

Current Temperature Status and Heat Wave Warning

Dated: 20th April, 2024

Time of Issue: 1630 Hrs IST

♦ Observed Temperature Scenario:-

Maximum Temperature & its departure (Yesterday) (Annexure 1):-

- Yesterday, maximum temperatures were in the range of 42-44°C over many parts of Vidarbha, Marathwada, Rayalaseema over some parts of Madhya Maharashtra, Telangana, Chhattisgarh, Odisha, north Madhya Pradesh and Gangetic West Bengal and in isolated pockets over East Uttar Pradesh & Jharkhand. These were in the range of 40-42°C some parts of East Madhya Pradesh, East Uttar Pradesh, Tamil Nadu, Puducherry & Karaikal and at isolated pockets over Bihar and West Madhya Pradesh. These were above normal by 2-4°C over many parts of Gangetic West Bengal and in isolated pockets over Bihar, Jharkhand, East Uttar Pradesh, Chhattisgarh, Odisha, Telangana, Rayalaseema, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, Uttarakhand, Vidarbha and Madhya Pradesh.
- **Yesterday's Highest Maximum Temperature on Plains:** 44.3°C at Nandyal (Rayalaseema) & Boudh (Odisha).
- **Markedly above normal (5.1°C or more):-** NIL.
- **Appreciably above normal (3.1°C to 5.0°C):-** At many places over Gangetic West Bengal; at isolated pockets over East Uttar Pradesh, Bihar.
- **Above normal (1.6°C to 3.0°C):-** At many places over, East Madhya Pradesh, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Chhattisgarh, Jharkhand, Uttarakhand; at a few places over Kerala & Mahe, South Interior Karnataka, Vidarbha, Madhya Maharashtra, Marathwada; at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, East Uttar Pradesh, Chhattisgarh.

Minimum Temperature & its departure (Today) (Annexure 2):-

- **Markedly above normal (5.1°C or more):-** NIL.
- **Appreciably above normal (3.1°C to 5.0°C):-** At many places over Madhya Maharashtra; at isolated places over East Uttar Pradesh, West Madhya Pradesh, Bihar, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, North Interior Karnataka, Telangana, Rayalaseema.
- **Above normal (1.6°C to 3.0°C):-** At most places over Sub-Himalayan West Bengal & Sikkim, Konkan & Goa and Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal; at many places over Jharkhand, Coastal Andhra Pradesh & Yanam; at a few places over West Bengal & Sikkim, East Rajasthan; at isolated places over Uttarakhand, Haryana, Assam & Meghalaya.

♦ **Heat wave conditions:-** Yesterday, **Heat Wave conditions** prevailed in many parts with **severe heat wave conditions** in some parts over Gangetic West Bengal; **Heat Wave conditions** in some areas over Odisha and in isolated places over Telangana and Tamil Nadu.

♦ **Warm night conditions:-** **Warm Night to severe warm night conditions** with day maximum temperature exceeding 40°C (from 0830 hours IST of yesterday to 0830 hours IST of today): prevailed in isolated pockets over East Uttar Pradesh and Madhya Maharashtra.

♦ **Percentile Temperature (Annexure 3) :-**

♦ **Temperatures Recorded at 1430 Hours IST of Today, the 20th April, 2024 (Annexure 4) :-**

- Jamshedpur (**Jharkhand**) recorded the highest temperature of 44.4°C.

♦ **Wind Speed & Relative Humidity Recorded at 1430 Hours IST of Today (Annexure 5) :-**

♦ **Maximum Temperatures Forecast :-**

- Rise in maximum temperatures by 2-3°C very likely over East Uttar Pradesh during next 24 hours and no significant change thereafter.
- No significant change in maximum temperatures very likely over West India during next 2 days and rise by 2-3°C thereafter.
- No significant change in maximum temperatures very likely over rest parts of the country.

Hot Weather Warnings for Next 5 Days

DAY-1:-

- ❖ Hot and humid weather very likely to prevail over Coastal Andhra Pradesh & Yanam, Rayalaseema, Tamil Nadu, Kerala & Mahe and Madhya Maharashtra.
- ❖ Heat wave conditions in some parts with severe heat wave conditions very likely to prevail in isolated pockets over Gangetic West Bengal; Heat wave to severe heat wave conditions in isolated pockets over Odisha; heat wave conditions in isolated pockets over East Uttar Pradesh, Bihar, Jharkhand & interior Tamil Nadu.
- ❖ Warm Night conditions very likely to prevail in isolated pockets over East Uttar Pradesh, north Madhya Pradesh and Madhya Maharashtra.

