



All India Impact Based Weather Warning Bulletin

Wednesday 23 June 2021
Time of Issue: 1315 hours IST

(MID-DAY)

23 June (Day 1): ♦ **Heavy to Very Heavy Rainfall** very likely at isolated places over Chhattisgarh and **Heavy Rainfall** at isolated places over southeast Uttar Pradesh, Madhya Pradesh, Vidarbha, Jharkhand, West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana, north Tamilnadu, Puducherry & Karaikal and Kerala & Mahe.

♦ **Thunderstorm with lightning & gusty winds (speed 40-50 kmph)** very likely at isolated places over Andaman & Nicobar Islands; **with (speed 30-40 kmph)** at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttar Pradesh and Rajasthan and with **lightning** at isolated places over Himachal Pradesh, Uttarakhand, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana, Rayalseema, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal.

♦ **Strong Winds (speed 40-50 kmph gusting to 60 kmph)** very likely over Southwest and Westcentral Arabian Sea; over Westcentral Bay of Bengal along & off Andhra Pradesh coast. Fishermen are advised not to venture into these areas.

24 June (Day 2): ♦ **Heavy Rainfall** very likely at isolated places over East Madhya Pradesh, Chhattisgarh, Sub-Himalayan West Bengal, Odisha, Andaman & Nicobar Islands and Assam & Meghalaya.

♦ **Thunderstorm with lightning & gusty winds (speed 40-50 kmph)** very likely at isolated places over Andaman & Nicobar Islands; **with (speed 30-40 kmph)** at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and Rajasthan and with **lightning** at isolated places over Himachal Pradesh, Uttarakhand, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Telangana, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal.

♦ **Strong Winds (speed 40-50 kmph gusting to 60 kmph)** very likely over Southwest and Westcentral Arabian Sea; over Westcentral Bay of Bengal along & off Andhra Pradesh coast. Fishermen are advised not to venture into these areas.

25 June (Day 3): ♦ **Heavy to Very Heavy Rainfall** very likely at isolated places over Odisha and **Heavy Rainfall** at isolated places over Chhattisgarh, Sub-Himalayan West Bengal, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

♦ **Thunderstorm with lightning & gusty winds (speed 30-40 kmph)** very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab and Haryana, Chandigarh & Delhi and with **lightning** at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Coastal Andhra Pradesh & Yanam.

♦ **Strong Winds (speed 40-50 kmph gusting to 60 kmph)** very likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.

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

Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day

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26 June (Day 4): ♦ Heavy Rainfall likely at isolated places over Bihar, Odisha, Sub-Himalayan West Bengal, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

♦ **Thunderstorm with lightning & gusty winds (speed 30-40 kmph)** likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab and Haryana, Chandigarh & Delhi and with **lightning** at isolated places over Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Coastal Andhra Pradesh & Yanam.

♦ **Strong Winds (speed 40-50 kmph gusting to 60 kmph)** likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.

27 June (Day 5): ♦ Heavy Rainfall likely at isolated places over Bihar, Odisha, Sub-Himalayan West Bengal, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

♦ **Thunderstorm with lightning** likely at isolated places over Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Coastal Andhra Pradesh & Yanam.

