

Sunday, April 28, 2024  
Time of Issue: 1630 hours IST  
(EVENING)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

### Significant Weather Features:

#### Weather Systems and Forecast & Warnings:

- ❖ A Western Disturbance as a cyclonic circulation lies over east Afghanistan & neighbourhood upto middle tropospheric level and a cyclonic circulation lies over northwest Rajasthan & neighbourhood in lower tropospheric levels. Under their influence:
  - ✓ Farley widespread to Widespread light to moderate rainfall/snowfall accompanied with **thunderstorm, lightning** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during 28<sup>th</sup> April -30 April, 2024 with possibility of **hailstorm over Himachal Pradesh on 28<sup>th</sup> & 29<sup>th</sup> and Uttarakhand on 29<sup>th</sup> April, 2024.**
  - ✓ Isolated **Heavy rainfall** also likely over Jammu-Kashmir-Gilgit-Baltistan-Muzaffarabad on 28<sup>th</sup> & 29<sup>th</sup> April and over Himachal Pradesh on 29<sup>th</sup> April, 2024.
  - ✓ Isolated to scattered rainfall accompanied with **thunderstorm, lightning & gusty winds (40-50 kmph)** very likely over Punjab, Haryana-Chandigarh during 28<sup>th</sup> & 29<sup>th</sup> April, 2024.
  - ✓ Isolated rainfall accompanied with **thunderstorm, lightning & gusty winds (35-45 kmph)** very likely over Uttar Pradesh on 28<sup>th</sup> & 29<sup>th</sup> April, 2024.
  - ✓ Isolated **Hailstorm** very likely over Punjab on 29<sup>th</sup> April, 2024.
  - ✓ **Duststorm/thundersquall** (50-60 kmph) very likely over south Haryana and West Uttar Pradesh on 28<sup>th</sup> April, 2024.
- ❖ A trough/wind discontinuity runs from eastern parts of Vidarbha to north Kerala in lower tropospheric levels. Another trough runs from northeast Jharkhand to south Chhattisgarh. Under their influence:
  - ✓ Isolated light rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over West Madhya Pradesh on 28<sup>th</sup>, over East Madhya Pradesh, Vidarbha, Chhattisgarh on 28<sup>th</sup> & 29<sup>th</sup> and **with lightning** over Marathwada on 28<sup>th</sup> April, 2024.
  - ✓ Isolated to scattered light to moderate rainfall accompanied with isolated **thunderstorm & lightning** very likely over Kerala & Mahe during next 5 days; over Lakshadweep on 28<sup>th</sup>-29<sup>th</sup>; and **gusty winds (30-40 kmph)** very likely over Coastal Andhra Pradesh & Yanam during 28<sup>th</sup>- 30<sup>th</sup> April, 2024.
- ❖ A cyclonic circulation lies over northeast Assam in lower tropospheric levels. Under its 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 and Fairly widespread to fairly widespread rainfall over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 27<sup>th</sup> April-02<sup>nd</sup> May, 2024.
  - ✓ Isolated light to moderate rainfall accompanied with **thunderstorm & lightning & gusty winds (30-40 kmph)** very likely over Sikkim on 28<sup>th</sup> April-01<sup>st</sup> May and over Arunachal Pradesh during next 7 days.
  - ✓ **Isolated heavy to very heavy rainfall** very likely over Arunachal Pradesh and Assam & Meghalaya on 01<sup>st</sup>-02<sup>nd</sup> May and over Nagaland, Manipur, Mizoram & Tripura on 02<sup>nd</sup> May; with isolated heavy rainfall over Arunachal Pradesh & Assam & Meghalaya during 28<sup>th</sup>- 30<sup>th</sup> April; over Nagaland, Manipur, Mizoram & Tripura on 01<sup>st</sup> May 2024.
  - ✓ **Isolated extremely heavy rainfall** very likely over Assam & Meghalaya on 02<sup>nd</sup> May, 2024.

