

Current Temperature Status and Heat Wave Warning

Dated: 21st 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 42-46°C over many parts of Gangetic West Bengal, over some parts of Chhattisgarh and Jharkhand and in isolated pockets over East Uttar Pradesh, Vidarbha, Bihar and East Madhya Pradesh. These are in the range of 40-42°C at many parts of Coastal Andhra Pradesh & Yanam and Rayalaseema and at some parts of Odisha and Tamil Nadu, Puducherry & Karaikal and at isolated pockets over Gujarat state and Marathwada. These were above normal by 2-4°C over many parts of Gangetic West Bengal and in isolated pockets over Chhattisgarh, Jharkhand, Bihar, East Uttar Pradesh, East Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Rayalaseema, Telangana, Vidarbha and Odisha.
- **Yesterday's Highest Maximum Temperature on Plains:** 45.2°C at **Baripada & Boudh** (Odisha)
- **Markedly above normal (5.1°C or more):-** At a few places over Gangetic West Bengal.
- **Appreciably above normal (3.1°C to 5.0°C):-** At a few places over Jharkhand and Bihar
- **Above normal (1.6°C to 3.0°C):-** At many places over Odisha, Tamil Nadu, Puducherry & Karaikal Kerala & Mahe; at a few places over Arunachal Pradesh and East Uttar Pradesh; at isolated places over Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Rayalaseema, West Uttar Pradesh, Vidarbha and East Madhya Pradesh.

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 a few places over Gangetic West Bengal; at isolated places over Bihar, Odisha, East Madhya Pradesh and Nagaland, Manipur, Mizoram & Tripura.
- **Above normal (1.6°C to 3.0°C):-** At most places over Jharkhand and Tamil Nadu, Puducherry & Karaikal; at many places over Sub-Himalayan West Bengal & Sikkim and Kerala & Mahe; at a few places over Arunachal Pradesh, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam and Rayalaseema; at isolated places over East Uttar Pradesh, West Madhya Pradesh, Chhattisgarh, Madhya Maharashtra and South Interior Karnataka.

♦ **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 isolated places over Odisha, Chhattisgarh and Bihar.

♦ **Warm night conditions:-** Today, 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 Madhya Pradesh, Bihar, Gangetic West Bengal, Odisha and Chhattisgarh.

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

♦ **Temperatures Recorded at 1430 Hours IST of Today, the 21st April, 2024 (Annexure 4) :-**

- Bankura (**Gangetic West Bengal**) recorded the highest temperature of 43.6°C.

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

♦ **Maximum Temperatures Forecast :-**

- No significant change in maximum temperatures very likely over Northwest India during next 24 hours and rise gradually by 2-3°C thereafter.
- No significant change in maximum temperatures very likely over East India during next 24 hours and fall by about 2°C during subsequent 2 days and rise by 2-3°C thereafter.
- No significant change in maximum temperatures very likely over West India during next 3 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 Sub-Himalayan West Bengal, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Heat wave conditions** in many parts with severe heat wave conditions in isolated pockets very likely to prevail over Gangetic West Bengal; **Heat wave conditions in some parts with severe heat wave conditions** in isolated pockets over Odisha; heat wave conditions in isolated pockets over East Uttar Pradesh, Sub-Himalayan West Bengal, Bihar and Jharkhand.
- ❖ **Warm Night** conditions very likely to prevail in isolated pockets over Gangetic West Bengal and Odisha.

DAY-2:-

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

DAY-3:-

- ❖ **Hot and humid** weather very likely to prevail over Sub-Himalayan West Bengal & Sikkim, Odisha, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Heat wave conditions** in some parts with severe heat wave conditions in isolated pockets very likely to prevail over Gangetic West Bengal; heat wave conditions in isolated pockets over East Uttar Pradesh and Bihar.

DAY-4:-

- ❖ **Hot and humid** weather very likely to prevail over Sub-Himalayan West Bengal & Sikkim, Odisha, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.

