

Current Temperature Status and Heat Wave Warning

Dated: 29th April, 2024

Time of Issue: 1630 Hrs IST

♦ Observed Temperature Scenario:-

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

- Yesterday, maximum temperatures are in the range of 42-45°C over in some parts of Odisha, Gangetic West Bengal and Rayalaseema; in the range of 40-42°C over many parts of East Uttar Pradesh, Bihar, Jharkhand, Marathwada, Madhya Maharashtra, North Interior Karnataka, Telangana; in some parts of Vidarbha, Coastal Andhra Pradesh & Yanam; in isolated pockets of Chhattisgarh and Gujarat. These are above normal by 4-8°C over in many parts of Bihar and Gangetic West Bengal; in some parts of Sub Himalayan West Bengal and in isolated pockets of north Odisha.
- **Yesterday's Highest Maximum Temperature on Plains:** 45.6°C at Nandyal (Rayalaseema).
- **Markedly above normal (5.1°C or more):-** At most places over Gangetic West Bengal; at a few places over Bihar and Sub-Himalayan West Bengal; at isolated places over Jharkhand.
- **Appreciably above normal (3.1°C to 5.0°C):-** At a few places over Odisha; at isolated places over Saurashtra & Kutch, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Telangana, South Interior Karnataka and Kerala & Mahe.
- **Above normal (1.6°C to 3.0°C):-** At most places over Konkan & Goa, Rayalaseema and North Interior Karnataka; at many places over Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam; at a few places over Marathwada; at isolated places over East Uttar 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 many places over Madhya Maharashtra, at a few places over Marathwada; at isolated places over East Uttar Pradesh, Telangana, Bihar, West Bengal & Sikkim, Konkan & Goa and Nagaland, Manipur, Mizoram & Tripura.
- **Above normal (1.6°C to 3.0°C):-** At most places over Karnataka and Kerala & Mahe; at a few places over Gujarat Region and Odisha; at isolated places over Punjab, Saurashtra & Kutch, Vidarbha, Assam & Meghalaya, Rayalaseema, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal.

♦ **Heat wave conditions:-** Yesterday, Heat Wave to severe heat wave conditions prevailed in many parts over Gangetic West Bengal; in some parts over Bihar and Odisha and heat wave conditions in isolated pockets over Sub-Himalayan West Bengal, Konkan & Goa, Rayalaseema and Telangana. Heat wave conditions have been prevailing over Odisha since 15th and over Gangetic West Bengal since 17th April.

- ♦ **Warm night conditions:-** Warm Night prevailed in isolated places over North Interior Karnataka and East Uttar Pradesh.
- ♦ **Hot & Humid prevailed** in isolated places over Kerala, Tamil Nadu, Puducherry & Karaikal and Coastal Karnataka.
- ♦ **Percentile Temperature (Annexure 3) :-**
- ♦ **Temperatures Recorded at 1430 Hours IST of Today, the 29th April, 2024 (Annexure 4) :-**
 - Prayagraj (East Uttar Pradesh) recorded the highest temperature of 44.2°C.
- ♦ **Wind Speed & Relative Humidity Recorded at 1430 Hours IST of Today (Annexure 5) :-**
- ♦ **Maximum Temperatures Forecast :-**
 - Rise in maximum temperatures by about 1-2 °C very likely over East India during next 2 days and no significant change thereafter.
 - Gradual Rise in maximum temperatures by about 2-4°C very likely over Central India during next 4-5 days and no significant change thereafter.
 - Rise in maximum temperatures by 2-3°C very likely over Tamil Nadu during next 3-4 days and no significant change 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 west Assam & Meghalaya, Tripura, south Gujarat Region, Tamil Nadu, Puducherry & Karaikal and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** very likely to prevail at many places over Gangetic West Bengal, Bihar; in isolated pockets over Odisha; heat wave conditions in isolated pockets over East Uttar Pradesh, Sub-Himalayan West Bengal, Jharkhand, Saurashtra & Kutch, Konkan & Goa, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Interior Karnataka.
- ❖ **Warm night** conditions very likely to prevail in isolated pockets over East Uttar Pradesh, Madhya Maharashtra, Marathwada and Interior Karnataka.

