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions.</p> <p>(a) Based on departure</p> <p>Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C.</p> <p>Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$</p> <p>(b) Based on actual Minimum Temperature (for Plains only)</p> <p>Cold Wave : When Minimum Temperature is $\leq 4.0^{\circ}\text{C}$</p> <p>Severe Cold Wave: When Minimum Temperature is $\leq 2.0^{\circ}\text{C}$</p> <p>(c) For Coastal Stations</p> <p>When Minimum Temperature departure is $\leq -4.5^{\circ}\text{C}$ & actual Minimum Temperature is $\leq 15^{\circ}\text{C}$</p>
 Cold Day	<p>When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions</p> <p>Based on departure</p> <p>Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C.</p> <p>Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$</p>
 Fog	<p>Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$</p> <p>Moderate Fog: When the visibility between 500-200 metres</p> <p>Dense Fog: when the visibility between 50-200 metres</p> <p>Very Dense Fog: when the visibility < 50 metres</p>