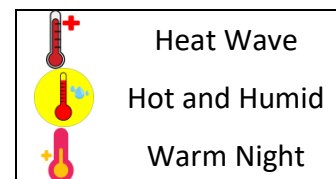
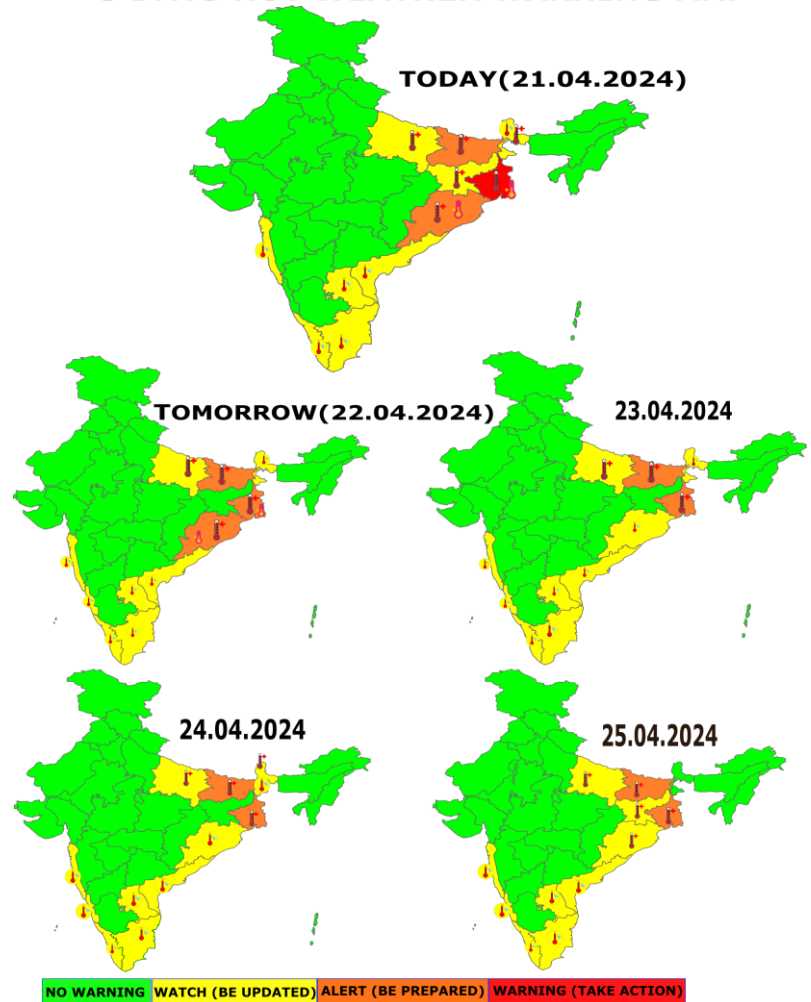
- ❖ **Heat wave conditions** in some parts with severe heat wave conditions in isolated pockets likely to prevail over Gangetic West Bengal; heat wave conditions in isolated pockets over East Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim and Bihar.

DAY-5:-

- ❖ **Hot and humid** weather very likely to prevail over Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.

- ❖ **Heat wave conditions** in some parts with severe heat wave conditions in isolated pockets likely to prevail over Gangetic West Bengal; heat wave conditions in isolated pockets over East Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Jharkhand, Odisha and 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.