DAY-2:-

- ❖ **Hot and humid weather** very likely to prevail over west Assam & Meghalaya, Tripura, Konkan & Goa, south Gujarat Region, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** very likely to prevail at many places over Gangetic West Bengal, Bihar; in isolated pockets over Odisha; heat wave conditions in isolated pockets over Sub-Himalayan West Bengal, Jharkhand, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Interior Karnataka.
- ❖ **Warm night conditions** very likely to prevail in isolated pockets over Interior Karnataka.

DAY-3:-

- ❖ **Hot and humid weather** very likely to prevail over west Assam & Meghalaya, Tripura, Konkan & Goa, south Gujarat Region, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** very likely to prevail at many places over Gangetic West Bengal, Bihar; in isolated pockets over Odisha; heat wave conditions in isolated pockets over Sub-Himalayan West Bengal, Jharkhand, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Interior Karnataka.
- ❖ **Warm night conditions** very likely to prevail in isolated pockets over Interior Karnataka.

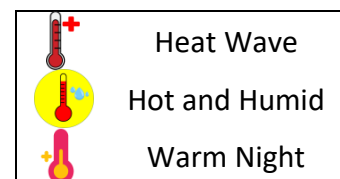
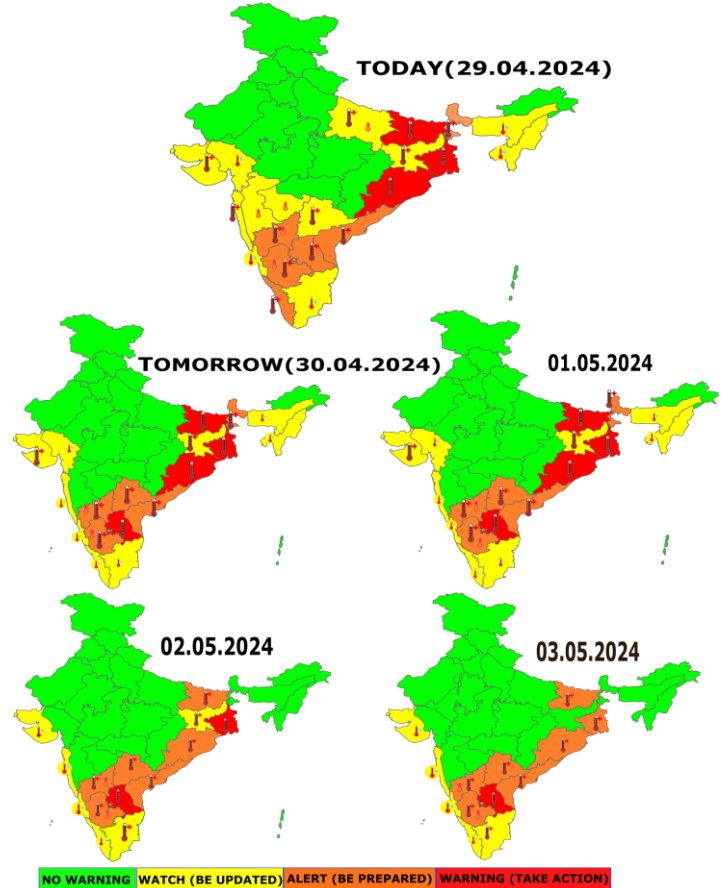
DAY-4:-

- ❖ **Hot and humid weather** likely to prevail over Konkan & Goa, Saurashtra & Kutch, Kerala & Mahe and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** likely to prevail in isolated pockets over Gangetic West Bengal, Rayalaseema; heat wave conditions in isolated pockets over Bihar, Odisha, Jharkhand, Coastal Andhra Pradesh & Yanam, Telangana, Tamil Nadu, Puducherry & Karaikal and Interior Karnataka.
- ❖ **Warm night conditions** likely to prevail in isolated pockets over Interior Karnataka