DAY-2:-

- ❖ Hot and humid weather very likely to prevail over Coastal Andhra Pradesh & Yanam, Rayalaseema, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- ❖ Heat wave conditions in some parts with severe heat wave conditions very likely to prevail in isolated pockets over Gangetic West Bengal; Heat wave to severe heat wave conditions in isolated pockets over Odisha; heat wave conditions in isolated pockets over Bihar and Jharkhand.
- ❖ Warm Night conditions very likely to prevail in isolated pockets over East Uttar Pradesh and north Madhya Pradesh.

DAY-3:-

- ❖ Hot and humid weather very likely to prevail over Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.
- ❖ Heat wave conditions very likely to prevail in some parts over Gangetic West Bengal; heat wave conditions in isolated pockets over Bihar, Odisha and Jharkhand.

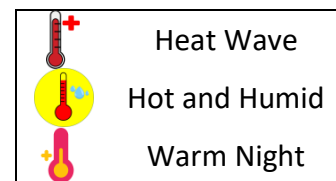
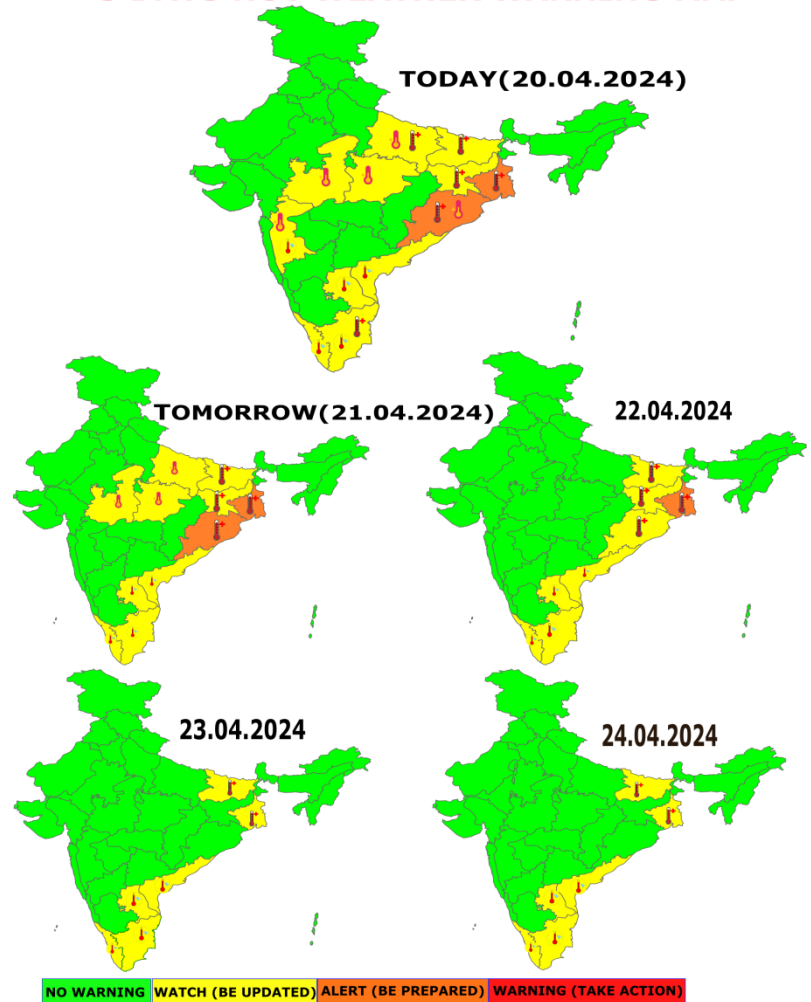
DAY-4:-

- ❖ Hot and humid weather likely to prevail over Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.
- ❖ Heat wave conditions very likely to prevail in some parts over Gangetic West Bengal; heat wave conditions in isolated pockets over Bihar.

DAY-5:-

- ❖ Hot and humid weather likely to prevail over Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.
- ❖ Heat wave conditions very likely to prevail in some parts over Gangetic West Bengal; heat wave conditions in isolated pockets over Bihar.