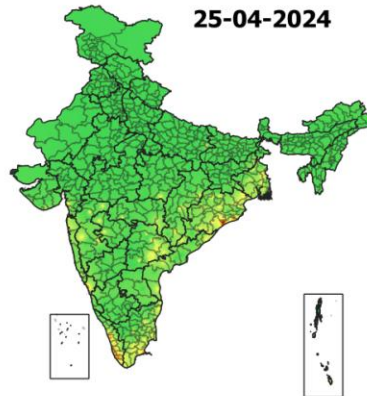
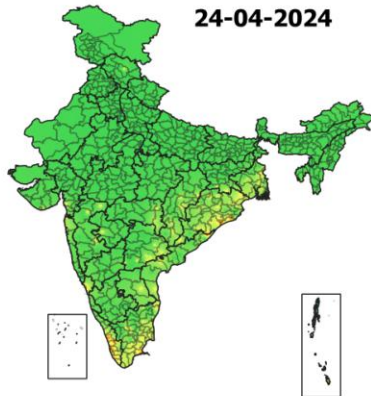
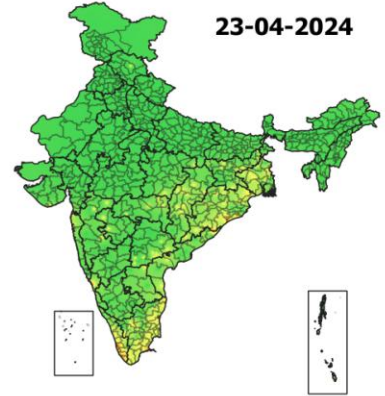
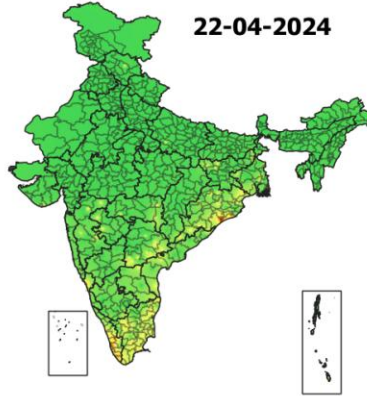
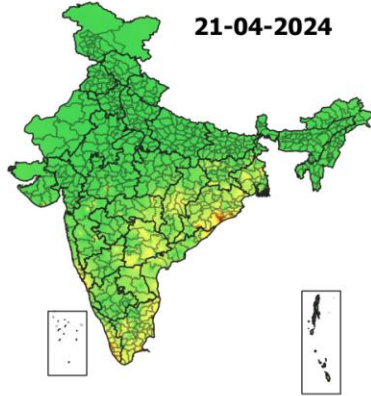
Orange alert Areas:

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.

Red alert Areas:

1. Very high likelihood of developing heat illness and heat stroke in all ages.
2. Extreme care needed for vulnerable people.

HEAT INDEX (EXPERIMENTAL FORECAST) DATED 21-04-2024



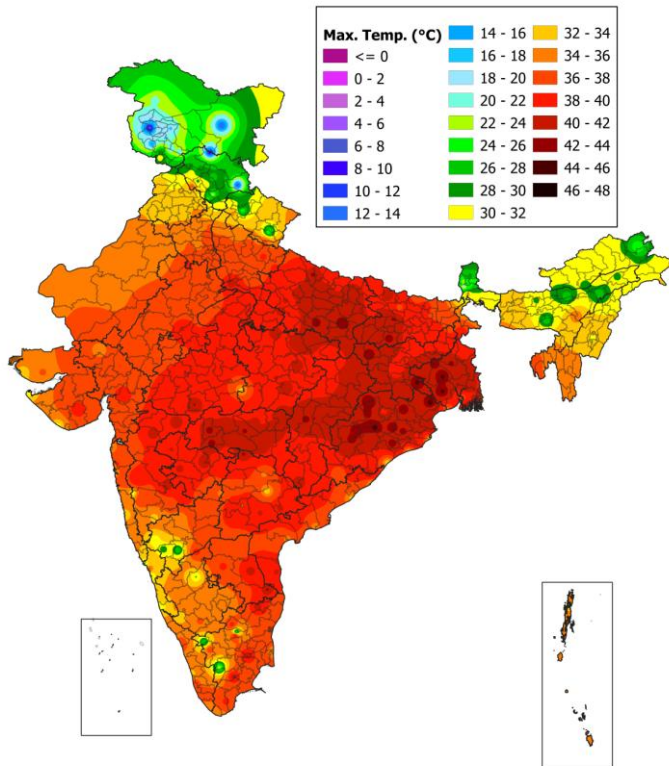
HEAT INDEX (°C)