DAY-5:-

- ❖ **Hot and humid weather** likely to prevail over Konkan & Goa, Saurashtra & Kutch, Kerala & Mahe and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** likely to prevail in isolated pockets over Rayalaseema; heat wave conditions in isolated pockets over Gangetic West Bengal, Bihar, Odisha, Coastal Andhra Pradesh & Yanam, Telangana, Tamil Nadu, Puducherry & Karaikal and Interior Karnataka.
- ❖ **Warm night conditions** likely to prevail in isolated pockets over Interior Karnataka.

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.

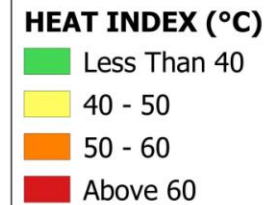
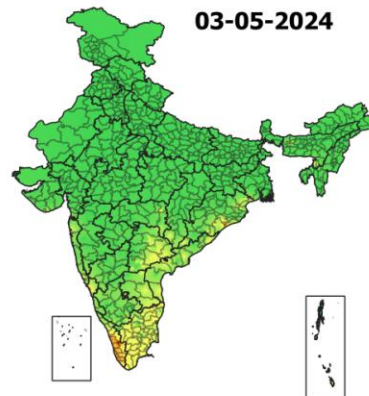
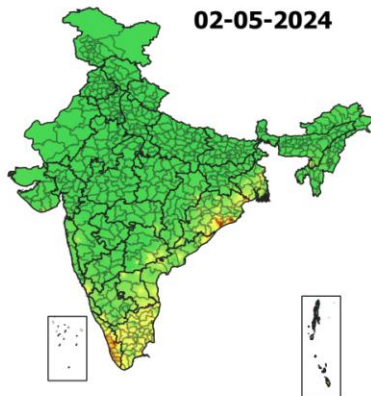
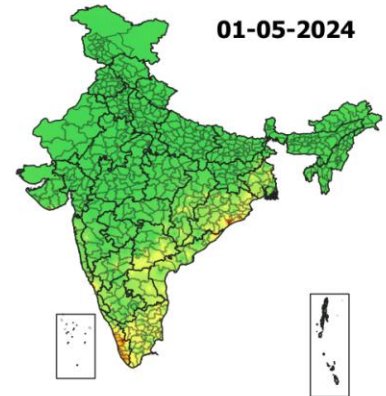
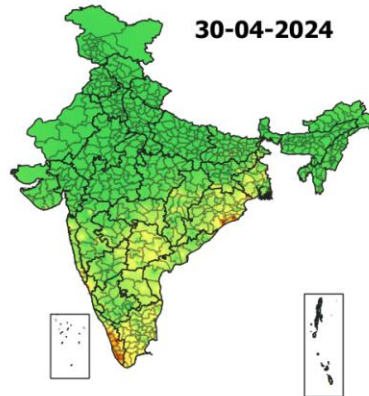
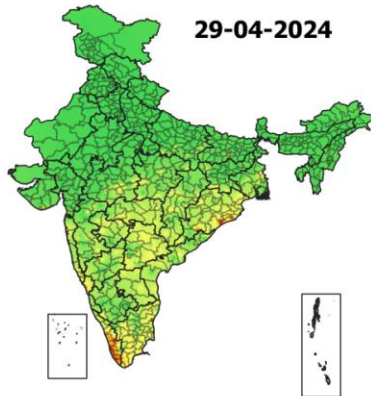
Orange alert Areas:

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.

