

Current Temperature Status and Heat Wave Warning

Dated: 17th 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 41-43°C over at a few places over Odisha, Coastal Andhra Pradesh & Yanam, Saurashtra & Kutch and Rayalaseema and at isolated pockets over West Uttar Pradesh, Jharkhand, Gangetic West Bengal, Gujarat Region, Konkan & Goa, Madhya Maharashtra, Telangana and North Interior Karnataka; 38-40°C over many places over East Uttar Pradesh and Vidarbha; at a few places over Tamil Nadu, Puducherry & Karaikal, Madhya Pradesh, Bihar, Chhattisgarh and Marathwada. These were above normal by 2-3° C at a few places over these areas.
- **Yesterday's Highest Maximum Temperature on Plains:** 43.6°C at Baripada (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 a few places over Nagaland, Manipur, Mizoram & Tripura and at isolated places over Arunachal Pradesh, Coastal Andhra Pradesh & Yanam and Saurashtra & Kutch.
- **Above normal (1.6°C to 3.0°C):-** at most places over Interior Karnataka; at many places over Bihar, Odisha, Madhya Maharashtra and Konkan & Goa; at a few places over Jharkhand, Marathwada, Gujarat Region, Rayalaseema, Kerala & Mahe and Sub-Himalayan West Bengal & Sikkim; at isolated places over Andaman & Nicobar Islands, Assam & Meghalaya, Chhattisgarh, East Uttar Pradesh, Madhya Pradesh and Tamil Nadu, Puducherry & Karaikal.

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 Madhya Maharashtra and Konkan & Goa and at isolated places over Gangetic West Bengal, Bihar, Saurashtra & Kutch and Marathwada.
- **Above normal (1.6°C to 3.0°C):-** at most places over Jharkhand and North Interior Karnataka; at many places over Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura, Odisha and Gujarat Region; at a few places over Andaman & Nicobar Islands, Assam & Meghalaya, East Uttar Pradesh, Coastal Andhra Pradesh & Yanam, Telangana and Kerala & Mahe and at isolated places over West Rajasthan, Madhya Pradesh, Chhattisgarh, Rayalaseema and South Interior Karnataka.

♦ **Heat wave conditions:-** Heat Wave to severe Heat wave conditions prevailed at isolated pockets over Saurashtra and Heat Wave conditions in some pockets over Gangetic West Bengal, Odisha and north Konkan.

♦ **Warm night conditions:-** NIL.

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

♦ **Temperatures Recorded at 1430 Hours IST of Today, the 17th April, 2024 (Annexure 4) :-**

- Rajkot (Saurashtra & Kutch) recorded the highest temperature of 43.4°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 & parts of south peninsular India during next 3 days and no significant change thereafter.
- No significant change in maximum temperatures very likely over northwest India during next 2 days and fall by 2-3°C for subsequent 3 days.
- 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 areas of Gujarat region, Coastal & south Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- ❖ Heat wave to severe heat wave very likely to prevail in isolated pockets over Saurashtra & Kutch; Heat wave in isolated pockets over Gangetic West Bengal, Bihar, Odisha, north Konkan, Madhya Maharashtra, Marathwada Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana.
- ❖ Warm Night very likely to prevail in isolated pockets over Madhya Maharashtra and Marathwada.

DAY-2:-

- ❖ Hot and humid weather very likely to prevail over Konkan, Kerala & Mahe and Coastal & South Interior Karnataka.
- ❖ Heat wave to severe heat wave very likely to prevail in isolated pockets over Odisha, Heat wave at isolated pockets over Gangetic West Bengal, Bihar, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana.
- ❖ Warm Night very likely to prevail in isolated pockets over Madhya Maharashtra

DAY-3:-

- ❖ Hot and humid weather likely to prevail over Konkan and Coastal & south Interior Karnataka.
- ❖ Heat wave to severe heat wave very likely to prevail in isolated pockets over Gangetic West Bengal and Odisha; heat wave likely to prevail in isolated pockets over Bihar, Jharkhand, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.

DAY-4:-

- ❖ Hot and humid weather likely to prevail over Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana.
- ❖ Heat wave to severe heat wave likely to prevail in isolated pockets over Gangetic West Bengal; heat wave likely to prevail in isolated pockets over Bihar, Jharkhand and Odisha.

