

Tuesday, April 30, 2024  
Time of Issue: 0800 hours IST  
(MORNING)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

### Significant Weather Features:

#### Weather Systems and Forecast & Warnings:

- ❖ A cyclonic circulation lies over northeast Assam and a trough runs from north Bihar to Manipur in lower tropospheric levels. Under their influence:
  - ✓ Fairly widespread to widespread light to moderate rainfall/snowfall accompanied with isolated **thunderstorm & lightning & gusty winds (40-50 kmph)** very likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 5 days.
  - ✓ Isolated light to moderate rainfall accompanied with **thunderstorm & lightning & gusty winds (30-40 kmph)** very likely over Sikkim on 30<sup>th</sup> April-02<sup>nd</sup> May with isolated **hailstorm** on 01<sup>st</sup> May, 2024.
  - ✓ **Isolated heavy rainfall** very likely over Arunachal Pradesh and Assam & Meghalaya on 30<sup>th</sup> April & 01<sup>st</sup> May and over Nagaland, Manipur, Mizoram & Tripura on 01<sup>st</sup>, 03<sup>rd</sup> & 04<sup>th</sup> May; with isolated **very heavy rainfall** over Arunachal Pradesh, Assam and Mizoram & Tripura and isolated **extremely heavy rainfall** very likely over Meghalaya on 02<sup>nd</sup> May, 2024.
- ❖ A Western Disturbance as a cyclonic circulation lies over Pakistan & adjoining Afghanistan upto middle tropospheric level. Under its influence:
  - ✓ Scattered to fairly widespread light to moderate rainfall/snowfall accompanied with **thunderstorm, lightning** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand on 30<sup>th</sup> April, 2024.
  - ✓ Isolated rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Punjab on 30<sup>th</sup> April, 2024.
  - ✓ **Strong surface winds (25-35 kmph)** very likely to prevail over West Madhya Pradesh, East Uttar Pradesh, Bihar, Jharkhand during 30<sup>th</sup> April-02<sup>nd</sup> May, 2024.
- ❖ A trough/wind discontinuity runs from southeast Madhya Pradesh to South Interior Karnataka in lower tropospheric levels. Under its influence; isolated to scattered light to moderate rainfall accompanied with isolated **thunderstorm & lightning** very likely over Kerala & Mahe during next 7 days and Lakshadweep on 30<sup>th</sup> April, 2024.

#### Maximum temperature observation:

- ❖ Yesterday, maximum temperatures were in the range of 42-45°C over in most parts of Gangetic West Bengal and Odisha; in many parts of Bihar, East Uttar Pradesh, East Madhya Pradesh, Coastal Andhra Pradesh & Yanam and Rayalaseema; in some parts of Jharkhand, Vidarbha, Madhya Maharashtra, Marathwada, Telangana and Tamil Nadu, Puducherry & Karaikal; in isolated parts of North Interior Karnataka and West Madhya Pradesh; in the range of 40-42 in isolated pockets of West Madhya Pradesh, East Rajasthan, Gujarat State and Kerala & Mahe. These were above normal by 4-8°C over in many parts of Gangetic West Bengal and Bihar; in some parts of Sub Himalayan West Bengal and in isolated pockets of north Odisha.

#### Heat Wave, Warm Night and Hot & Humid weather warning for next 5 days

- ❖ **Heat Wave to severe heat wave conditions** very likely to prevail in many places over Odisha, Bihar on 30<sup>th</sup> April & 01<sup>st</sup> May; Gangetic West Bengal during 30<sup>th</sup> April-02<sup>nd</sup> May **and reduce in intensity thereafter. Heat Wave to severe heat wave conditions** very likely to prevail in isolated pockets over Rayalaseema during 02<sup>nd</sup>-04<sup>th</sup> May. **Heat wave conditions** in isolated pockets over Sub-Himalayan West Bengal, Saurashtra & Kutch, Rayalaseema during 30<sup>th</sup> April-02<sup>nd</sup> May and Telangana, Interior Karnataka, Coastal Andhra Pradesh & Yanam during next 5 days.
- ❖ **Hot and humid weather** very likely to prevail over West Assam, Tripura, south Gujarat Region, Tamil Nadu, Puducherry & Karaikal on 30<sup>th</sup> April & 01<sup>st</sup> May and Konkan & Goa, Kerala & Mahe and Coastal Karnataka during 30<sup>th</sup> April-04<sup>th</sup> May, 2024.
- ❖ **Warm night** very likely to prevail over Interior Karnataka during next 5 days.

### Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at many places over Himachal Pradesh and at isolated places over Punjab, West Rajasthan, Nagaland, Manipur, Mizoram & Tripura, Vidarbha, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): **Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad:** Banihal-4, Pahalgam-3, Kupwara and Baderwah-2 each, Quazigund, Batote, Katra, Jammu, Srinagar-1 each; **Himachal Pradesh:** Bhuntar, Manali, Dharamshala-2 each, Mandi, Sundernagar, kalpa-1 each.
- ❖ Yesterday, **Heat Wave to severe heat wave conditions** prevailed in most parts over Gangetic West Bengal; in Few parts over Saurashtra & Kutch, Bihar, Sub-Himalayan West Bengal and Odisha and **Heat wave conditions** in isolated pockets over Jharkhand, Kerala, Konkan and Rayalaseema. *Heat wave conditions have been prevailing over Odisha since 15<sup>th</sup> and over Gangetic West Bengal since 17<sup>th</sup> April.*
- ❖ **Minimum Temperature Departures (as on 29-04-2024):** Minimum temperatures were **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. These were **below normal (-1.6°C to -3.0°C)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 18.1°C** was reported at **Amritsar (Punjab)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 29-04-2024):** Maximum temperatures were **markedly above normal (5.1°C or more)** at most places over Gangetic West Bengal; at a few places over Odisha, Bihar and Sub-Himalayan West Bengal; at isolated places over Konkan & Goa; **appreciably above normal (3.1°C to 5.0°C)** at most places over Kerala & Mahe; at a few places over East Uttar Pradesh, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch and Tamil Nadu, Puducherry & Karaikal; **above normal (1.6°C to 3.0°C)** at many places over Coastal Andhra Pradesh & Yanam, Rayalaseema and Lakshadweep; at a few places over Karnataka and Telangana; at isolated places over West Uttar Pradesh, Chhattisgarh, Jharkhand, Assam & Meghalaya, Madhya Maharashtra and Andaman & Nicobar Islands. These were **markedly below normal (-5.1°C or less)** at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at a few places over Himachal Pradesh; at isolated places over Punjab and Haryana-Chandigarh; **appreciably below normal (-3.1°C to -5.0°C)** at many places over West Rajasthan; at isolated places over East Rajasthan; **below normal (-1.6°C to -3.0°C)** at isolated places over Gujarat Region, West Madhya Pradesh and Vidarbha and **near normal** over rest parts of the country. Yesterday, **the highest maximum temperature of 45.4°C** was reported at **Kandla (Saurashtra & Kutch) and Kalaikunda (Gangetic West Bengal)** over the country.