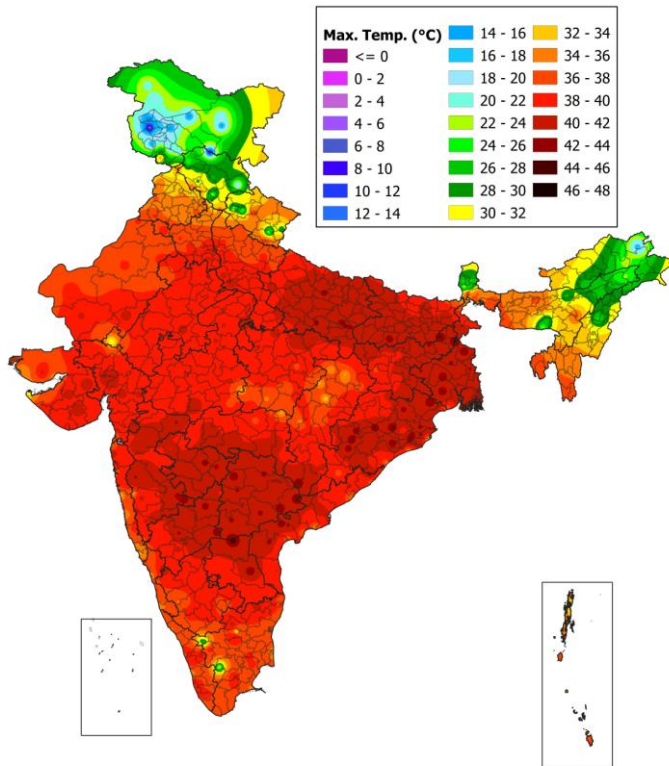
HEAT INDEX (EXPERIMENTAL FORECAST) DATED 29-04-2024