- Less Than 40
- 40 - 50
- 50 - 60
- Above 60

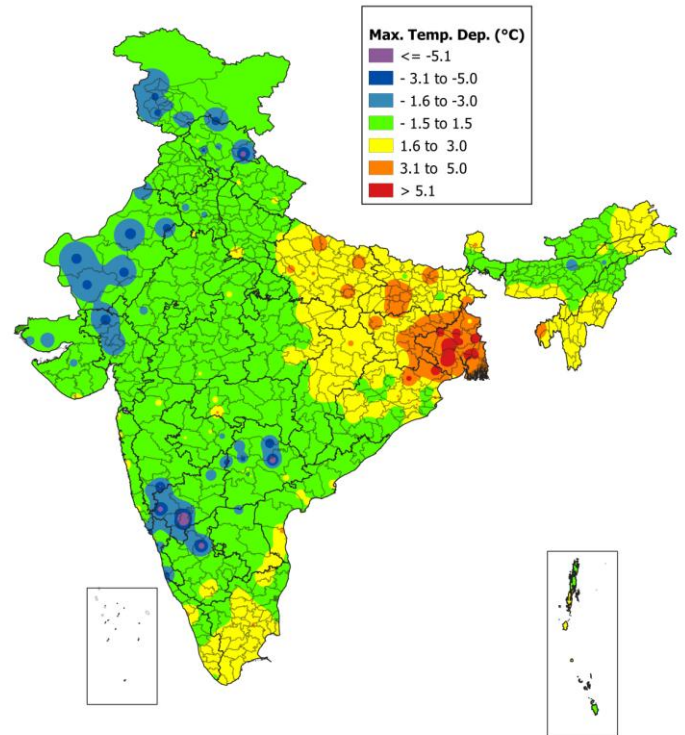
NOT VALIDATED OVER INDIA

Annexure 1

Maximum Temperature Dated 20/04/2024

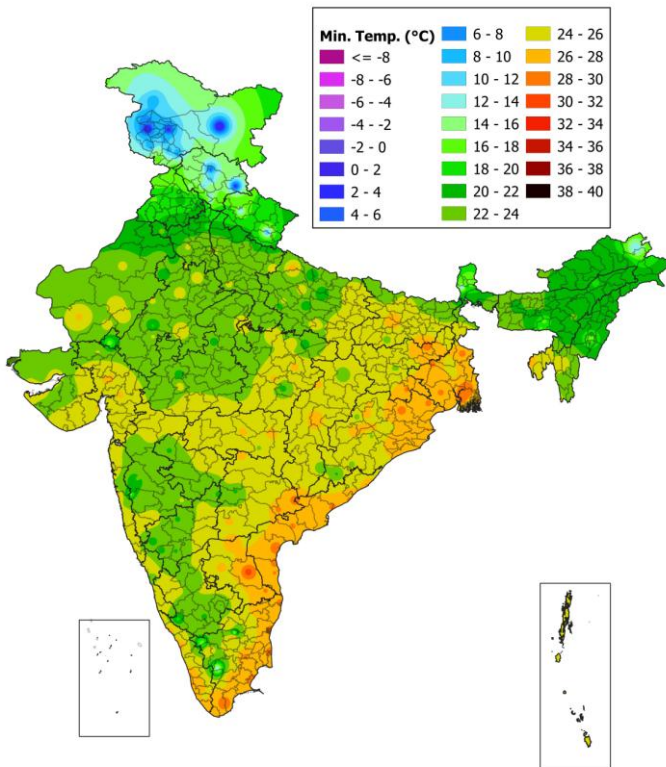


Max Temperature Departure Dated 20/04/2024

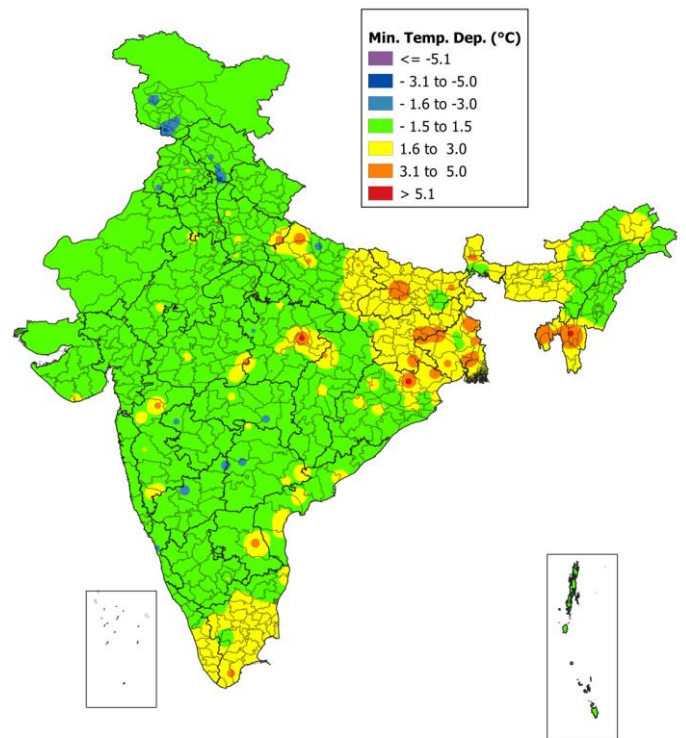