### Meteorological Analysis (Based on 0530 hours IST)

- ❖ The Western Disturbance as a cyclonic circulation over east Afghanistan & adjoining Pakistan now lies over Pakistan & adjoining Afghanistan between 3.1 km & 9.6 km above mean sea level.
- ❖ The cyclonic circulation over northeast Assam & neighbourhood between 1.5 & 3.1 km above mean sea level persists.
- ❖ The trough from north Bihar to Manipur across Sub-Himalayan West Bengal and south Assam at 0.9 km above mean sea level persists.
- ❖ The trough/wind discontinuity from central Vidarbha to Coastal Karnataka now runs from southeast Madhya Pradesh to South Interior Karnataka across Vidarbha, Marathawada & North Interior Karnataka and extends upto 1.5 km above mean sea level.
- ❖ The cyclonic circulation over south Tamil Nadu & neighbourhood at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over central parts of South Arabian Sea now lies over Southwest Arabian Sea & adjoining equatorial Indian Ocean and extends upto 4.5 km above mean sea level.
- ❖ A fresh Western Disturbance is likely to affect Western Himalayan Region from the night of 03<sup>rd</sup> May, 2024.
- ❖ The cyclonic circulation over northwest Rajasthan & neighbourhood extending upto 1.5 km above mean sea level has become less marked.

### Weather Forecast for next 7 days (Upto 0830 hours IST of 07<sup>th</sup> May, 2024)

- ❖ Meteorological sub-division wise detailed 7 days rainfall forecast is given in Table-1.
- ❖ Rise in maximum temperatures by about 1-2 °C very likely over East India during next 24 hours 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.
- ❖ Rise in maximum temperatures by 2-3°C very likely over Tamil Nadu during next 2-3 days and no significant change thereafter.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country.

### Weather Outlook for subsequent 3 days (During 07<sup>th</sup>-09<sup>th</sup> May, 2024)

- ❖ Isolated to scattered light/moderate rainfall likely over Northwest, Northeast & south Peninsular India.
- ❖ Dry weather likely to prevail over rest parts of the country.

Table-1

7 Days Rainfall Forecast								
S. No.	Subdivision	30-Apr	01-May	02-May	03-May	04-May	05-May	06-May
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	ISOL	ISOL	ISOL	ISOL	DRY	DRY	DRY
2	ARUNACHAL PRADESH	FWS	WS	WS	FWS	FWS	FWS	FWS
3	ASSAM & MEGHALAYA	SCT	WS	WS	FWS	FWS	FWS	FWS
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	SCT	FWS	WS	WS	FWS	FWS	FWS
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	ISOL	SCT	SCT	ISOL	SCT	FWS	FWS
6	GANGETIC WEST BENGAL	DRY	DRY	DRY	DRY	DRY	ISOL	SCT
7	ODISHA	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL
8	JHARKHAND	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL
9	BIHAR	DRY	DRY	DRY	ISOL	ISOL	ISOL	ISOL
10	EAST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
11	WEST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	ISOL	SCT
12	UTTARAKHAND	ISOL	DRY	DRY	DRY	ISOL	ISOL	SCT
13	HARYANA CHANDIGARH & DELHI	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
14	PUNJAB	ISOL	DRY	DRY	DRY	ISOL	DRY	ISOL
15	HIMACHAL PRADESH	SCT	ISOL	DRY	DRY	SCT	ISOL	SCT
16	JAMMU & KASHMIR AND LADAKH	FWS	ISOL	DRY	ISOL	SCT	ISOL	ISOL
17	WEST RAJASTHAN	DRY	DRY	DRY	DRY	ISOL	DRY	ISOL
18	EAST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
19	WEST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
20	EAST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
21	GUJARAT REGION	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASHTRA & KUTCH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
25	MARATHAWADA	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
26	VIDARBHA	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
27	CHHATTISGARH	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
28	COASTAL ANDHRA PRADESH & YANAM	ISOL	DRY	DRY	DRY	DRY	DRY	SCT
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
30	RAYALASEEMA	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
33	NORTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
34	SOUTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL
35	KERALA & MAHE	ISOL	ISOL	ISOL	ISOL	SCT	SCT	ISOL
36	LAKSHADWEEP	WS	DRY	DRY	DRY	DRY	DRY	DRY