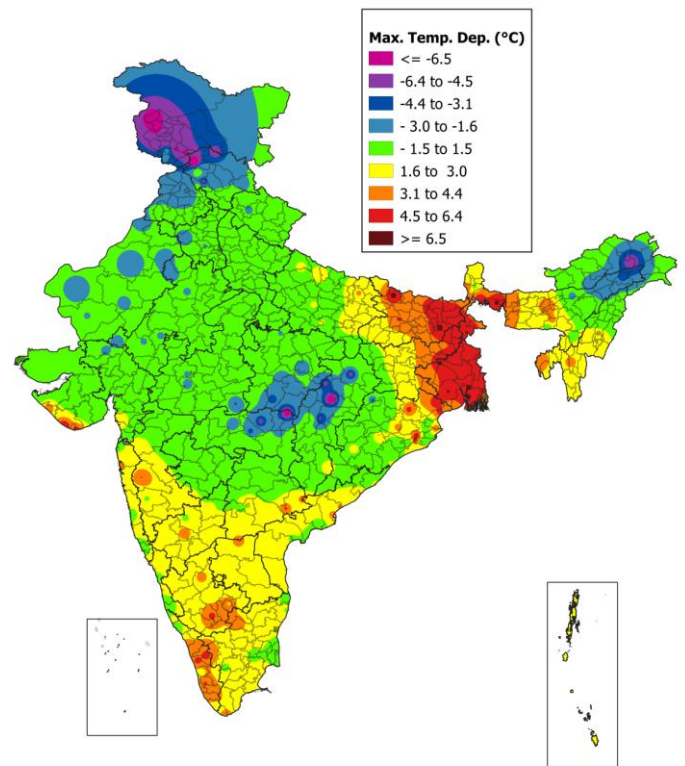
NOT VALIDATED OVER INDIA

Annexure 1

Maximum Temperature Dated 28/04/2024

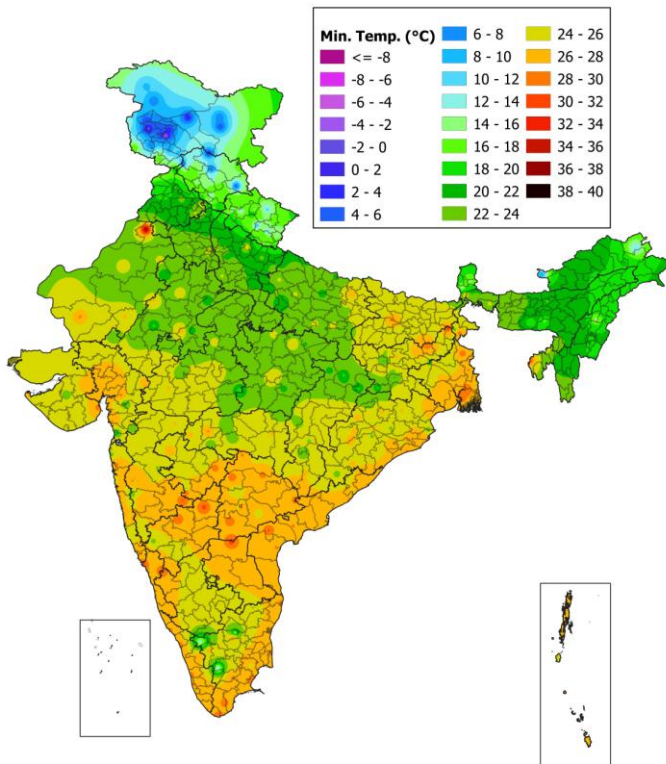


Max Temperature Departure Dated 28/04/2024

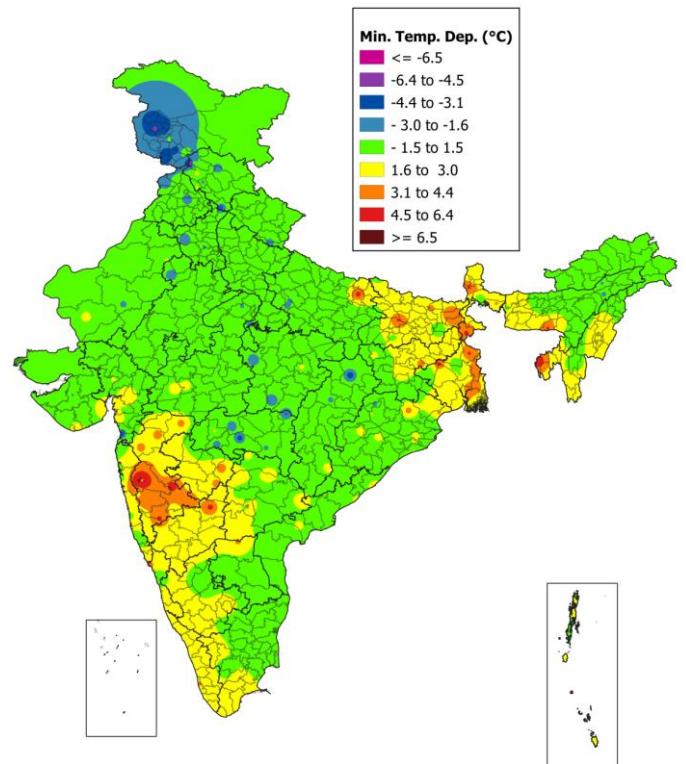


Annexure 2

Minimum Temperature Dated 29/04/2024

