



**Government of India  
Ministry of Earth Sciences  
India Meteorological Department**

**Press Release.  
Date: 27<sup>th</sup> November, 2023  
Time of Issue: 1400 hours IST**

To,

1. The Chief Secretary, Himachal Pradesh
2. The Chief Secretary, Uttarakhand
3. The Chief Secretary, Punjab
4. The Chief Secretary, Haryana
5. The Chief Secretary, Union Territory of Delhi
6. The Chief Secretary, Uttar Pradesh
7. The Chief Secretary, Rajasthan
8. The Chief Secretary, Madhya Pradesh
9. The Chief Secretary, Maharashtra
10. The Chief Secretary, Gujarat

**Special Message**

**Subject: Decrease in rainfall along with thunderstorm & hailstorm over central parts of India from today, the 27<sup>th</sup> November, 2023.**

**❖ Past Weather**

- As predicted, the interaction of active Western Disturbance and trough in easterly along with high moisture feed from Arabian Sea caused fairly widespread to widespread rainfall with isolated heavy to heavy rainfall along with thunderstorm & hailstorm activity over Gujarat, south Rajasthan, West Madhya Pradesh and north Maharashtra yesterday (detail is given in Annexure I).

**❖ Current status and forecast**

- A **Western Disturbance** as a cyclonic circulation lies over Central Pakistan trough in middle & upper tropospheric levels.
- An **induced cyclonic circulation** lies over north Gujarat & adjoining Rajasthan in lower tropospheric levels.
- The phase locking of the above Western Disturbance with the low level easterly winds has become insignificant. Hence, the intensity of adverse weather is likely to reduce from today.

- **However, under the influence of above systems:**
- Light to moderate rainfall at some places accompanied with isolated thunderstorm & lightning very likely over Himachal Pradesh, Uttarakhand, East Rajasthan, Madhya Pradesh, north Madhya Maharashtra, Marathwada, Vidarbha and Chhattisgarh during 27<sup>th</sup>-29<sup>th</sup> November with significant reduction thereafter.
  - **Isolated heavy rainfall** very likely over Vidarbha, north Madhya Maharashtra and Marathwada on 27<sup>th</sup> November, 2023.
  - **Hailstorm also likely** at isolated places very likely over Uttarakhand, Madhya Pradesh, Vidarbha, north Madhya Maharashtra and Marathwada on 27<sup>th</sup> November, 2023.
  - Light rainfall at isolated places very likely over the plains of Northwest India on 27<sup>th</sup> November.
- **The detailed Sub-division wise forecast and warnings are given at Annexures II & III respectively.**