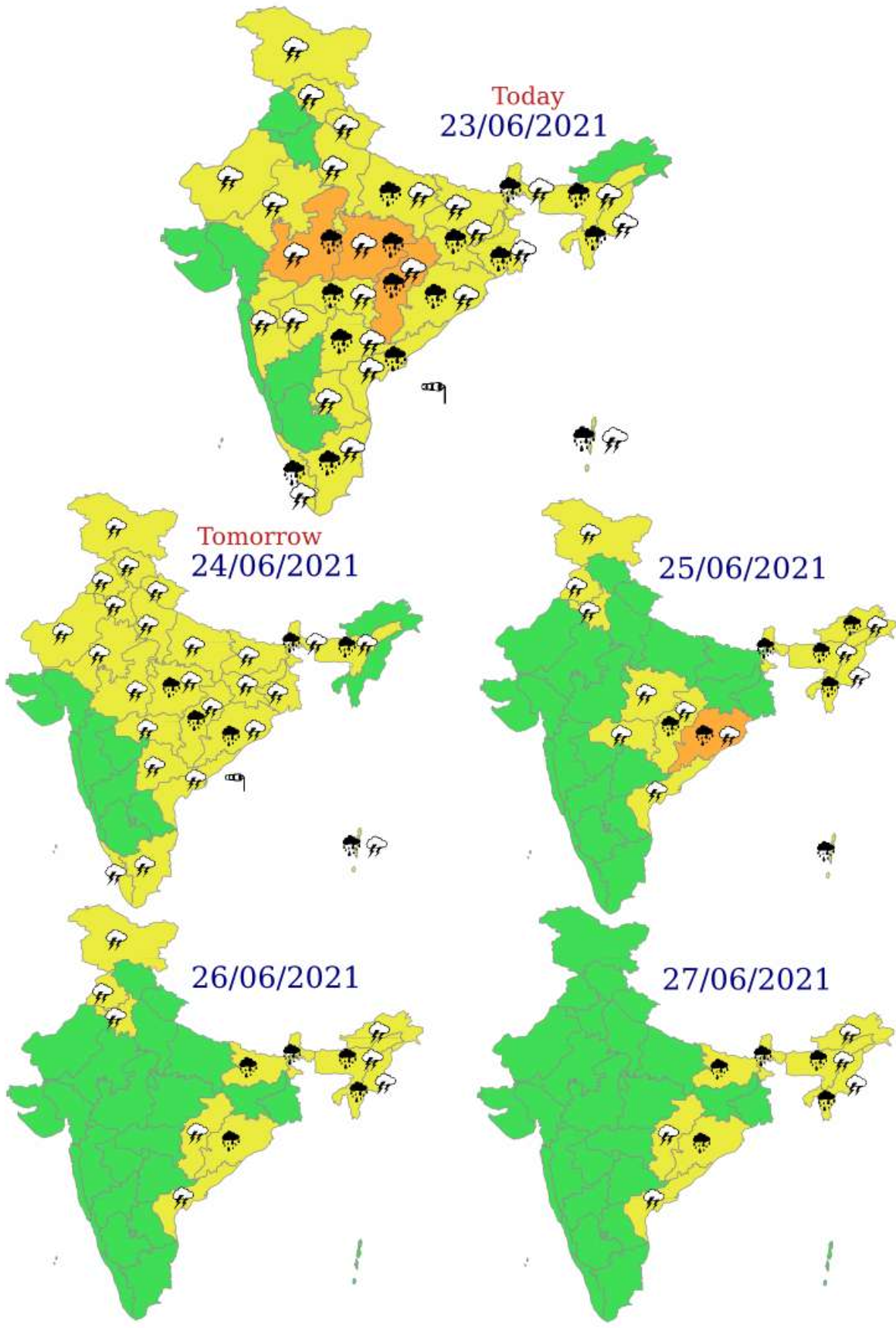
♦ **Strong Winds (speed 40-50 kmph gusting to 60 kmph)** likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.

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EXPECTED IMPACT & ACTION SUGGESTED due to thunderstorms & lightning over Madhya Pradesh and Chhattisgarh on 23rd June, 2021.

A. Impact Expected:

- Damage to thatched huts and asbestos roofed houses and cars. Roof tops may blow off.
- Unattached metal sheets may fly.
- Damage to power and communication lines due to breaking of tree branches.
- Damage to standing crops.
- Lightning strikes to ground.
- Flash flood due to associated rain

B. Action Suggested

- Farmers should not go in open fields.
- Cattle grazers and animals should not be in open.
- No fishing or boat movement.
- Mango and litchi orchards should be out of bound for any activity specially by children.
- Do not take shelter under isolated trees.
- Immediately get out of and away from ponds, lakes, and outdoor watery area (e.g. paddy transplantation).
- Go indoors or seek safe pukka shelters after hearing thunder. Stay indoors for 30 minutes after hearing the last clap of thunder.
- If no shelter is available, immediately get into the lightning crouch.
- During travel, stay inside car or bus or train when thunderstorm occurs.
- Do not use electric/ electronic appliance.
- Stay away from downed power lines.

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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 *
Heavy: 64.5 to 115.5 mm/cm *
Very Heavy: 115.6 to 204.4 mm/cm *
Extremely Heavy: > 204.4 mm/cm *



When maximum temperature of a station reaches $\geq 40^\circ\text{C}$ for plains and $\geq 30^\circ\text{C}$ for hilly regions
(a) Based on Departure from normal

Heat Wave: Maximum Temperature Departure from normal 4.5°C to 6.4°C .

Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^\circ\text{C}$

(b) Based on Actual maximum temperature

Heat Wave: When actual maximum temperature $\geq 45^\circ\text{C}$.

Severe Heat Wave: When actual maximum temperature $\geq 47^\circ\text{C}$

(c) Criteria for heat wave for coastal stations

When maximum temperature departure is $> 4.5^\circ\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^\circ\text{C}$.