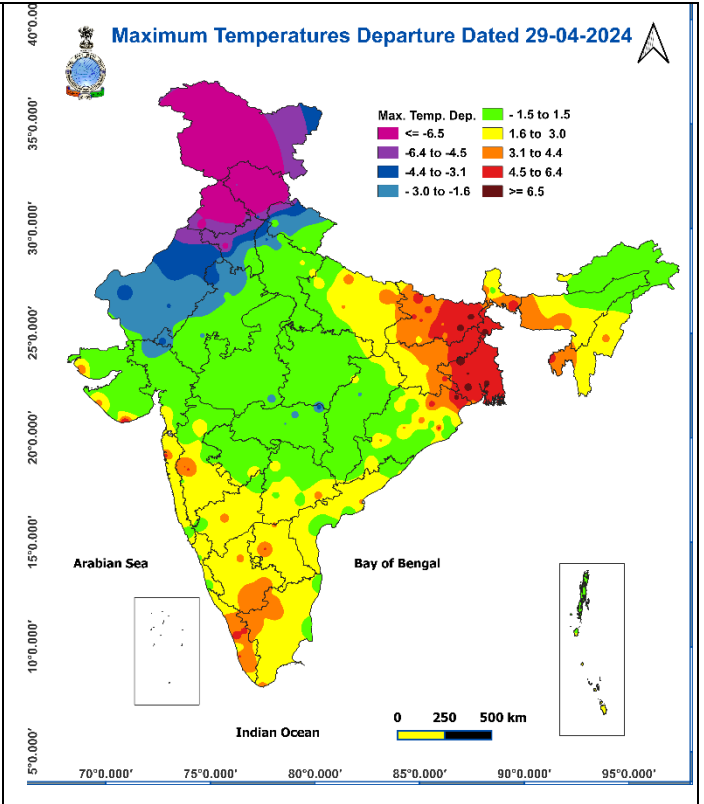
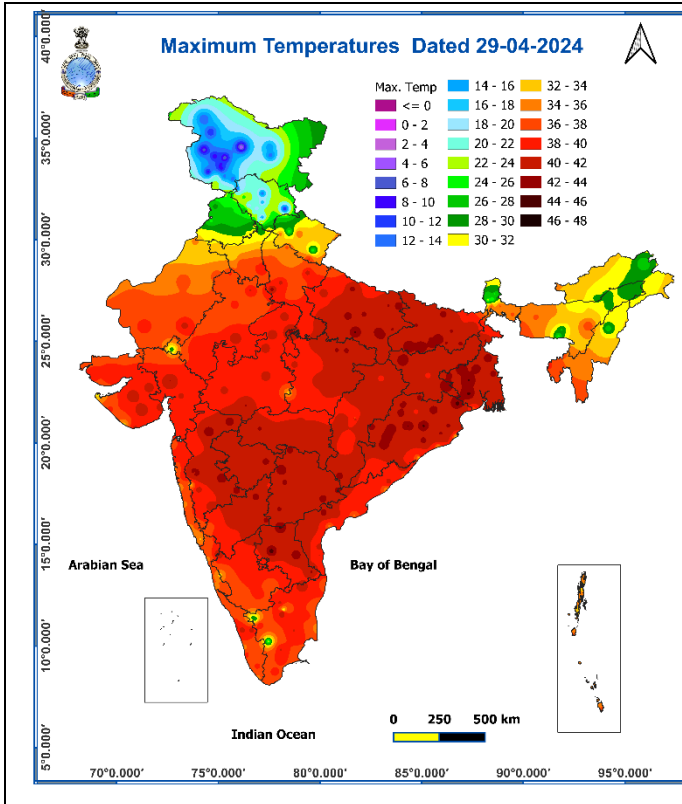
Legend	Category	% Stations
WS	Widespread/Most Places	76-100
FWS	Fairly Widespread/Many Places	51-75
SCT	Scattered/ A Few Places	26-50
ISOL	Isolated Places	1-25
DRY	No Rain	0

\* Red colour warning does not mean "Red Alert", Red colour 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.  
For more details, kindly visit <https://mausam.imd.gov.in> or contact: 011-2434-4599  
(Service to the Nation since 1875)