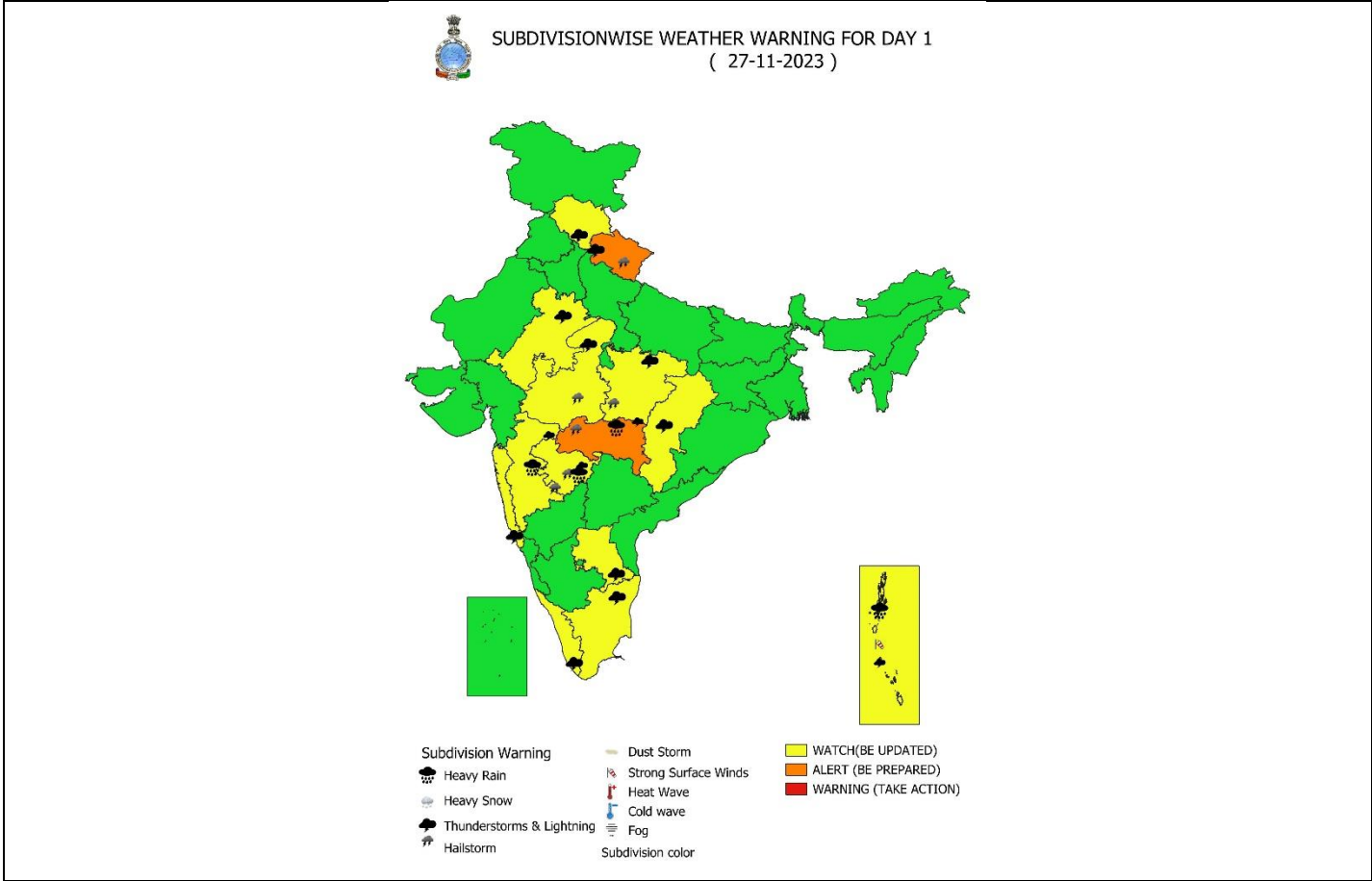
**Realized weather during past 24 hours till 0830 hours IST of today**

- ❖ **Hailstorms** reported at isolated places over South Rajasthan (Jalore), West Madhya Pradesh (Ratlam, Ujjain, Khargone and Jhabua), Madhya Maharashtra (Nashik), Marathwada (Aurangabad district) and Gujarat region.
- ❖ **Gusty winds** reported at isolated places over Madhya Pradesh.
- ❖ **Heavy to very heavy rainfall** at isolated places over Madhya Maharashtra and Gujarat Region and **heavy rainfall** at isolated places over West Madhya Pradesh, Saurashtra & Kutch, and Marathwada
  