Annexure 2

Minimum Temperature Dated 21/04/2024

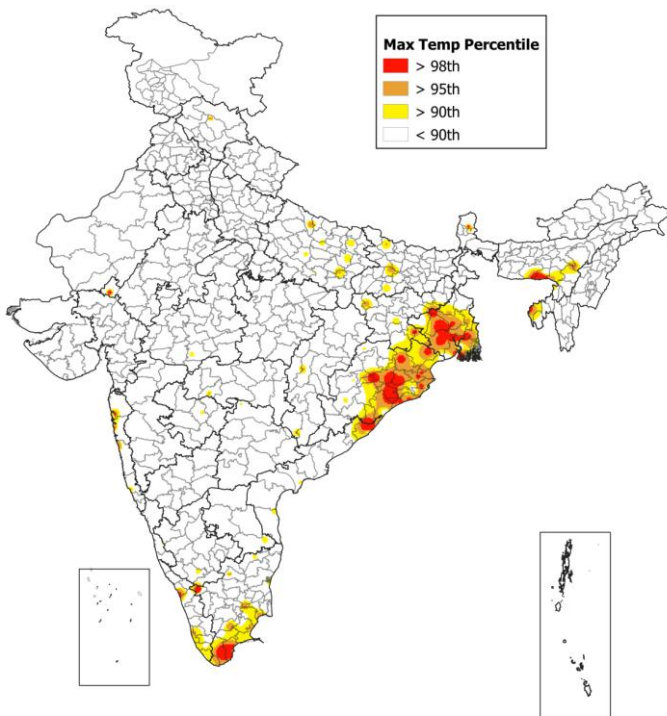


Min Temperature Departure Dated 21/04/2024

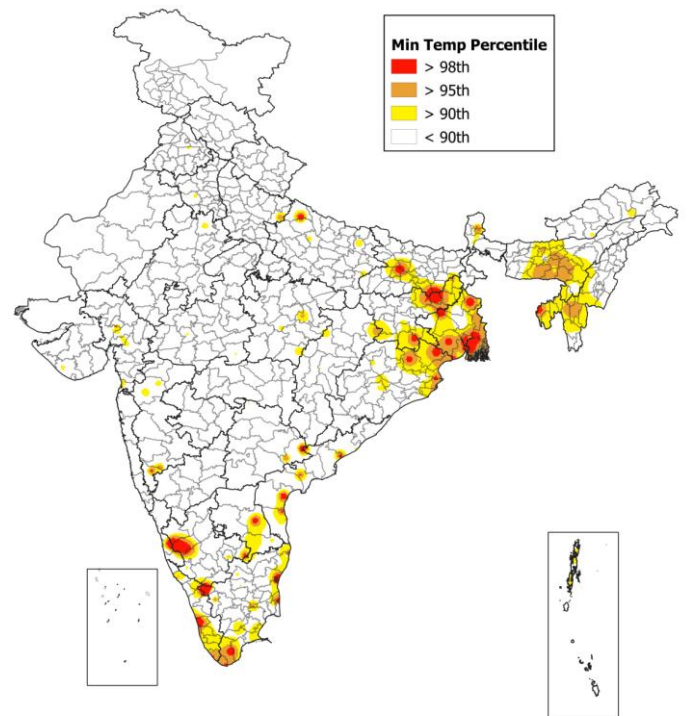


Annexure 3

Max Temp Percentile Dated 20/04/2024

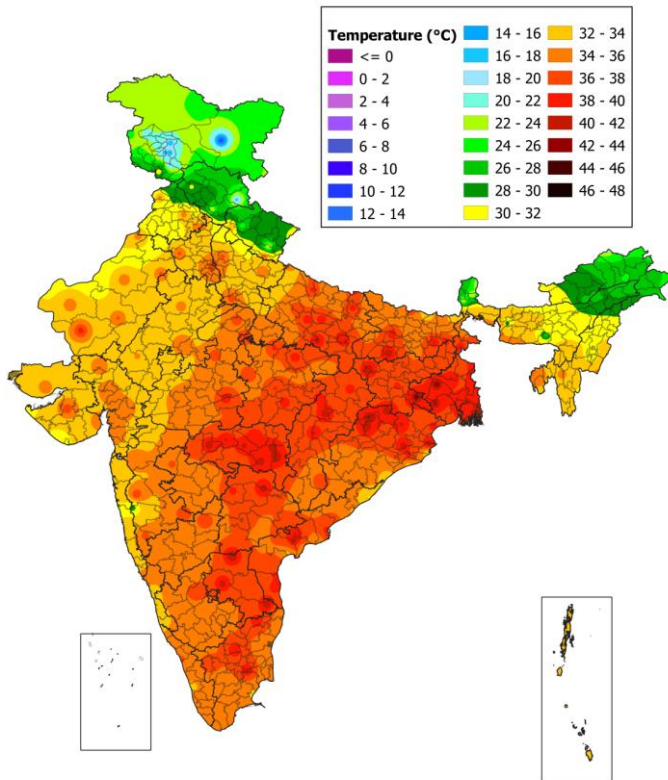


Min Temp Percentile Dated 21/04/2024