**Fig. 1: Maximum Temperatures**

**Fig. 2: Departure of Maximum Temperatures**



**Fig. 3: Minimum Temperatures**

**Fig. 4: Departure of Minimum Temperatures**

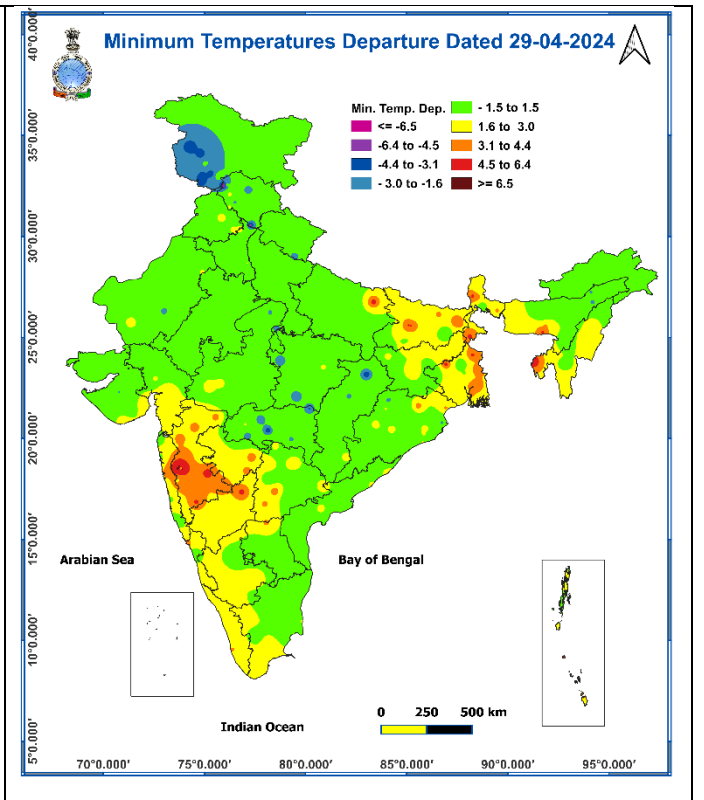
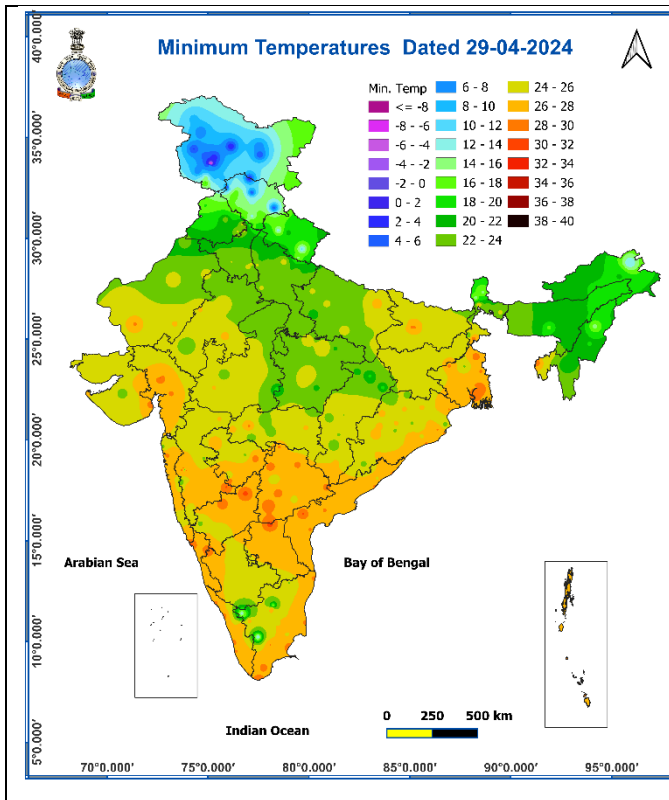
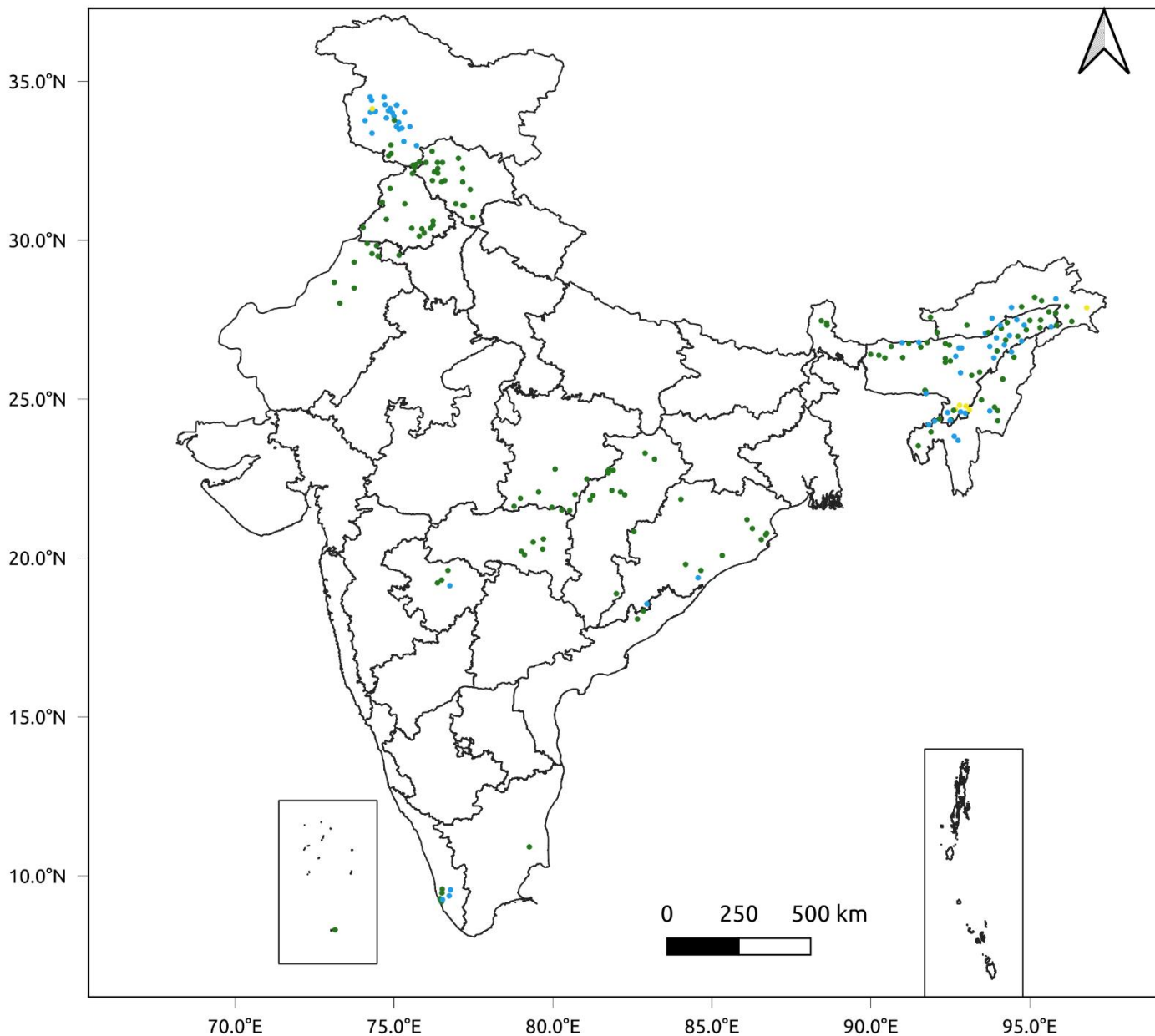