- ❖ **Significant Rainfall Amount:**
  - **Madhya Maharashtra:** Taloda (dist Nandurbar) 15, Jamner (dist Jalgaon) 9, Yaval (dist Jalgaon) 8, Nandurbar (dist Nandurbar) 7, Shahada (dist Nandurbar) 7, Shirpur (dist Dhule) 7;
  - **Gujarat Region:** Sagbara (dist Narmada) 14, Navasari\_aws (dist Navsari) 13, Umerpada (dist Surat) 12, Mandvi (dist Surat) 12, Kukarmunda (dist Tapi) 11, Kamrej (dist Surat) 10, Narmada\_kvks Aws (dist Narmada) 10, Surat City (dist Surat) 9, Surat\_kvks Aws (dist Surat) 9, Netrang (dist Bharuch) 9, Nadiad (dist Kheda) 8, Nizer (dist Tapi) 7, Palsana (dist Surat) 7, Ankleshwer (dist Bharuch) 7, Sankheda (dist Chhota Udepur) 7, Olpad (dist Surat) 7, Modasa (dist Aravalli) 7;
  - **Saurashtra & Kutch:** Chuda (dist Surendranagar) 11;
  - **West Madhya Pradesh:** Rama (dist Jhabua) 11, Niwali (dist Barwani) 11, Sendhwa (med) (dist Barwani) 11, Pansemal (dist Barwani) 10, Rajpur (dist Barwani) 10, Chachariyapati (dist Barwani) 9, Ranapur (dist Jhabua) 9, Badwani (dist Barwani) 9, Khargone-aws (dist Khargone) 8, Jhabua-aws (dist Jhabua) 8, Udaigarh (dist Alirajpur) 8, Warla (dist Barwani) 8, Maheshwar (dist Khargone) 8, Kukshi (dist Dhar) 7, Pati (dist Barwani) 7, Kathiwada (dist Alirajpur) 7, Alirajpur (dist Alirajpur) 7, Bhagwanpura (dist Khargone) 7, Anjad (dist Barwani) 7, Jhirnya (dist Khargone) 7, Bhikangaon (dist Khargone) 7, Bhabhra (dist Alirajpur) 7, Sondwa (dist Alirajpur) 7, Gogawan (dist Khargone) 7;
  - **Marathwada:** Purna (dist Parbhani) 9, Manvat (dist Parbhani) 8, Parbhani - Imd Obsy (dist Parbhani) 8, Jafrabad (dist Jalna) 7, Gangapur (dist Chh. Sambhajinagar) 7, Pathri (dist Parbhani) 7, Selu (dist Parbhani) 7;
  - **Vidarbha:** Sindkhed Raja (dist Buldhana) 8, Deolgaon Raja (dist Buldhana) 8, Mehkar (dist Buldhana) 7, Lonar (dist Buldhana) 7.