When maximum temperature remains 40°C

Warm Night: When minimum temperature departure 4.5°C to 6.4°C .

Severe Warm Night: When minimum temperature departure $> 6.4^\circ\text{C}$.



When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions.
(a) Based on departure

Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C .

Severe Cold Wave: Minimum Temperature Departure from normal $\geq -6.5^\circ\text{C}$

(b) Based on actual Minimum Temperature (for Plains only)

Cold Wave : When Minimum Temperature is $\leq 4.0^\circ\text{C}$

Severe Cold Wave: When Minimum Temperature is $\leq 2.0^\circ\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is $\leq -4.5^\circ\text{C}$ or actual Minimum Temperature is $\leq 15^\circ\text{C}$



When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions
Based on departure

Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C .

Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^\circ\text{C}$



Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$

Moderate Fog: When the visibility between 500-200 metres

Dense Fog: when the visibility between 50- 200 metres

Very Dense Fog: when the visibility < 50 metres



Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)



An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.



Ice deposits on ground

Air temperature $\leq 4^\circ\text{C}$ (over Plains)



A strong wind that rises suddenly, lasts for atleast 1 minute.

Moderate: Wind speed 52-61 kmph

Severe: Wind speed 62-87 kmph

Very Severe: Wind speed > 87 kmph



Effect of various waves in the sea over specific area

Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre

High to very high: Wind speed 63-117 kmph (34-63 knots) & Wave height 6-14 metre

Phenomenal: Wind speed > 117 kmph (> 63 knots) & Wave height > 14 metre



Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)

Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)

Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)

Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)

Super Cyclone Storm: Wind speed > 220 kmph (> 119 knots)

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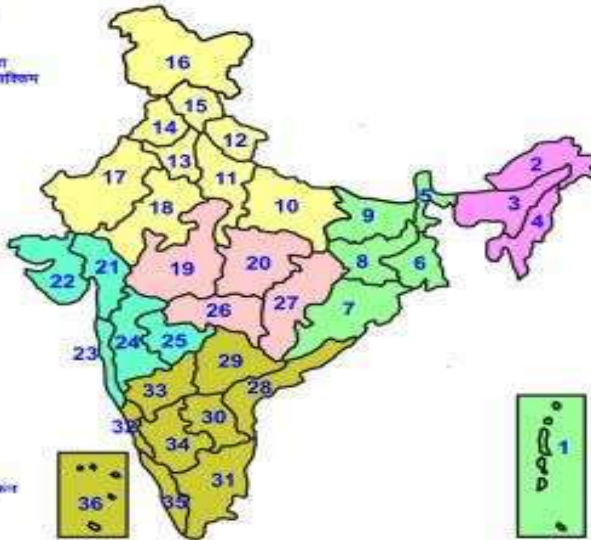
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LEGENDS

1. अंडमान और निकोबार द्वीप समूह
2. अरुणाचल प्रदेश
3. असम और मेघालय
4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
5. उप-हिमालयन पश्चिम बंगाल और सिक्किम
6. पश्चिम बंगाल
7. ओडिशा
8. झारखण्ड
9. बिहार
10. पूर्वी उत्तर प्रदेश
11. पश्चिम उत्तर प्रदेश
12. उत्तराखण्ड
13. हरियाणा, चंडीगढ़, राजस्थान
14. पंजाब
15. हिमाचल प्रदेश
16. जम्मू & कश्मीर और लद्दाख
17. पश्चिम राजस्थान
18. पूर्वी राजस्थान
19. पश्चिम मध्य प्रदेश
20. पूर्वी मध्य प्रदेश
21. गुजरात
22. सौराष्ट्र
23. कर्नाटक
24. मध्य महाराष्ट्र
25. महाराष्ट्र
26. उत्तरांचल प्रदेश
27. छत्तीसगढ़
28. आंध्र प्रदेश
29. तेलंगाना
30. आंध्र प्रदेश
31. तमिलनाडु, पुदुचेरी, केरल
32. उत्तरांचल प्रदेश
33. उत्तरांचल प्रदेश
34. उत्तरांचल प्रदेश
35. उत्तरांचल प्रदेश
36. लक्षद्वीप



1. Andaman & Nicobar Islands
2. Arunachal Pradesh
3. Assam & Meghalaya
4. Nagaland, Manipur, Mizoram & Tripura
5. Sub-Himalayan West Bengal & Sikkim
6. West Bengal
7. Orissa
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chand & 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. Uttaranchal
27. Chhattisgarh
28. Coastal Andhra Pradesh & Yanam
29. Telangana
30. Rayalaseema
31. Tamilnadu, 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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