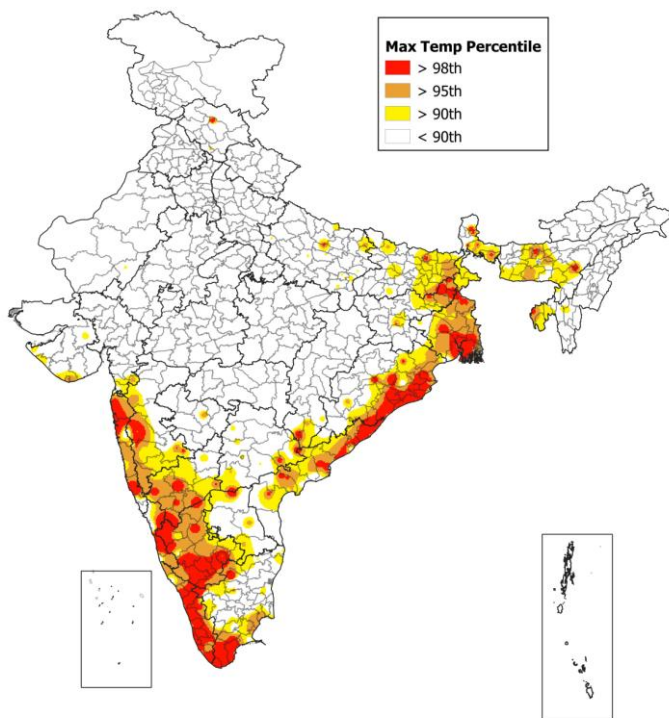


Min Temperature Departure Dated 29/04/2024

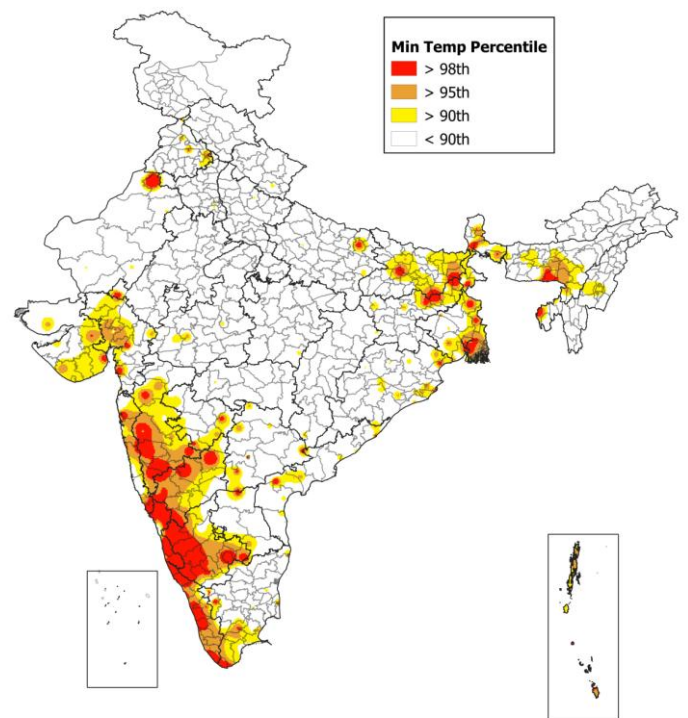


Annexure 3

Max Temp Percentile Dated 28/04/2024

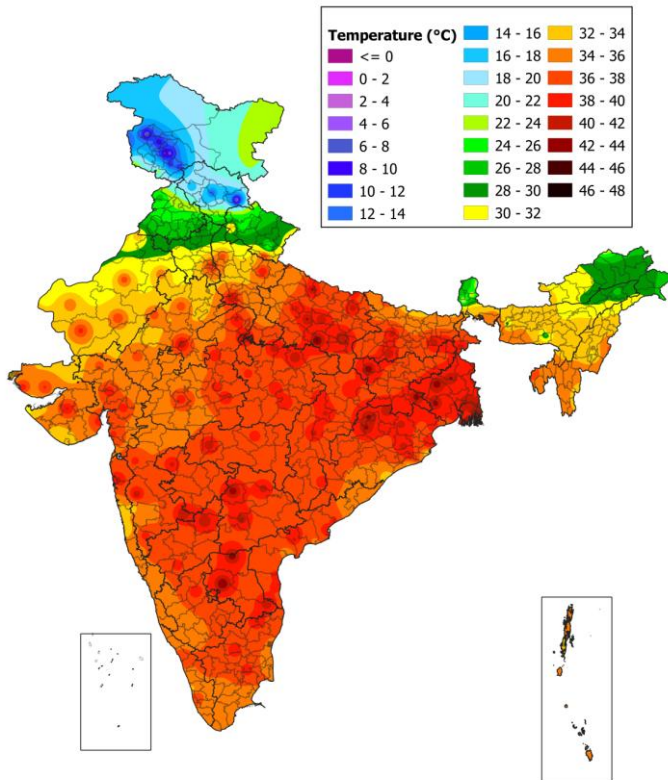


Min Temp Percentile Dated 29/04/2024