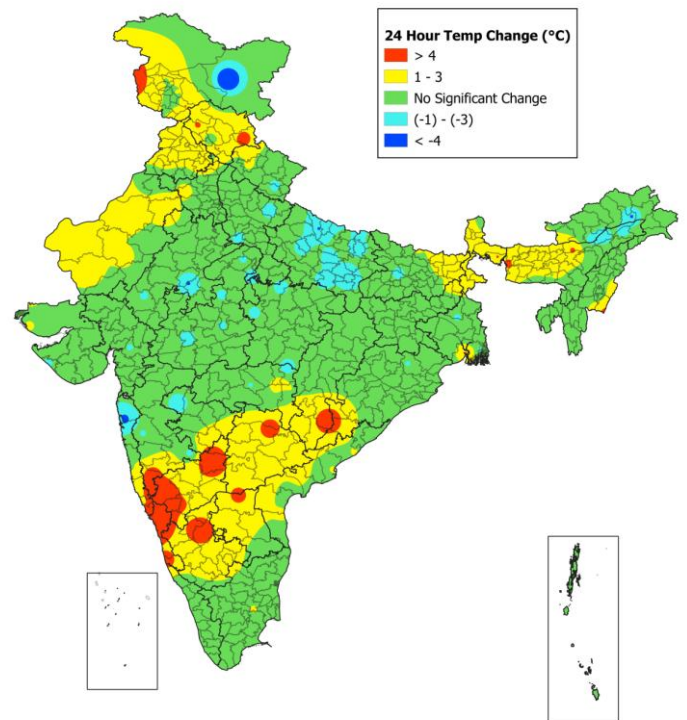


Annexure 4

Observed Temperature at 1430 hrs IST Dated 21/04/2024

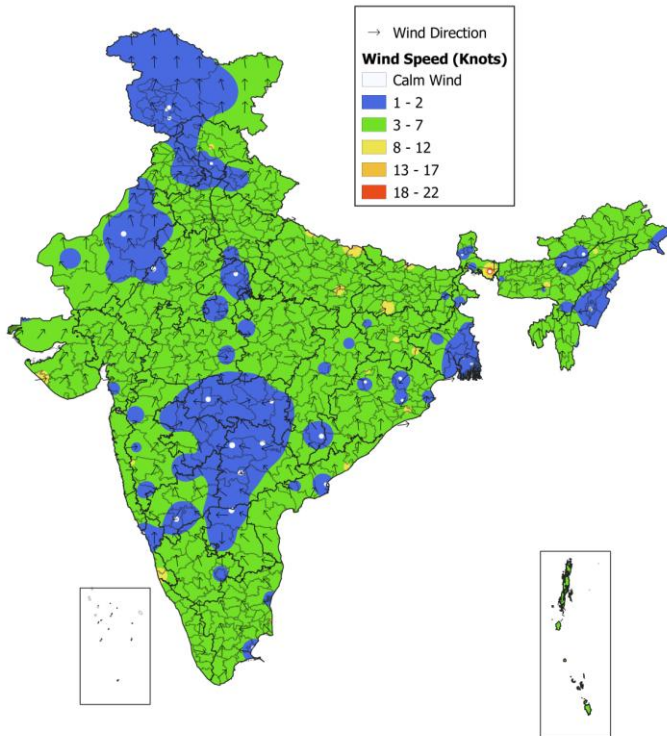


24 hrs Temperature Change at 1430 hrs IST Dated 21/04/2024

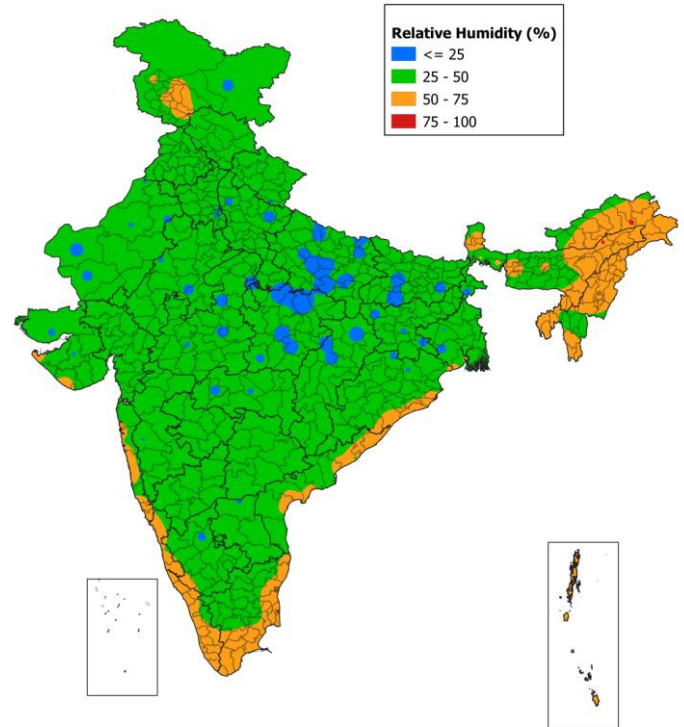


Annexure 5