DAY-5:-

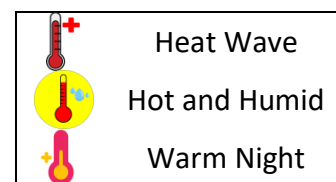
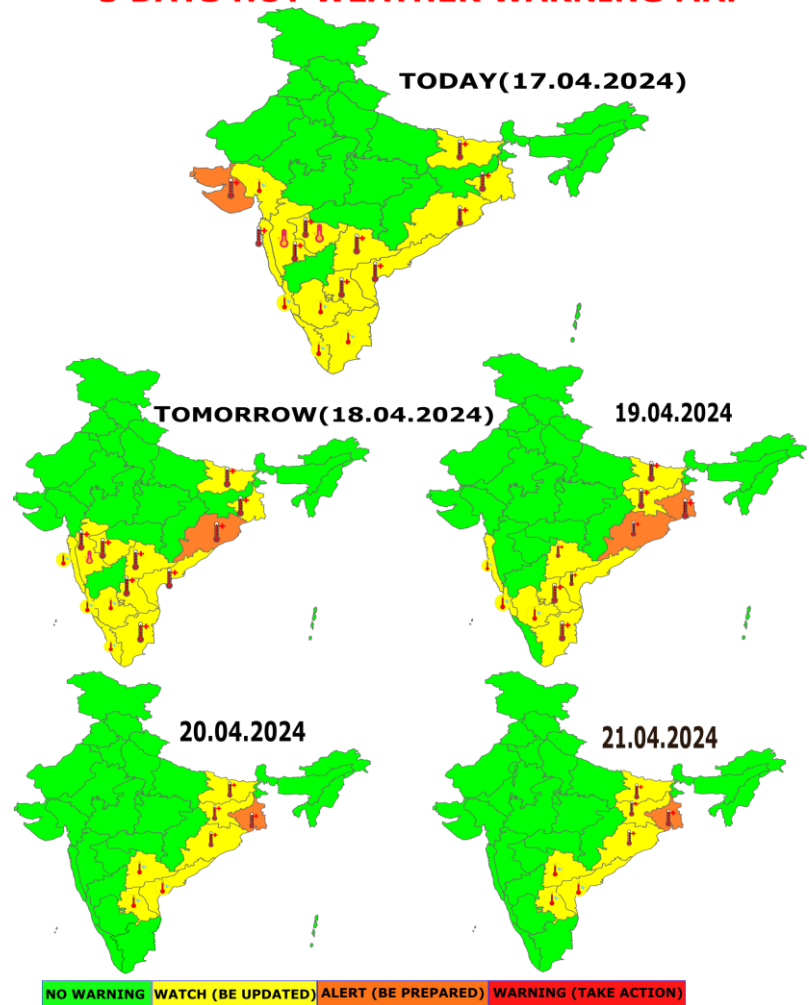
- ❖ Hot and humid weather likely to prevail over Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana.
- ❖ Heat wave to severe heat wave likely to prevail in isolated pockets over Gangetic West Bengal; heat wave likely to prevail in isolated pockets over Bihar, Jharkhand and Odisha.

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.