5 DAYS HOT WEATHER WARNING MAP



IMPACT & ACTION SUGGESTED:

Yellow alert Areas:

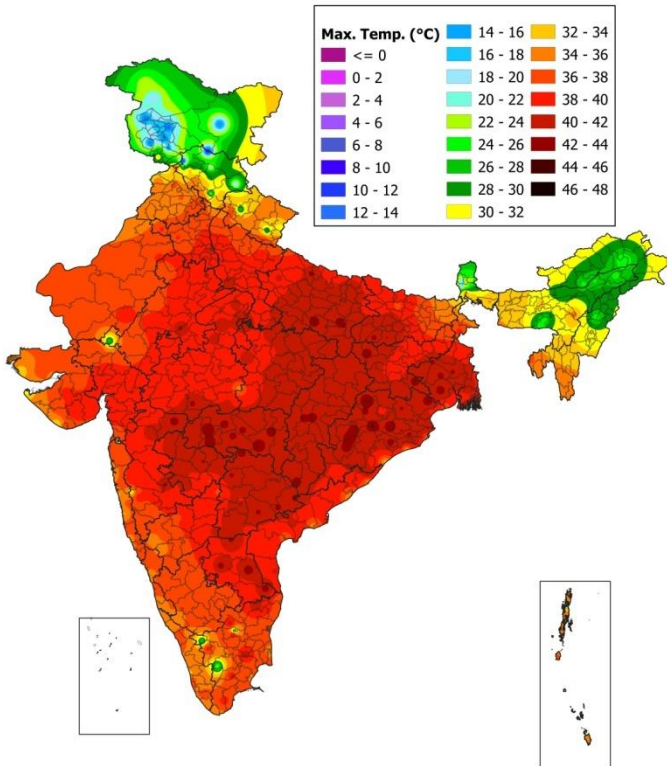
1. Moderate temperature, Heat is tolerable for general public but moderate health concern for vulnerable people e.g. infants, elderly, people with chronic diseases.
2. Avoid heat exposure, Wear light weight, light coloured, loose, cotton clothes, Cover your head, Use a cloth, hat or umbrella.

Orange alert Areas:

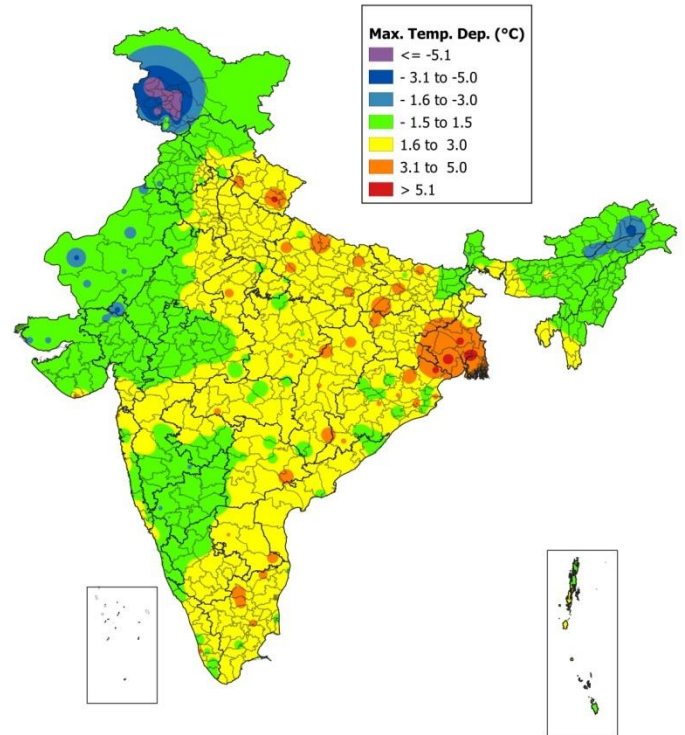
1. High temperature, Increased likelihood of heat illness symptoms in people who are either exposed to sun for a prolonged period or doing heavy work. High health concern for vulnerable people e.g. infants, elderly, people with chronic diseases.
2. Drink sufficient water- even if not thirsty, Use ORS, homemade drinks like lassi, torani (rice water), lemon water, buttermilk, etc. to keep yourself hydrated.