Fig. 5: Accumulated Rainfall (mm) during past 24 hours

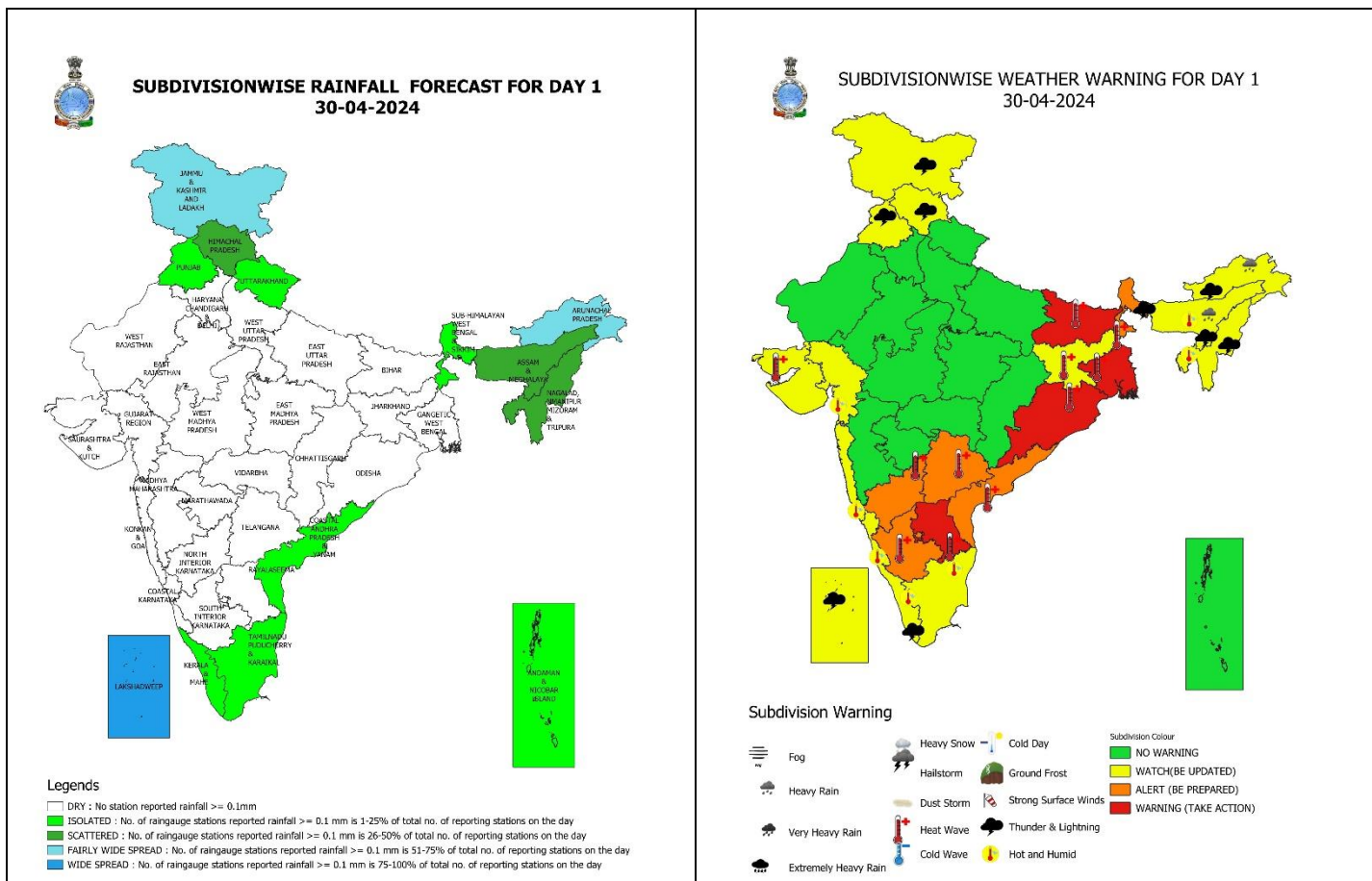


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 28-4-2024 to 0830 IST of 29-4-2024



## Legends

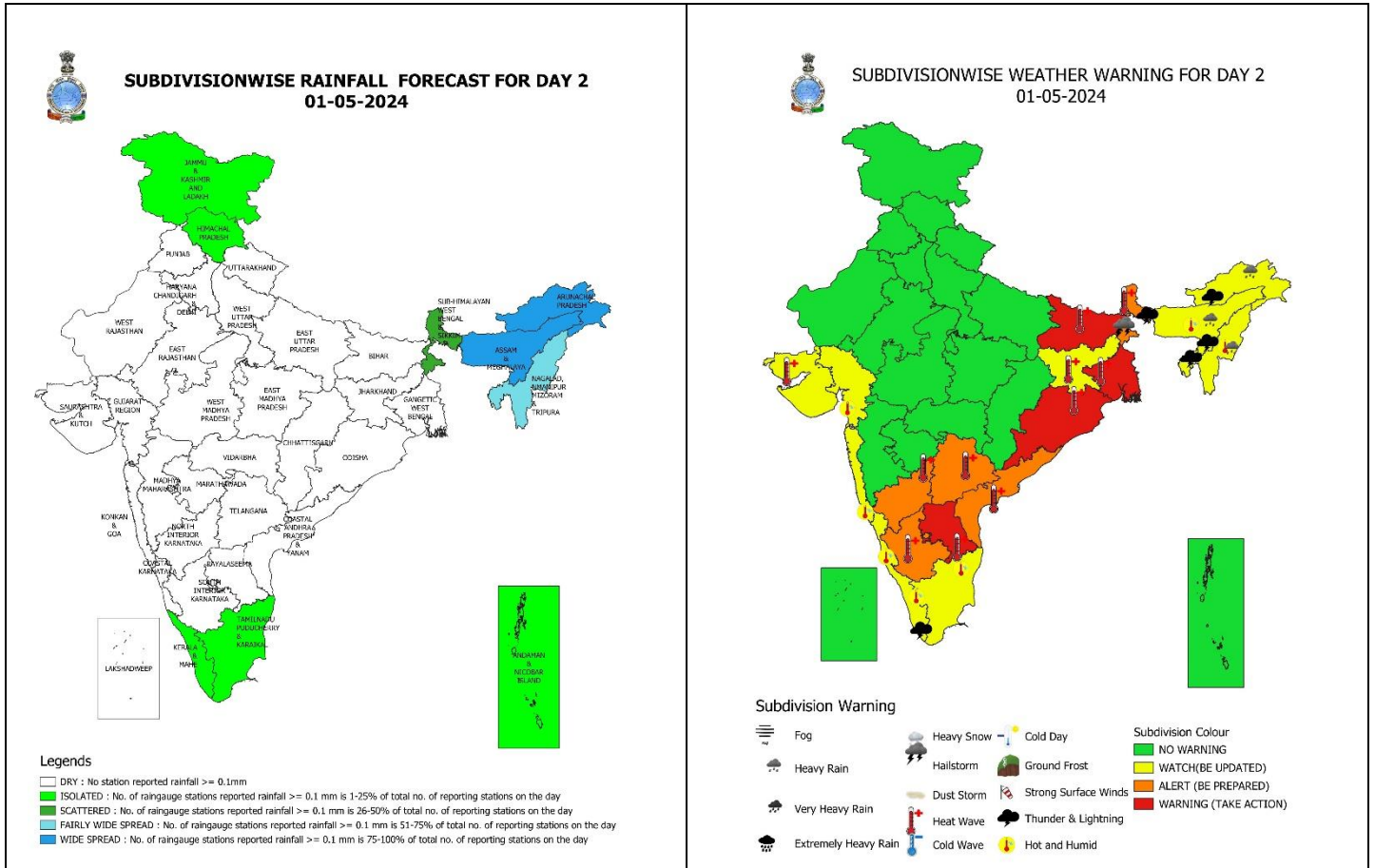
- Very Light to Light Rainfall (0.1 - 15.5 mm)
- Moderate Rainfall (15.6 - 64.4 mm)
- Heavy Rainfall (64.5 - 115.5 mm)
- Very Heavy Rainfall (115.6 - 204.4 mm)
- Extremely Heavy Rainfall ( $\geq 204.5$  mm)