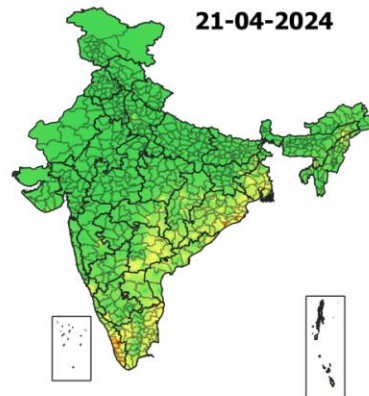
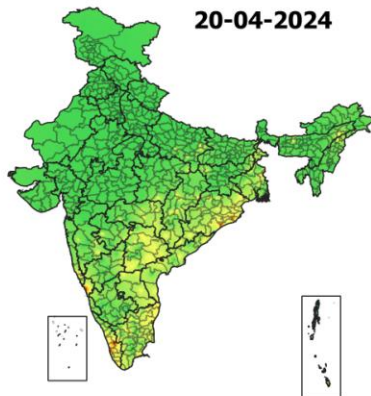
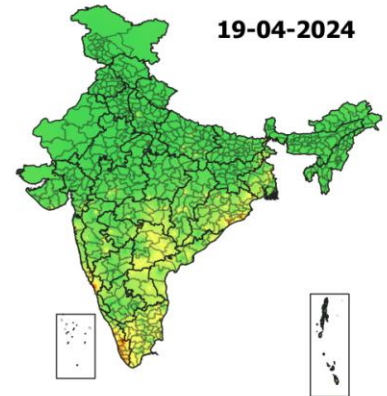
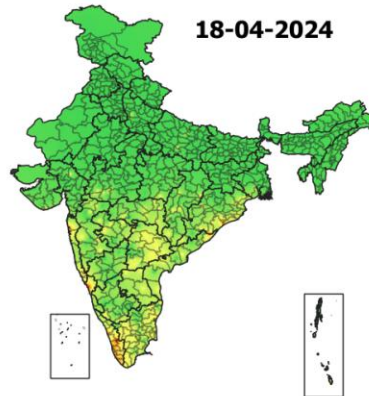
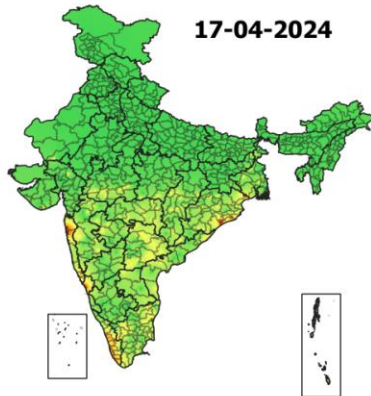
5 DAYS HOT WEATHER WARNING MAP



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.

HEAT INDEX (EXPERIMENTAL FORECAST) DATED 17-04-2024



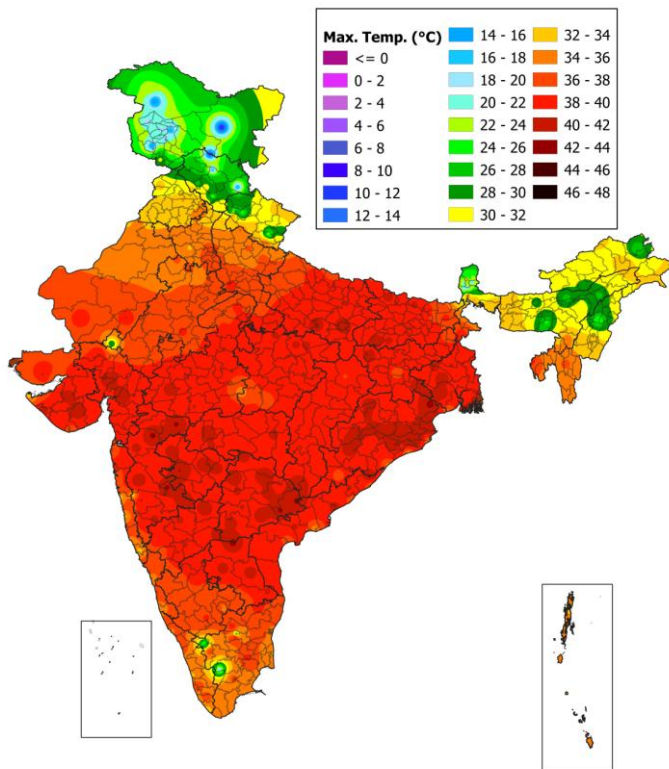
HEAT INDEX (°C)