## Annexure II

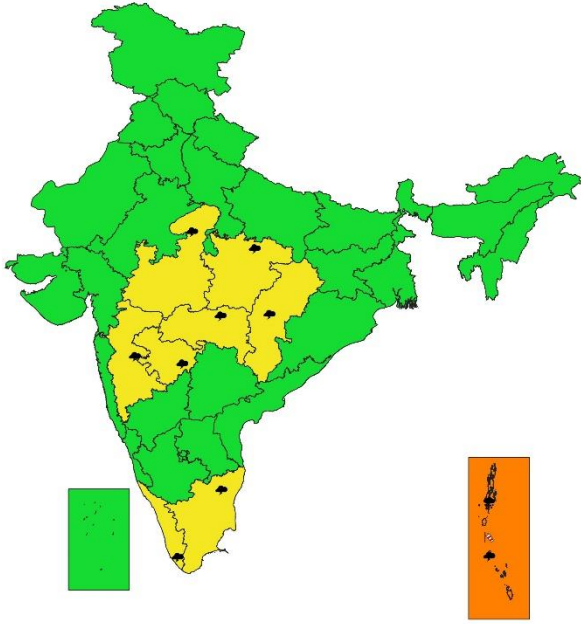
7 Days Rainfall Forecast								
S. No.	Subdivision	27- Nov	28- Nov	29- Nov	30- Nov	01- Dec	02- Dec	03- Dec
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS	WS	WS	WS	WS	FWS	FWS
2	ARUNACHAL PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
3	ASSAM & MEGHALAYA	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	DRY	ISOL	DRY	DRY	DRY	DRY	DRY
6	GANGETIC WEST BENGAL	DRY	DRY	DRY	DRY	DRY	DRY	DRY
7	ODISHA	ISOL	ISOL	DRY	DRY	DRY	DRY	ISOL
8	JHARKHAND	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
9	BIHAR	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
10	EAST UTTAR PRADESH	ISOL	DRY	DRY	ISOL	DRY	DRY	DRY
11	WEST UTTAR PRADESH	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
12	UTTARAKHAND	SCT	ISOL	DRY	DRY	DRY	DRY	DRY
13	HARYANA CHANDIGARH & DELHI	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	SCT	ISOL	ISOL	ISOL	ISOL	DRY	DRY
16	JAMMU & KASHMIR AND LADAKH	ISOL	ISOL	SCT	SCT	ISOL	DRY	DRY
17	WEST RAJASTHAN	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	SCT	ISOL	DRY	ISOL	DRY	DRY	DRY
19	WEST MADHYA PRADESH	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	DRY
20	EAST MADHYA PRADESH	SCT	SCT	ISOL	ISOL	ISOL	ISOL	DRY
21	GUJARAT REGION	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASHTRA & KUTCH	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	ISOL	ISOL	ISOL	ISOL	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	SCT	SCT	ISOL	ISOL	ISOL	DRY	DRY
25	MARATHAWADA	FWS	SCT	ISOL	ISOL	ISOL	DRY	DRY
26	VIDARBHA	FWS	SCT	SCT	ISOL	ISOL	DRY	DRY
27	CHHATTISGARH	ISOL	SCT	ISOL	ISOL	DRY	DRY	DRY
28	COASTAL ANDHRA PRADESH & YANAM	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
29	TELANGANA	ISOL	ISOL	ISOL	ISOL	DRY	DRY	DRY
30	RAYALASEEMA	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
31	TAMILNADU PUDUCHERRY & KARAIKAL	SCT	SCT	SCT	SCT	SCT	SCT	SCT
32	COASTAL KARNATAKA	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
33	NORTH INTERIOR KARNATAKA	ISOL	ISOL	ISOL	ISOL	DRY	DRY	DRY
34	SOUTH INTERIOR KARNATAKA	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
35	KERALA & MAHE	ISOL	ISOL	SCT	SCT	SCT	ISOL	ISOL
36	LAKSHADWEEP	SCT	SCT	SCT	SCT	SCT	DRY	DRY

Legend	Category	% Stations
WS	Widespread/Most Places	76-100
FWS	Fairly Widespread/Many Places	51-75
SCT	Scattered/ A Few Places	26-50
ISOL	Isolated Places	1-25
DRY	No Rain	0





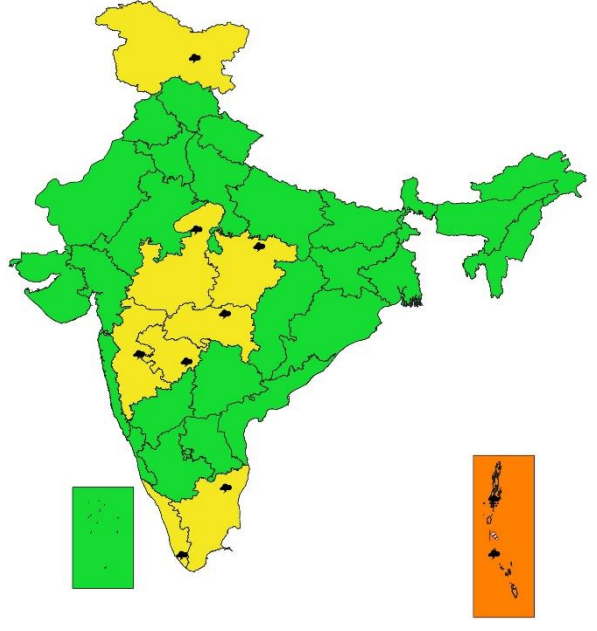
### SUBDIVISIONWISE WEATHER WARNING FOR DAY 2 ( 28-11-2023)



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <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)    |