**30 April (Day 1):**

- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Lakshadweep; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Sub-Himalayan West Bengal & Sikkim; **with lightning** at isolated places over Himachal Pradesh, Arunachal Pradesh and Kerala & Mahe.
- ❖ **Heavy rainfall** very likely at isolated places over Arunachal Pradesh and Assam & Meghalaya.
- ❖ **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.

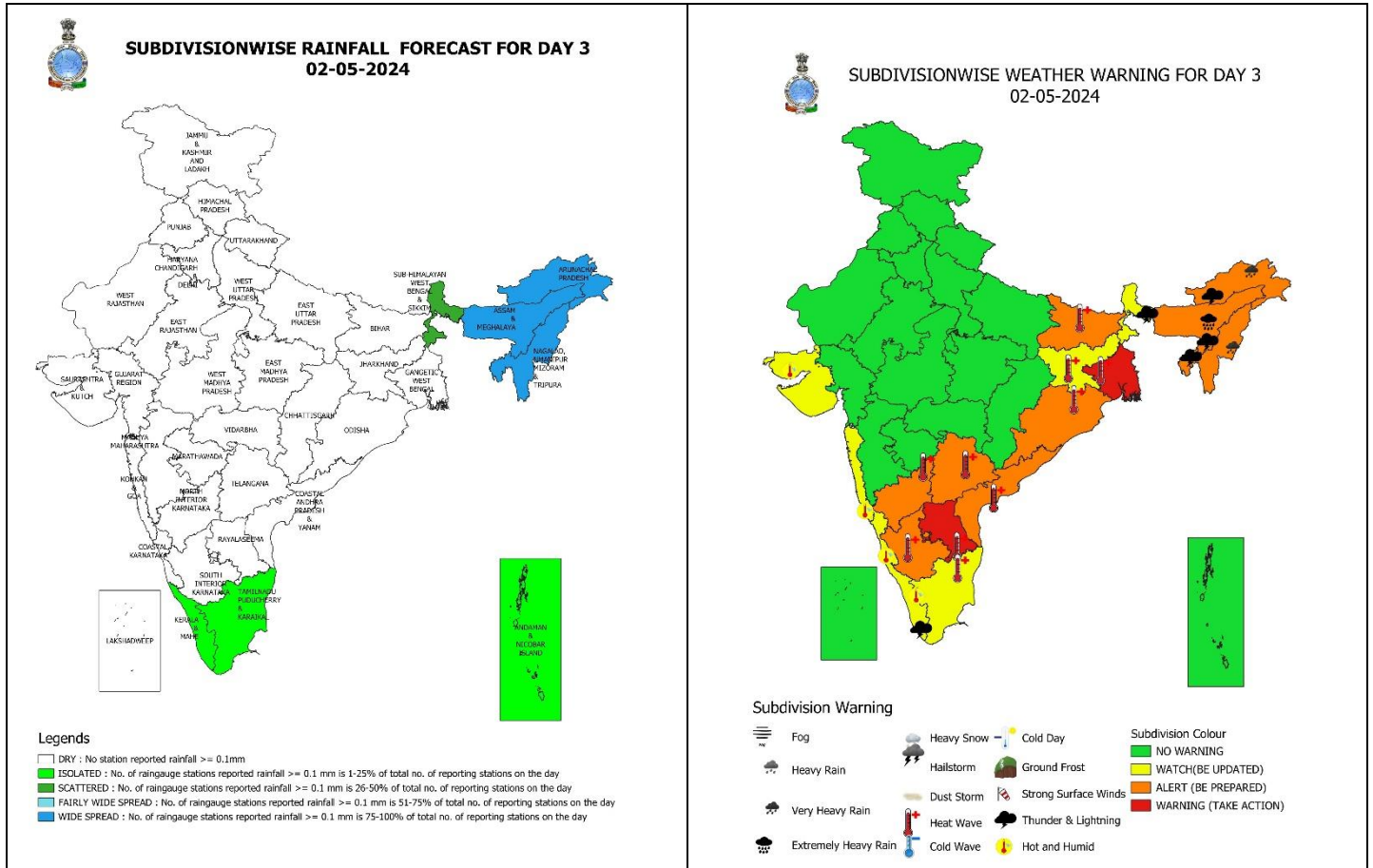




## 01 May (Day 2):

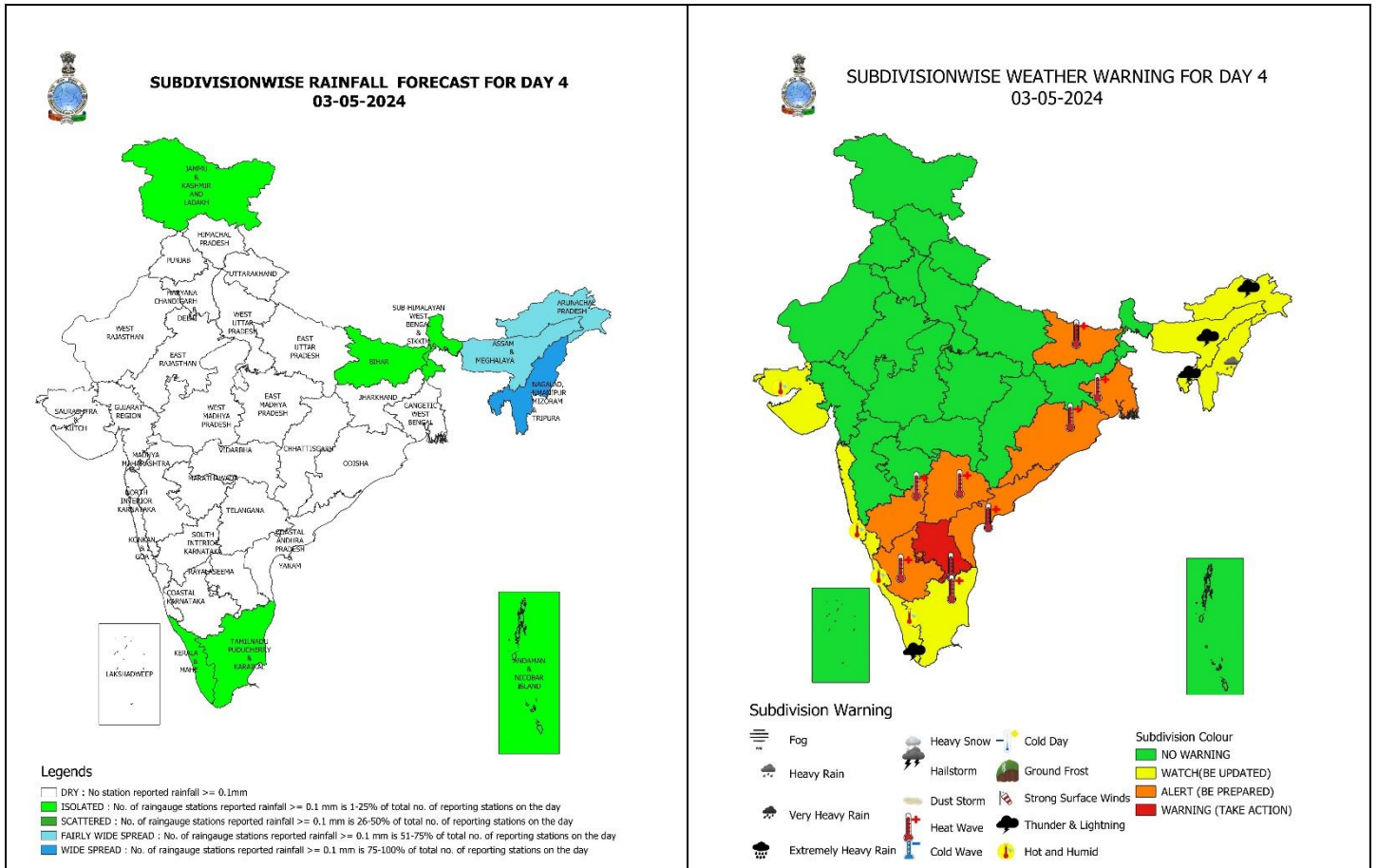