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

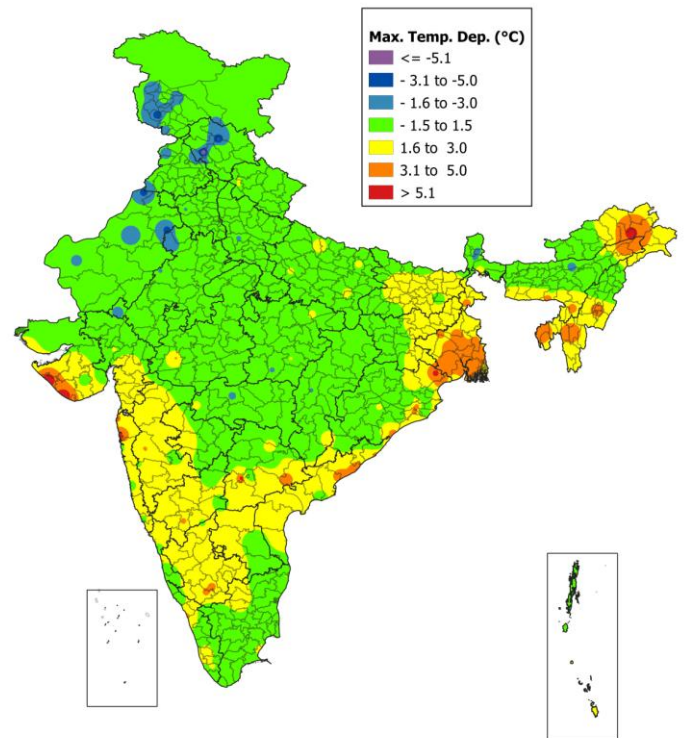
NOT VALIDATED OVER INDIA

Annexure 1

Maximum Temperature Dated 16/04/2024

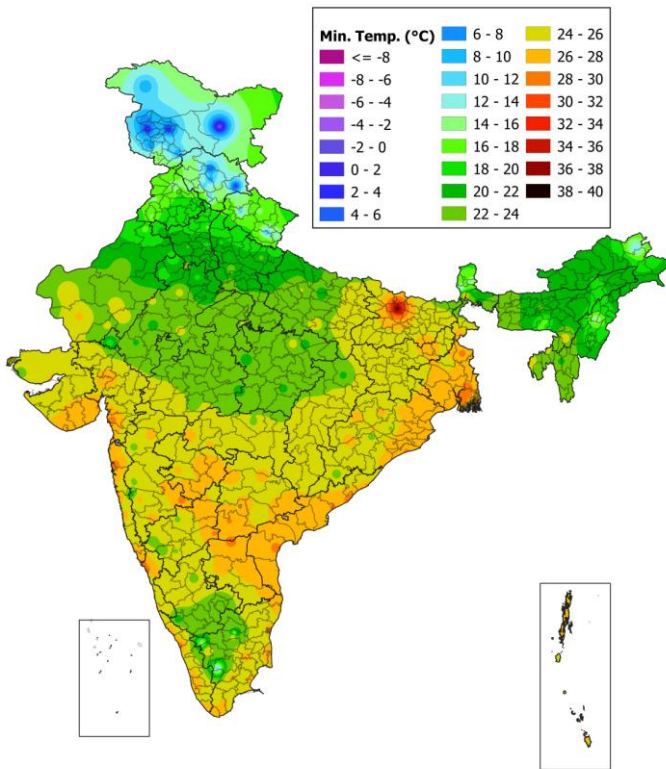


Max Temperature Departure Dated 16/04/2024

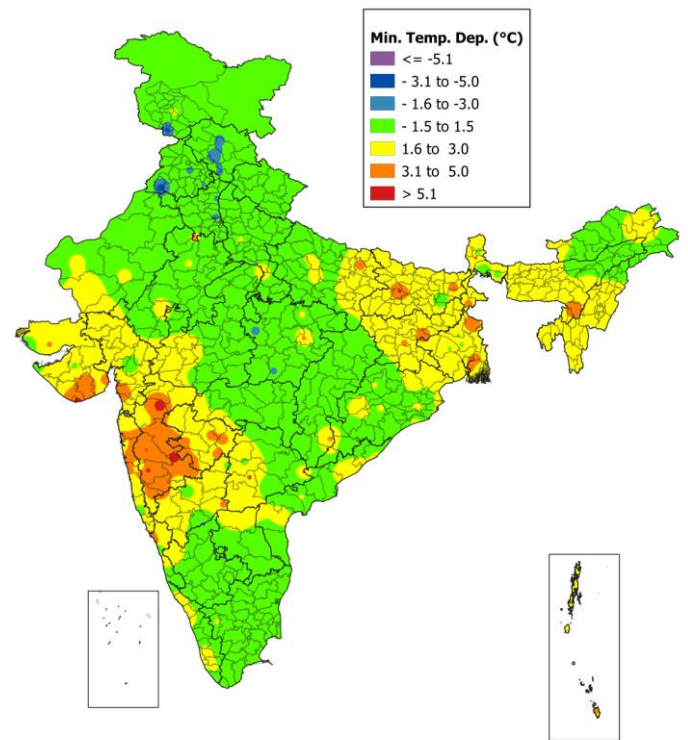


Annexure 2

Minimum Temperature Dated 17/04/2024