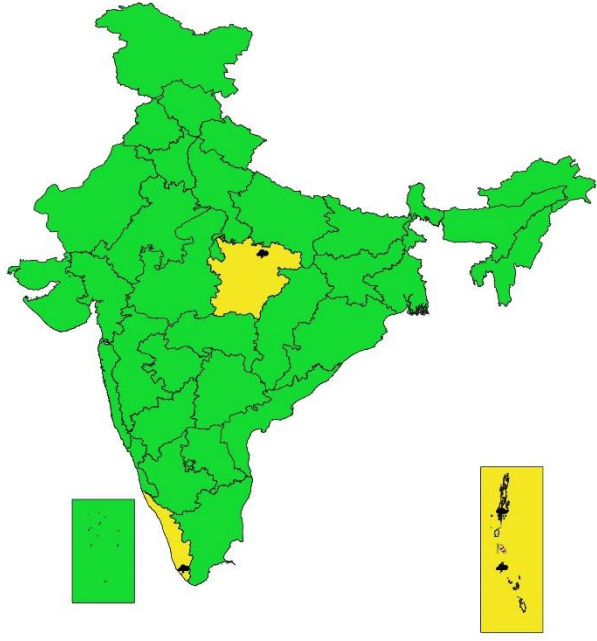
### SUBDIVISIONWISE WEATHER WARNING FOR DAY 3 ( 29-11-2023)



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <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)    |



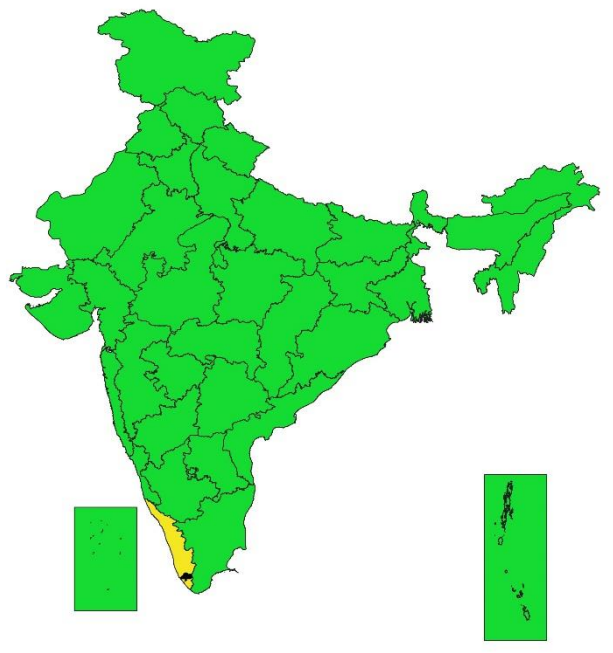
### SUBDIVISIONWISE WEATHER WARNING FOR DAY 4 ( 30-11-2023)



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <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 RAINFALL FORECAST FOR DAY 5 ( 1-12-2023)



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <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 expected and action suggested due to isolated thunderstorm with lightning/gusty winds & Hailstorm over** Uttarakhand, Madhya Pradesh, Vidarbha, north Madhya Maharashtra and Marathwada on 27<sup>th</sup> November, 2023.

**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 heavy rainfall, gusty winds and hailstorms likely over various parts of the country**


- Drain out excess water from standing crop fields to avoid water stagnation in Gujarat, North Marathwada, North Madhya Maharashtra, West Madhya Pradesh and Vidarbha.
- Use hail nets in orchards for protection of fruits and provide staking to vegetables in Uttarakhand, Madhya Pradesh, Vidarbha and North Marathwada.
- Keep harvested produce in safer places or cover the harvested produce in the fields with tarpaulin/polythene sheets.
- Provide mechanical support to horticultural crops.

Legends:

<b>SPATIAL DISTRIBUTION</b> (% of Stations reporting)			
% Stations	Category	% Stations	Category
76-100	<b>Widespread (WS/ Most Places)</b>	26-50	<b>Scattered (SCT/ A Few Places)</b>
51-75	<b>Fairly Widespred (FWS/ Many Places)</b>	1-25	<b>Isolated (ISOL)</b>

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)

<b>Probabilistic Forecast</b>	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

<b>Flash Flood Risk</b>	
	High Risk (Take Action)
	Moderate Risk (Be Prepared)
	Low Risk (Be Updated)