Annexure 1

Maximum Temperature Dated 19/04/2024

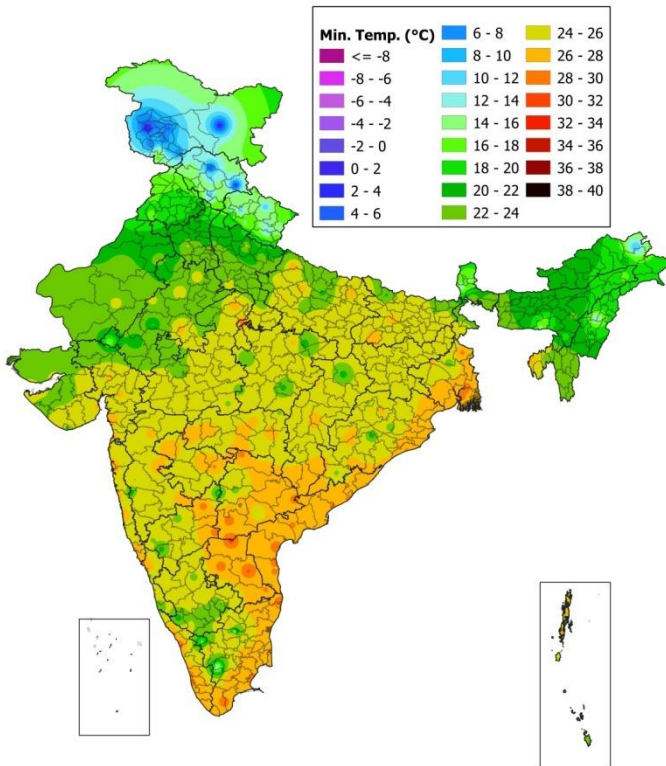


Max Temperature Departure Dated 19/04/2024

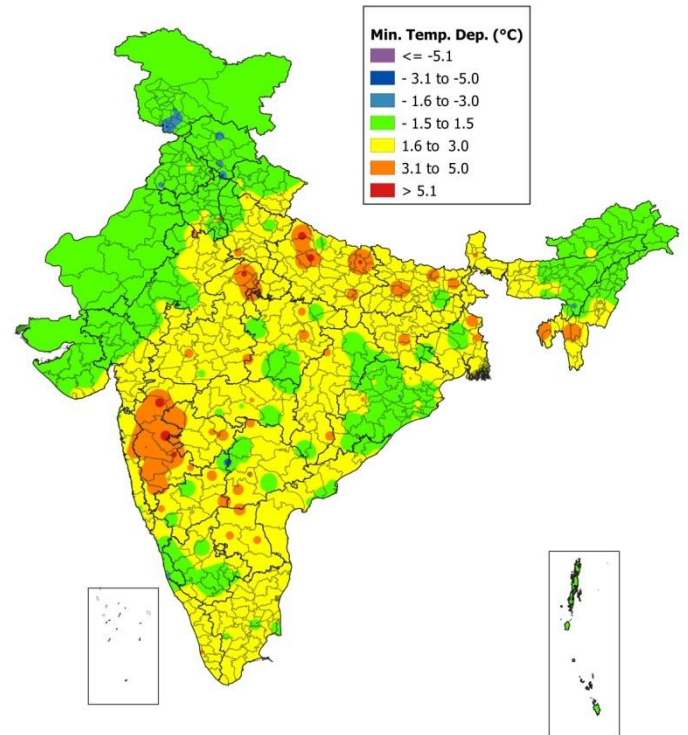


Annexure 2

Minimum Temperature Dated 20/04/2024

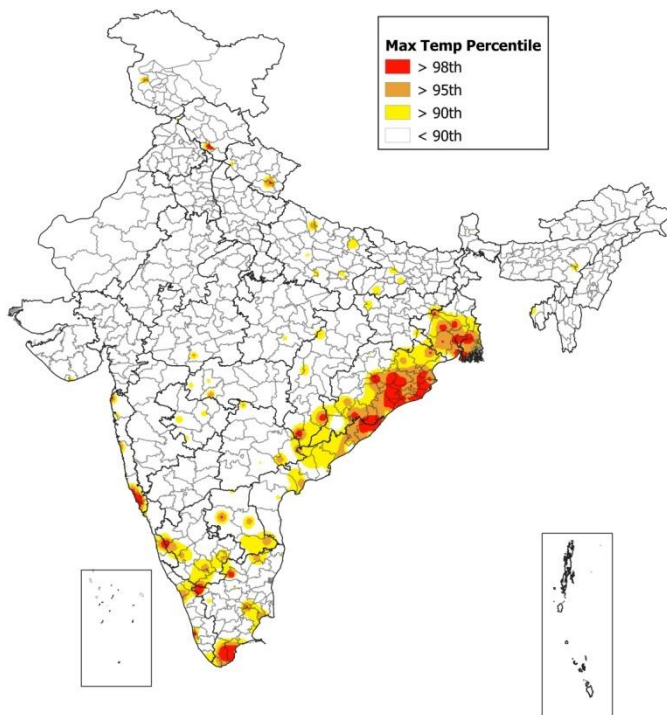


Min Temperature Departure Dated 20/04/2024

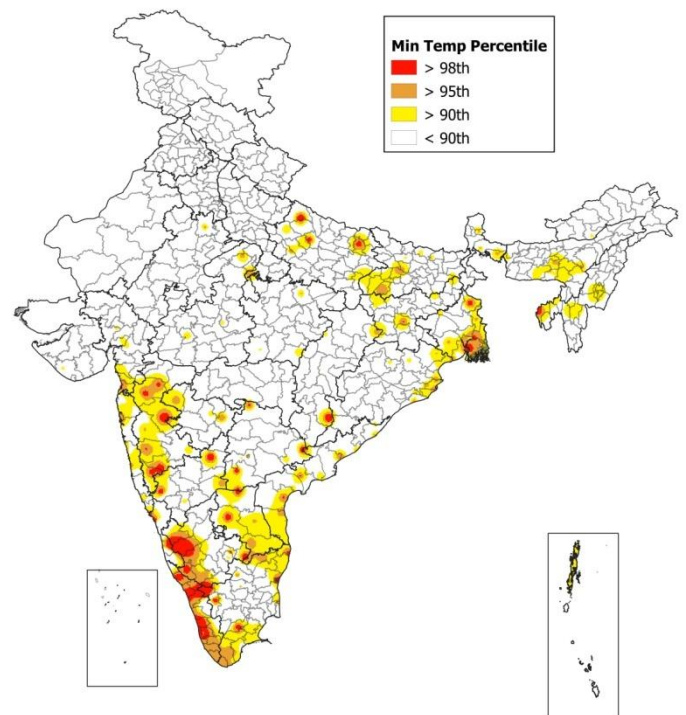


Annexure 3

Max Temp Percentile Dated 19/04/2024

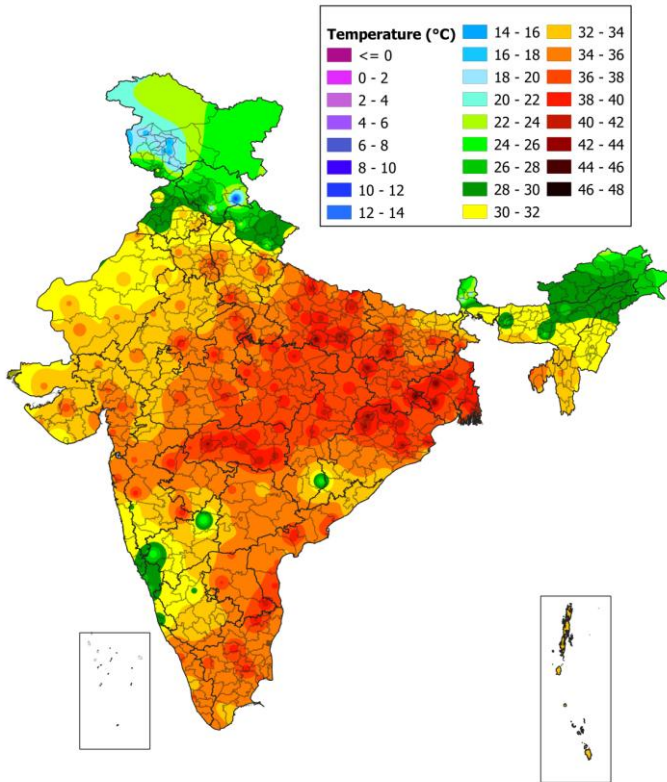


Min Temp Percentile Dated 20/04/2024

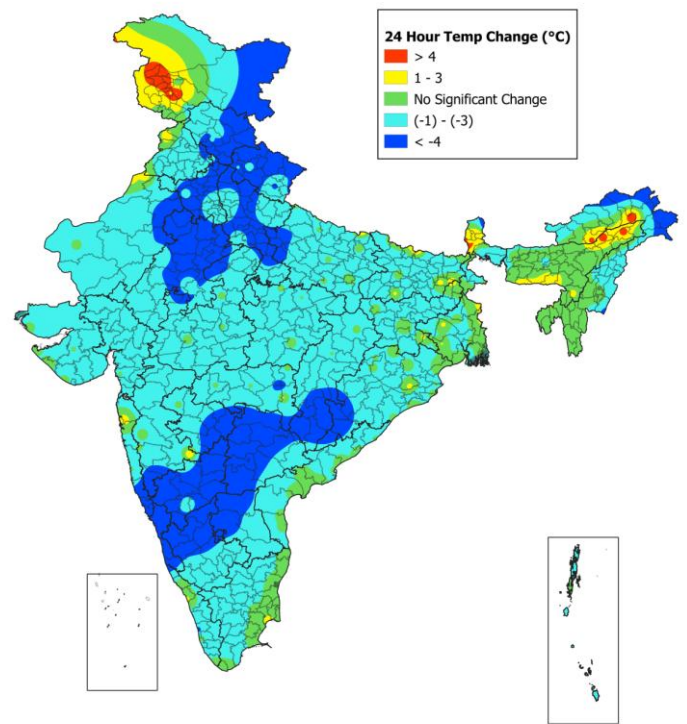


Annexure 4