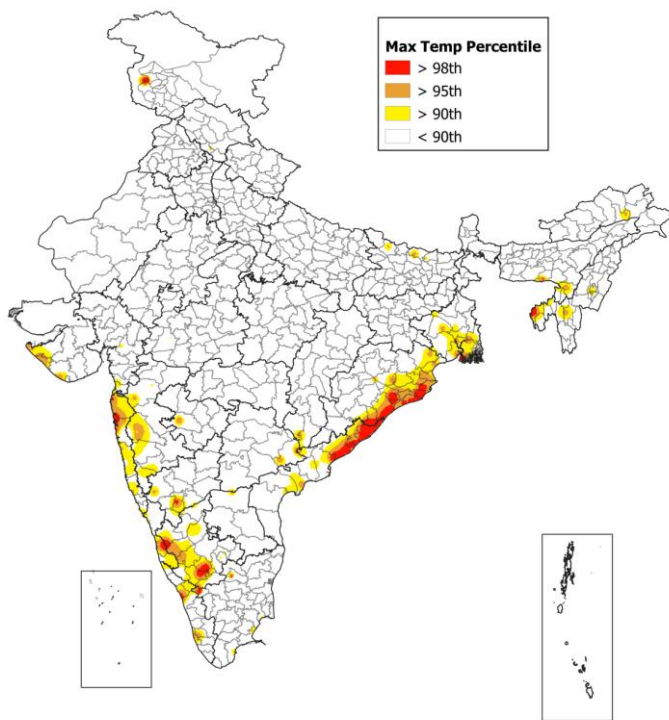


Min Temperature Departure Dated 17/04/2024

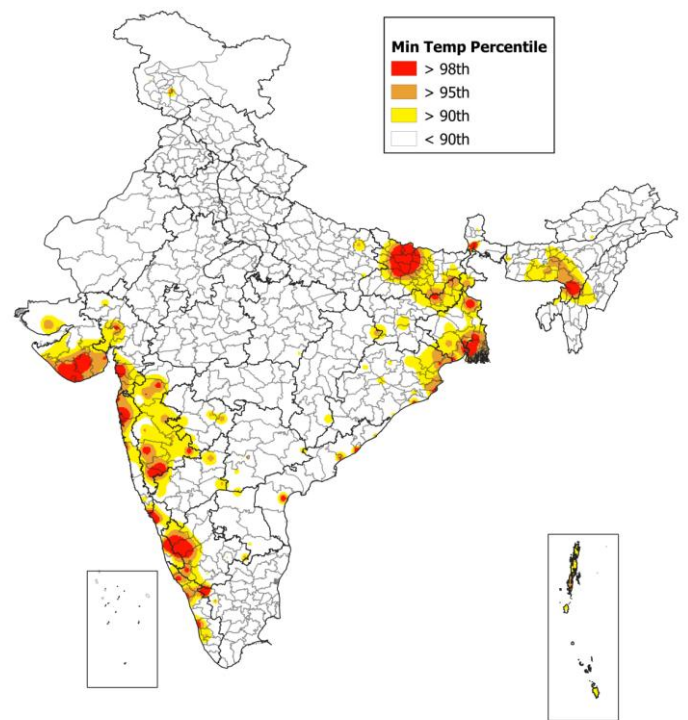


Annexure 3

Max Temp Percentile Dated 16/04/2024

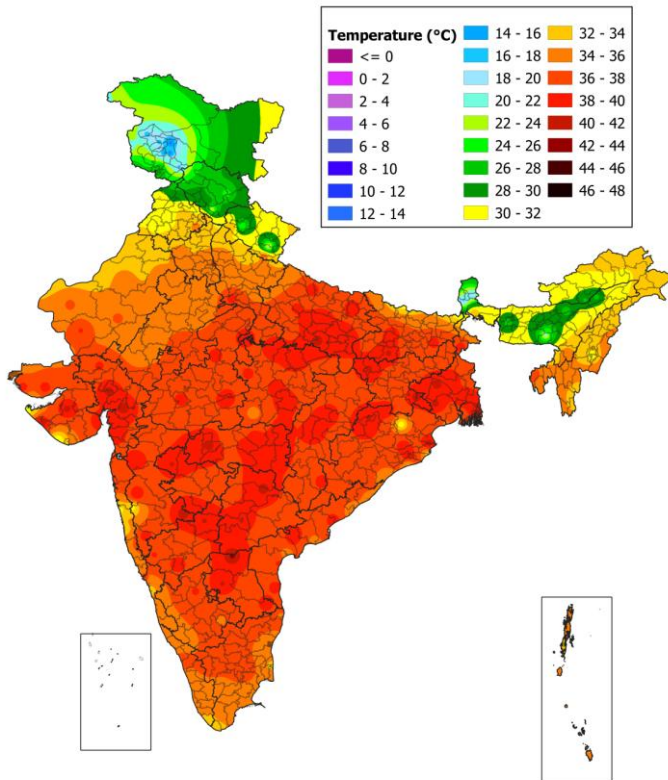


Min Temp Percentile Dated 17/04/2024

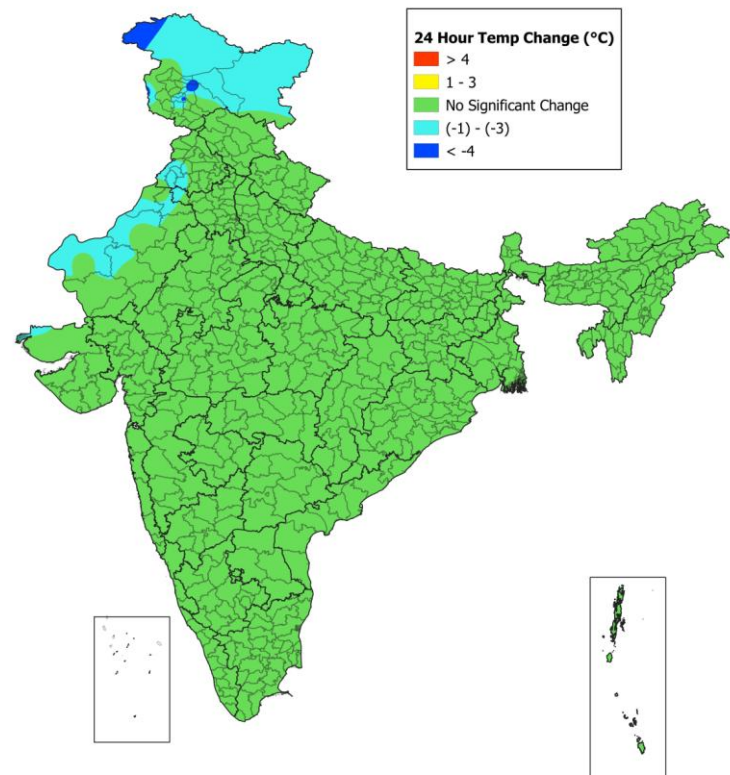


Annexure 4

Observed Temperature at 1430 hrs IST Dated 17/04/2024