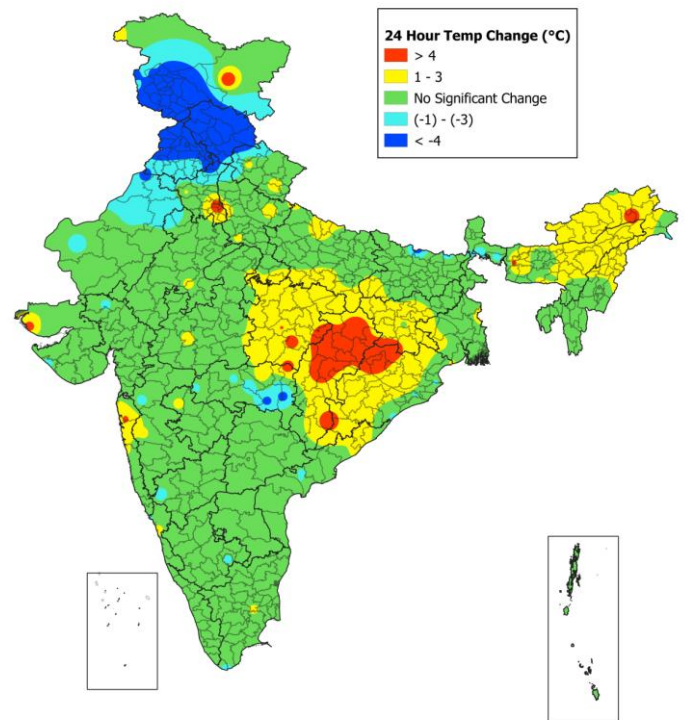


Annexure 4

Observed Temperature at 1430 hrs IST Dated 29/04/2024

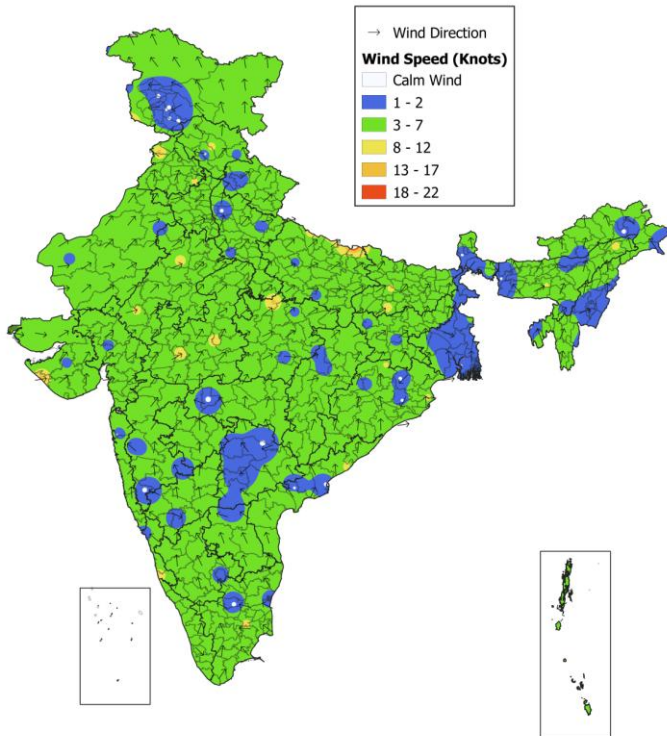


24 hrs Temperature Change at 1430 hrs IST Dated 29/04/2024

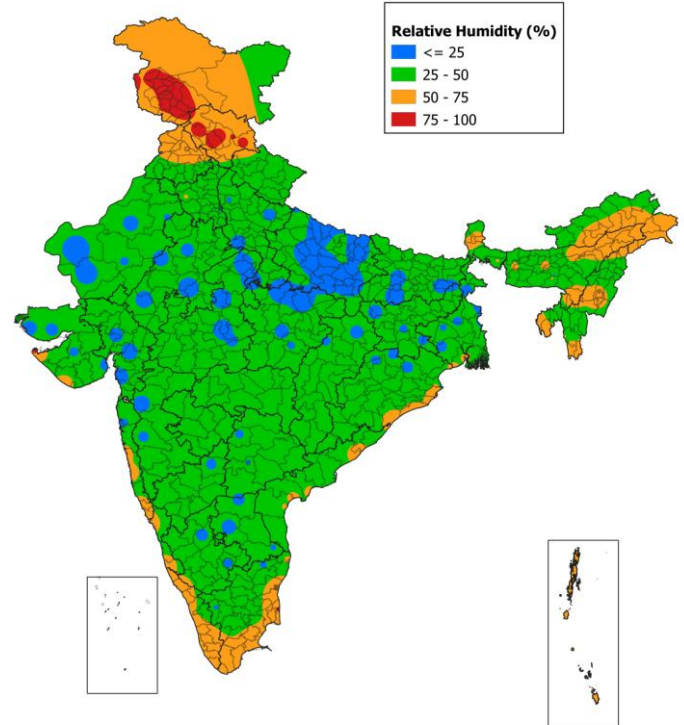


Annexure 5

Wind Map at 1430 hrs IST Dated 29/04/2024



