



**Impact expected and action suggested due to Thunderstorm, lightning, gusty winds & hailstorm over Jammu & Kashmir, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Rajasthan on 20<sup>th</sup> ; over Uttarakhand on 20<sup>th</sup> & 21<sup>st</sup> and over Sub-Himalayan West Bengal & Sikkim on 21<sup>st</sup> April.**

**Duststorm also likely over Rajasthan on 20<sup>th</sup> April.**

### **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.
- Farming operations may be suspended during the event.

\* Red color warning does not mean "Red Alert" Red color warning means "Take Action".

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For more details kindly visit [www.imd.gov.in](http://www.imd.gov.in) or contact : +91 11 24631913, 24643965, 24629798

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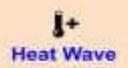
## LEGENDS

### WARNING

WARNING (TAKE ACTION)
ALERT (BE PREPARED)
WATCH (BE UPDATED)
NO WARNING (NO ACTION)

### Probabilistic Forecast

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

 Rain/ Snow *	<p>Heavy: 64.5 to 115.5 mm/cm *</p> <p>Very Heavy: 115.6 to 204.4 mm/cm *</p> <p>Extremely Heavy: &gt; 204.4 mm/cm *</p>
 Heat Wave	<p>When maximum temperature of a station reaches <math>\geq 40^\circ\text{C}</math> for plains and <math>\geq 30^\circ\text{C}</math> for hilly regions</p> <p>(a) Based on Departure from normal</p> <p>Heat Wave: Maximum Temperature Departure from normal <math>4.5^\circ\text{C}</math> to <math>6.4^\circ\text{C}</math>.</p> <p>Severe Heat Wave: Maximum Temperature Departure from normal <math>\geq 6.5^\circ\text{C}</math>.</p> <p>(b). Based on Actual maximum temperature</p> <p>Heat Wave: When actual maximum temperature <math>\geq 45^\circ\text{C}</math>.</p> <p>Severe Heat Wave: When actual maximum temperature <math>\geq 47^\circ\text{C}</math>.</p> <p>(c). Criteria for heat wave for coastal stations</p> <p>When maximum temperature departure is <math>&gt; 4.5^\circ\text{C}</math> from normal. Heat Wave may be described provided maximum temperature <math>\geq 37^\circ\text{C}</math>.</p>
 Warm Night	<p>When maximum temperature remains <math>40^\circ\text{C}</math></p> <p>Warm Night: When minimum temperature departure <math>4.5^\circ\text{C}</math> to <math>6.4^\circ\text{C}</math>.</p> <p>Severe Warm Night: When minimum temperature departure <math>&gt; 6.4^\circ\text{C}</math>.</p>
 Cold Wave	<p>When minimum temperature of a station <math>\leq 10^\circ\text{C}</math> for plains and <math>\leq 0^\circ\text{C}</math> for hilly regions.</p> <p>(a). Based on departure</p> <p>Cold Wave: Minimum Temperature Departure from normal <math>-4.5^\circ\text{C}</math> to <math>-6.4^\circ\text{C}</math>.</p> <p>Severe Cold Wave: Minimum Temperature Departure from normal <math>\geq -6.5^\circ\text{C}</math>.</p> <p>(b) Based on actual Minimum Temperature (for Plains only)</p> <p>Cold Wave : When Minimum Temperature is <math>\leq 4.0^\circ\text{C}</math></p> <p>Severe Cold Wave: When Minimum Temperature is <math>\leq 2.0^\circ\text{C}</math>.</p> <p>(c) For Coastal Stations</p> <p>When Minimum Temperature departure is <math>\leq -4.5^\circ\text{C}</math> or actual Minimum Temperature is <math>\leq 15^\circ\text{C}</math>.</p>
 Cold Day	<p>When minimum temperature of a station <math>\leq 10^\circ\text{C}</math> for plains and <math>\leq 0^\circ\text{C}</math> for hilly regions</p> <p>Based on departure</p> <p>Cold Day: Maximum Temperature Departure from normal <math>-4.5^\circ\text{C}</math> to <math>-6.4^\circ\text{C}</math>.</p> <p>Severe Cold Day: Maximum Temperature Departure from normal <math>\leq -6.5^\circ\text{C}</math>.</p>
 Fog	<p>Phenomenon of small droplets suspended in air and the horizontal visibility <math>&lt; 1\text{km}</math></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 <math>&lt; 50</math> metres</p>
 Thunderstorm	<p>Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)</p>
 Dust/Sand Storm	<p>An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.</p>
 Frost	<p>Ice deposits on ground</p> <p>Air temperature <math>\leq 4^\circ\text{C}</math> ( over Plains)</p>
 Squall	<p>A strong wind that rises suddenly, lasts for atleast 1 minute.</p> <p>Moderate: Wind speed 52-61 kmph</p> <p>Severe: Wind speed 62-87 kmph</p> <p>Very Severe: Wind speed <math>&gt; 87</math> kmph</p>
 Sea State	<p>Effect of various waves in the sea over specific area</p> <p>Rough to very rough: Wind speed 41-62 kmph (22-33 knots) &amp; Wave height 2.5-6 metre</p> <p>High to very high: Wind speed 63-117 kmph ( 34-63 knots) &amp; Wave height 6-14 metre</p> <p>Phenomenal: Wind speed <math>&gt; 117</math> kmph (<math>&gt; 63</math> knots) &amp; Wave height <math>&gt; 14</math> metre</p>
 Cyclone	<p>Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)</p> <p>Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)</p> <p>Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)</p> <p>Extremely Severe Cyclonic Storm: Wind speed 168-220 kmph (90 -119 knots)</p> <p>Super Cyclone Storm: Wind speed <math>&gt; 220</math> kmph (<math>&gt; 119</math> knots)</p>