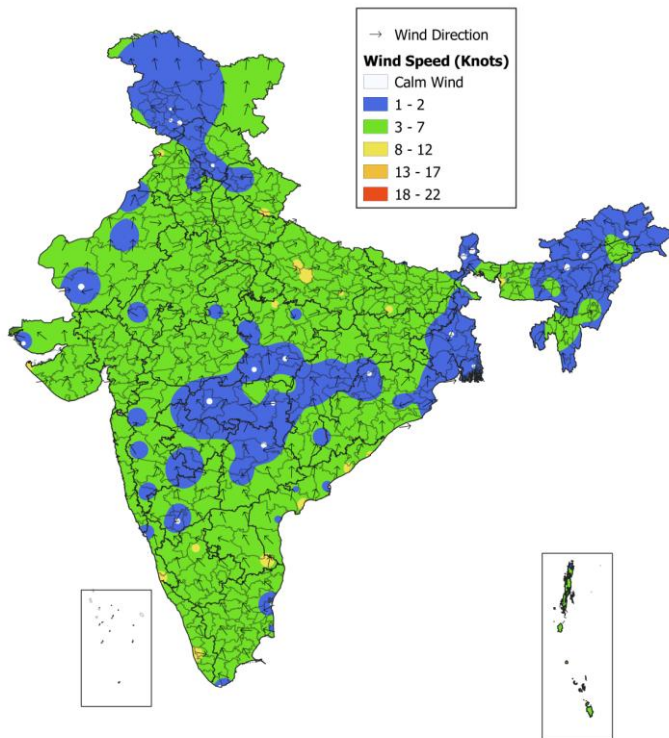


24 hrs Temperature Change at 1430 hrs IST Dated 17/04/2024

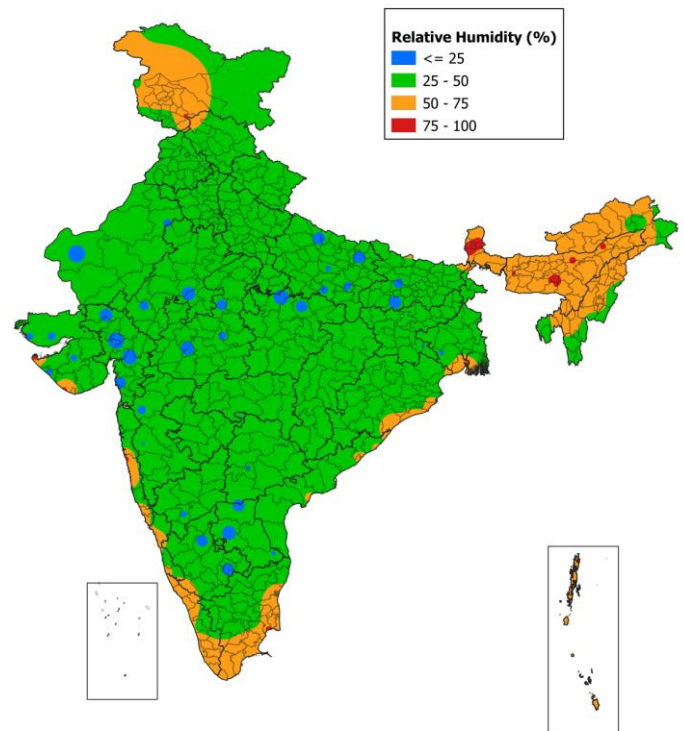


Annexure 5

Wind Map at 1430 hrs IST Dated 17/04/2024



Relative Humidity at 1430 Hrs IST Dated 17/04/2024



For Districtwise heat wave warning visit:

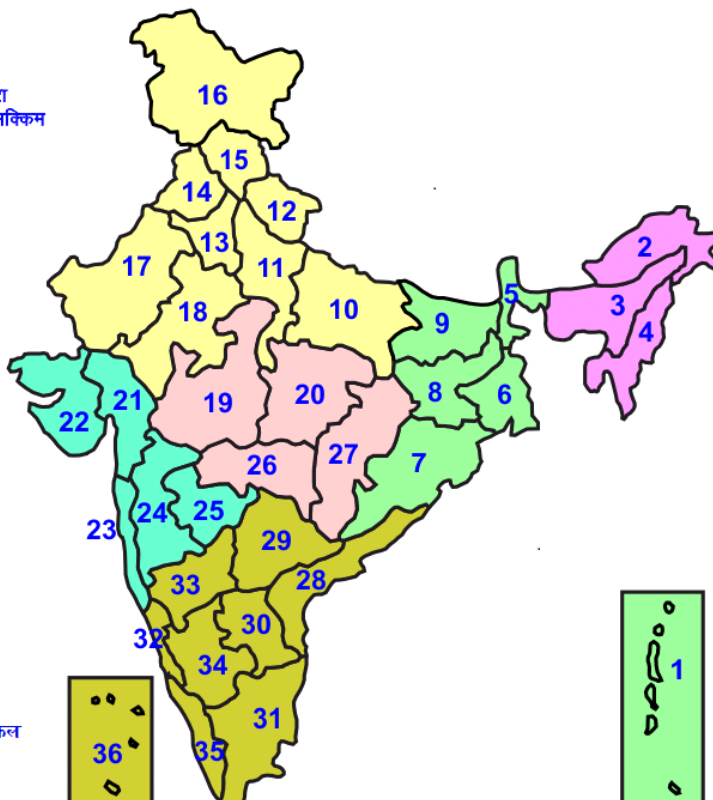
<https://mausam.imd.gov.in/responsive/districtWiseHeatwaveWarning.php>

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 गांगेय बंगाल
- 7 ओडिशा
- 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. Marathwada
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 $> 6.4^\circ \text{C}$.

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