Relative Humidity at 1430 Hrs IST Dated 29/04/2024



For Districtwise heat wave warning visit:

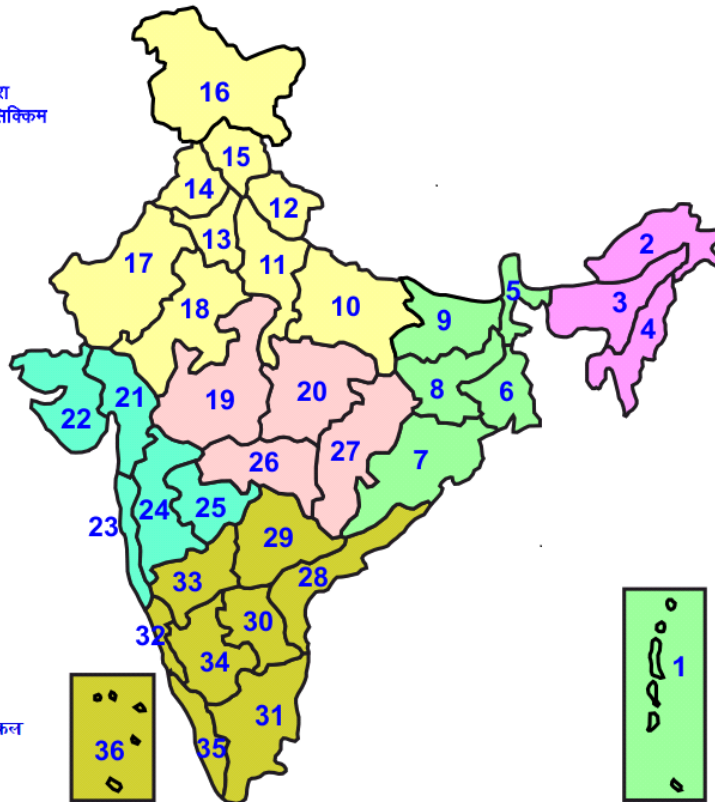
<https://mausam.imd.gov.in/responsive/districtWiseHeatwaveWarning.php>

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.