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph) & hailstorm** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim; **with lightning & gusty winds (speed reaching 40-50 kmph)** at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; **with lightning** at isolated places over Arunachal Pradesh and Kerala & Mahe.
- ❖ **Heavy rainfall** very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **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.





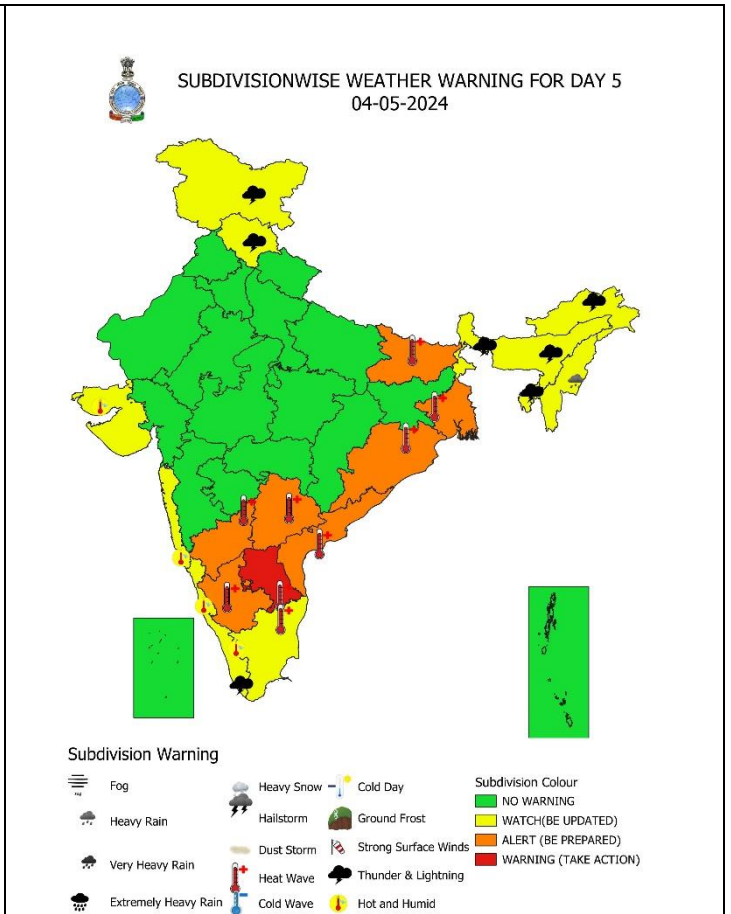
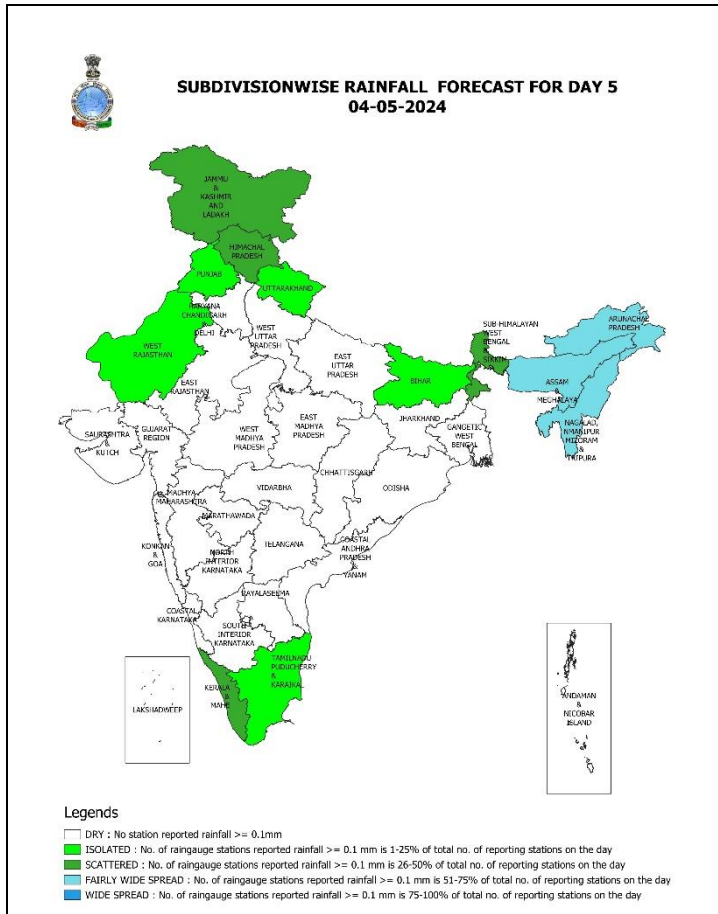
## 02 May (Day 3):

- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Sub-Himalayan West Bengal & Sikkim; **with lightning** at isolated places over Arunachal Pradesh and Kerala & Mahe.
- ❖ **Heavy to very heavy rainfall with extremely heavy falls** very likely at isolated places over Assam & Meghalaya; **Heavy to very heavy rainfall** at isolated places over Arunachal Pradesh and Mizoram & Tripura and **heavy rainfall** at isolated places over Nagaland, & Manipur.
- ❖ **Hot and humid weather** very likely to prevail over Konkan & Goa, Saurashtra & Kutch, Kerala & Mahe and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** very 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** very likely to prevail in isolated pockets over Interior Karnataka.



### 03 May (Day 4):

- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Nagaland, Manipur, Mizoram & Tripura; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Assam & Meghalaya and **with lightning** at isolated places over Arunachal Pradesh and Kerala & Mahe.
- ❖ **Heavy rainfall** likely at isolated places over Nagaland & Manipur.
- ❖ **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.



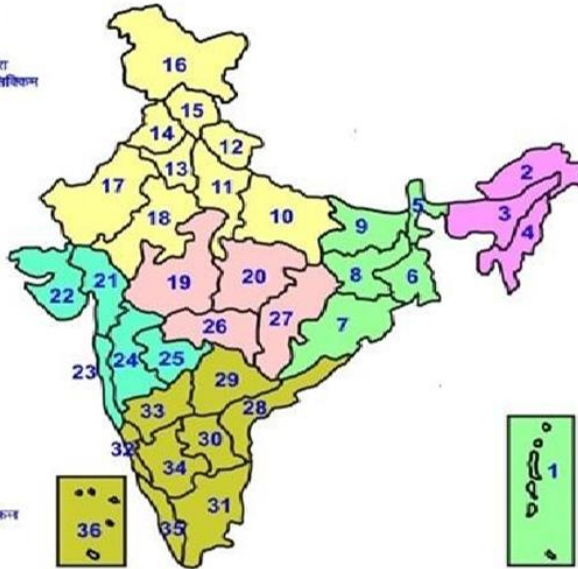
### 04 May (Day 5):

- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Nagaland, Manipur, Mizoram & Tripura; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Assam & Meghalaya and **with lightning** at isolated places over Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Kerala & Mahe.
- ❖ **Heavy rainfall** likely at isolated places over Nagaland & Manipur.
- ❖ **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.



## LEGENDS

- 1 अंडमन और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
- 5 उप-हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम बंगाल
- 7 ओडिशा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखण्ड
- 13 हरियाणा, चंडीगढ़ 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
- 22 सागराश्रम
- 23 कोंकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठवाड़ा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 आंध्र प्रदेश एवं यानम
- 29 तेलंगाना
- 30 तेलंगाना
- 31 तमिलनाडु, पुदुचेरी एवं कराईकल
- 32 आंतरिक उत्तरी कर्नाटक
- 33 आंतरिक दक्षिणी कर्नाटक
- 34 केरल एवं माहे
- 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. Odisha
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. Tamilnada, 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)

## WARNING

<b>WARNING (TAKE ACTION)</b>
<b>ALERT ( BE PREPARED)</b>
<b>WATCH (BE UPDATED)</b>
<b>NO WARNING ( NO ACTION)</b>

## Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75



## 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 \*



Heat Wave

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  $4.5^\circ\text{C}$  to  $6.4^\circ\text{C}$ .  
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  $\geq 37^\circ\text{C}$



Warm Night

When maximum temperature remains  $40^\circ\text{C}$

Warm Night: When minimum temperature departure  $4.5^\circ\text{C}$  to  $6.4^\circ\text{C}$ .  
Severe Warm Night: When minimum temperature departure  $> 6.4^\circ\text{C}$ .



Cold Wave

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  $-4.5^\circ\text{C}$  to  $-6.4^\circ\text{C}$ .  
Severe Cold Wave: Minimum Temperature Departure from normal  $\leq -6.5^\circ\text{C}$

(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  $\leq -4.5^\circ\text{C}$  & actual Minimum Temperature is  $\leq 15^\circ\text{C}$



Cold Day

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  $-4.5^\circ\text{C}$  to  $-6.4^\circ\text{C}$ .  
Severe Cold Day: Maximum Temperature Departure from normal  $\leq -6.5^\circ\text{C}$



Fog

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



Thunderstorm

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



Dust/Sand Storm

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



Frost

Ice deposits on ground

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



Squall

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



Sea State

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



Cyclone

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)