Observed Temperature at 1430 hrs IST Dated 20/04/2024

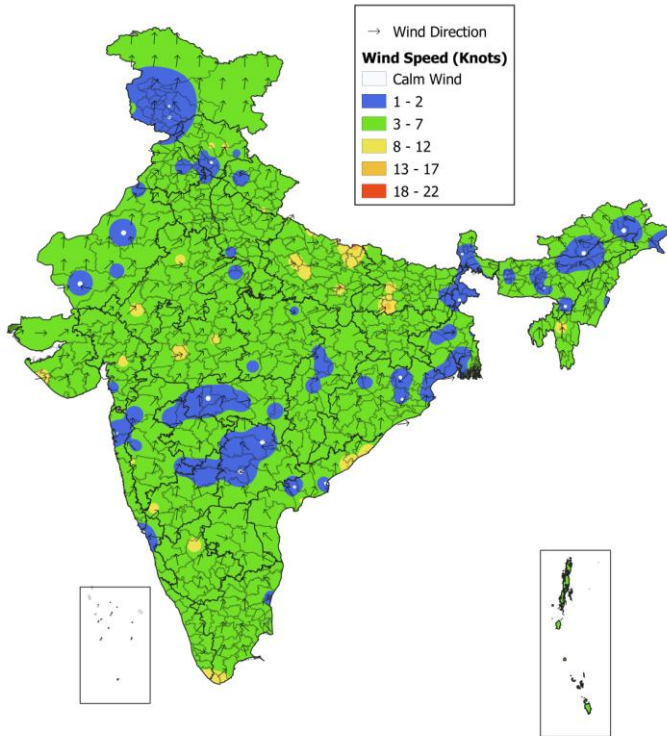


24 hrs Temperature Change at 1430 hrs IST Dated 20/04/2024

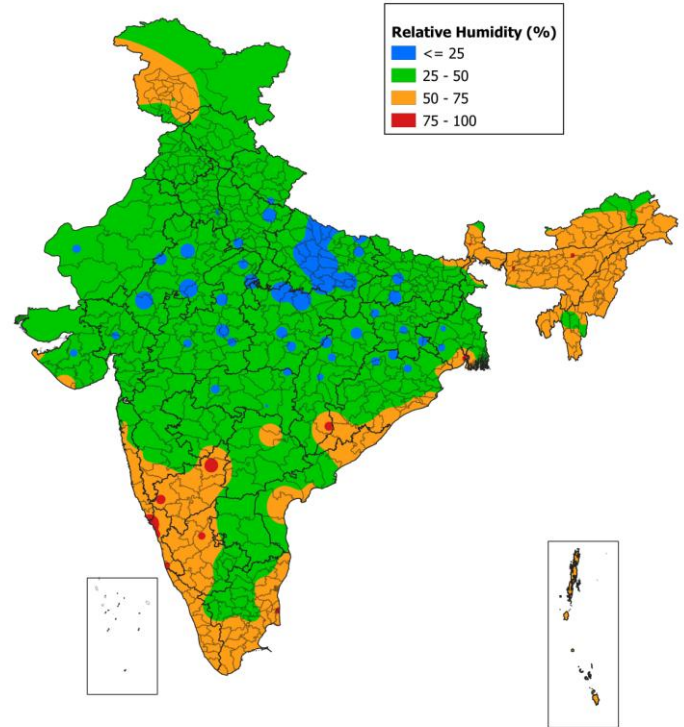


Annexure 5

Wind Map at 1430 hrs IST Dated 20/04/2024



Relative Humidity at 1430 Hrs IST Dated 20/04/2024



For Districtwise heat wave warning visit:

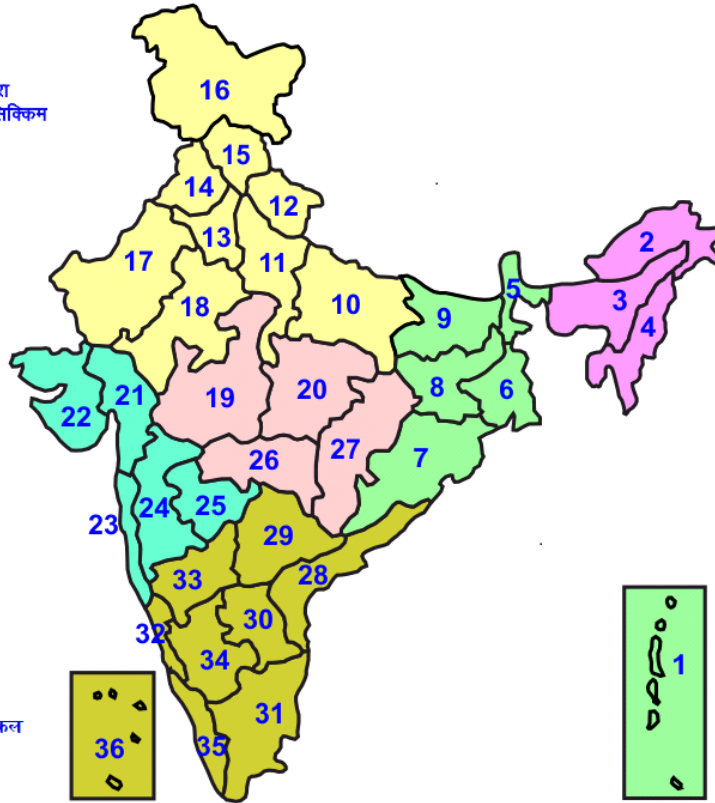
<https://mausam.imd.gov.in/responsive/districtWiseHeatwaveWarning.php>

For GIS Based Heat Wave Warning visit:

http://103.215.208.18/dwr_img/GIS/heatwave.html

LEGENDS

- 1 अंडमान और निकोबार द्वीप समुह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड मनीपुर मीजोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम गंगेय बंगाल
- 7 ओडिसा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा चंडिगढ़ एवं दिल्ली
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एवं कश्मीर एवं लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात क्षेत्र
- 22 सौराष्ट्र एवं कच्छ
- 23 कोंकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठावाडा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 तटीय आंध्र प्रदेश एवं यनम
- 29 तेलंगाना
- 30 रायलसीमा
- 31 तमिलनाडु, पुदुचेरी एवं कराईकल
- 32 तटिय कर्नाटक
- 33 आंतरिक उत्तरी कर्नाटक
- 34 आंतरिक दक्षिणी कर्नाटक
- 35 केरल एवं माहे
- 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, Chd & 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. Marathawada
26. Vidharbha
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

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

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 $> 6.4^\circ \text{C}$.

Heat Wave

Warm Night

Hot and Humid: When maximum temperatures remains 3°C above normal along with the above normal relative humidity.