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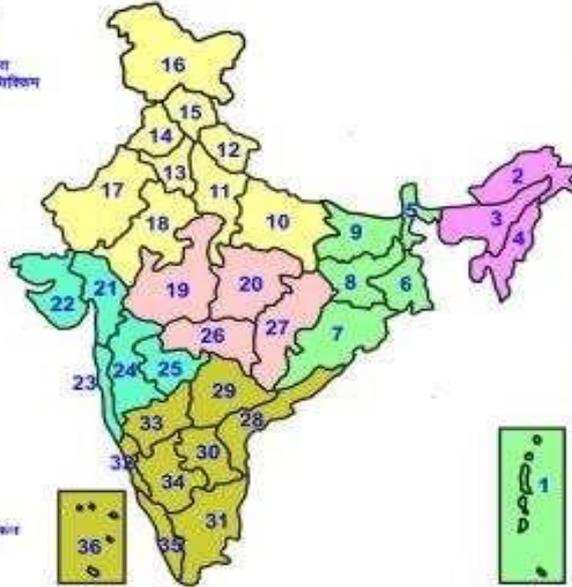
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## LEGENDS

- 1 अंडमान और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
- 5 पश्चिम हिमालय पश्चिम बंगाल, एंगम, सिक्किम
- 6 पश्चिम बंगाल
- 7 ओडिशा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा, चंडीगढ़, राजस्थान
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एवं कश्मीर, लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात
- 22 कर्नाटक
- 23 कोरगण्ड एंगम गोवा
- 24 मध्य महाराष्ट्र
- 25 महाराष्ट्र
- 26 तमिलनाडु
- 27 उत्तरांचल प्रदेश एवं चण्डे
- 28 तमिलनाडु
- 29 कर्नाटक
- 30 उत्तरांचल प्रदेश एवं चण्डे
- 31 उत्तरांचल प्रदेश एवं चण्डे
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- 33 उत्तरांचल प्रदेश एवं चण्डे
- 34 उत्तरांचल प्रदेश एवं चण्डे
- 35 उत्तरांचल प्रदेश एवं चण्डे
- 36 लक्षद्वीप



1. Andaman & Nicobar Islands
2. Arunachal Pradesh
3. Assam & Meghalaya
4. Nagaland, Manipur, Mizoram & Tripura
5. Sub-Himalayan West Bengal & Sikkim
6. Gangetic West Bengal
7. Orissa
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chid & Delhi
14. Punjab
15. Himachal Pradesh
16. Jammu & Kashmir and Ladakh
17. West Rajasthan
18. East Rajasthan
19. West Madhya Pradesh
20. East Madhya Pradesh
21. Gujarat
22. Saurashtra
23. Konkan & Goa
24. Madhya Maharashtra
25. Maharashtra
26. Vidharbha
27. Chhattisgarh
28. Coastal Andhra Pradesh & Yanam
29. Telangana
30. Rayalaseema
31. Tamilnada, Puducherry & Karaikal
32. Coastal Karnataka
33. North Interior Karnataka
34. South Interior Karnataka
35. Kerala & Mahe
36. 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)

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Heavy Rain	Heavy Snow	Thunderstorm	Dust Storm
Strong Winds	Visibility	Cyclone	Squall/ Hail
Frost	Cold Wave	Heat Wave	Sea State

Kindly download **MAUSAM** APP for location specific forecast & warning, **MEGHDOOT** APP for Agromet advisory and **DAMINI** APP for Lightning Warning & visit state MC/RMC websites for district wise warning.

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