Wind Map at 1430 hrs IST Dated 21/04/2024



Relative Humidity at 1430 Hrs IST Dated 21/04/2024



For Districtwise heat wave warning visit:

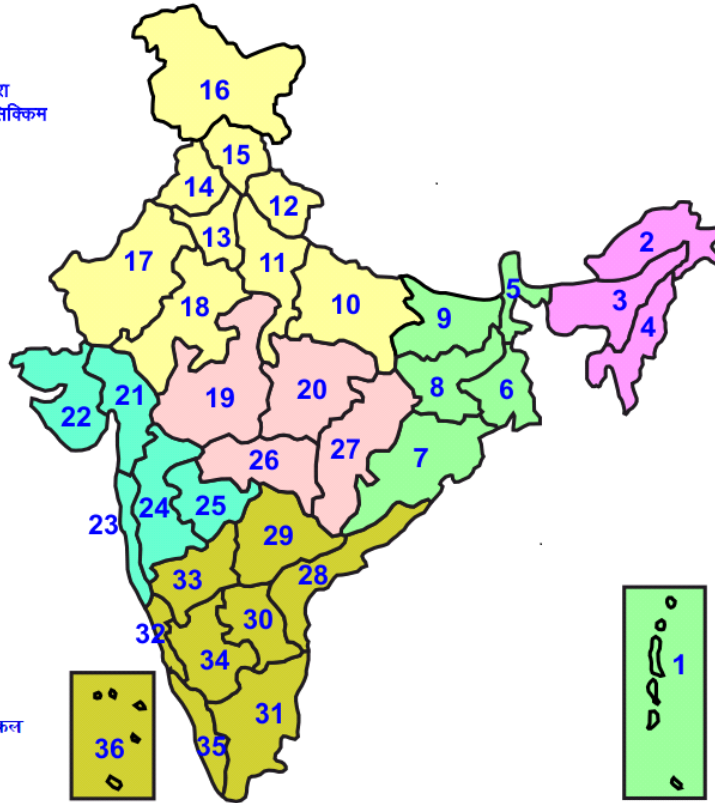
<https://mausam.imd.gov.in/responsive/districtWiseHeatwaveWarning.php>

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.