#### Maximum temperature observation and forecast for next 5 days:

- ❖ Yesterday, **maximum temperatures** were in the range of **42-45°C** over some places over Odisha, Gangetic West Bengal, Coastal Andhra Pradesh, Rayalaseema and Telangana; 40-42 over many parts of Bihar, Jharkhand, Chhattisgarh, Interior parts of Maharashtra, North Tamil Nadu, Marathwada, east Uttar Pradesh. These were **above normal by 4-9°C** over in many parts of Gangetic West Bengal and in some parts 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 Gangetic West Bengal, Odisha and Bihar, in some parts over Jharkhand during next 4 days till 1 May and then **Heat Wave to severe heat wave conditions likely at isolated places over these areas on 2 May. Heat Wave to severe heat wave conditions likely at isolated places over Sub-Himalayan West Bengal on 28 April and Heat wave conditions** in isolated pockets for subsequent 3 days till 1 May. **Heat wave conditions** in isolated pockets over Rayalaseema, Interior Karnataka, Tamil Nadu and Andhra Pradesh during next 5 days, Telangana during 29 April to 1 May; Kerala & Mahe on 28<sup>th</sup> April; Konkan on 28<sup>th</sup> and 29 April and East Uttar Pradesh during 28<sup>th</sup>-30<sup>th</sup> April.
- ❖ **Hot and humid weather** very likely to prevail over West Assam & Meghalaya, Tripura during 28<sup>th</sup>-29<sup>th</sup>; Kerala & Mahe, Coastal Karnataka during next 5-days, Telangana on 28 April and 2<sup>nd</sup> May, Konkan & Goa during 30<sup>th</sup> April April-01<sup>st</sup> May 2024.

## Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at many places over Himachal Pradesh; at a few places over Uttarakhand, Arunachal Pradesh, Assam & Meghalaya; at isolated places over Punjab, Haryana, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam.
- ❖ **Significant amount of rainfall** (from 0830 hours IST of yesterday to 0830 hours IST of today) (in cm): **Himachal Pradesh:** Rampur Bushar (dist Shimla) 4, Kumarsain (dist Shimla) 3, Kataula (dist Mandi) 3, Shimla AERO (dist Shimla) 3, Chamba AWS (dist Chamba) 2, Mashobra AWS (dist Shimla) 2, Narkanda AWS (dist Shimla) 2, Saloni (dist Chamba) 2; **Haryana-Chandigarh-Delhi:** Chandigarh Aws (dist Chandigarh) 1, Chandigarh (dist Chandigarh) 1, Naraingarh (dist Ambala) 1; **West Uttar Pradesh:** Shahjahanpur (t) (dist Shahjahanpur) 1, Shahjahapur Obsy (dist Shahjahanpur) 1; **East Madhya Pradesh:** Junnardeo (dist Chindwara) 1; **West Madhya Pradesh:** Multai (dist Betul) 1; **Kerala & Mahe:** Enadimangalam AWS (dist Pathanamthitta) 1.
- ❖ Yesterday, **Heat wave conditions** reported at some/many places with **severe heat wave conditions** at isolated places over Odisha and Gangetic West Bengal. **Heat Wave conditions** reported at isolated places over Kerala. **Heat wave conditions have been prevailing over Odisha since 15<sup>th</sup> and Gangetic West Bengal since 17<sup>th</sup> April.**
- ❖ **Minimum Temperature Departures (as on 28-04-2024):** Minimum temperatures are **markedly above normal (5.1°C or more)** at isolated places over Madhya Maharashtra; **appreciably above normal (3.1°C to 5.0°C)** at a few places over Bihar; at isolated places over West Bengal & Sikkim and Konkan & Goa; **above normal (1.6°C to 3.0°C)** at most places over North Interior Karnataka; at many places over Odisha, Marathwada and Assam & Meghalaya; at a few places over Jharkhand, Telangana and Nagaland, Manipur, Mizoram & Tripura; at isolated places over East Uttar Pradesh, Arunachal Pradesh, Gujarat Region, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. These are **below normal (-1.6°C to -3.0°C)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, West Uttar Pradesh, Rajasthan and **near normal** over rest parts of the country. Today, **the lowest minimum temperature of 18.6°C** is reported at **Muzaffarnagar (West Uttar Pradesh)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 27-04-2024):** Maximum temperatures were **markedly above normal (5.1°C or more)** at many places over Gangetic West Bengal; at isolated places over Bihar; **appreciably above normal (3.1°C to 5.0°C)** at a few places over Odisha, Jharkhand, Nagaland, Manipur, Mizoram & Tripura, Assam & Meghalaya; and at isolated places over Arunachal Pradesh, South Interior Karnataka, Rayalaseema and Kerala & Mahe; **above normal (1.6°C to 3.0°C)** at many places over North Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam; at a few places over Telangana; at isolated places over East Uttar Pradesh, Chhattisgarh, Konkan & Goa, Coastal Karnataka, Gujarat Region. 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, Punjab and at isolated places over north Rajasthan, Uttarakhand; **below normal (-1.6°C to -3.0°C)** at a few places over West Madhya Pradesh; at isolated places over East Madhya Pradesh, Vidarbha, Haryana-Chandigarh and **near normal** over rest parts of the country. Yesterday, **the highest maximum temperature of 45.8°C** was reported at **Kalaikunda (Gangetic West Bengal)** over the country.

## Meteorological Analysis (Based on 1430 hours IST)

- ❖ The Western Disturbance as a cyclonic circulation over east Afghanistan & neighbourhood between 3.1 & 5.8 km above mean sea level with a trough aloft in upper tropospheric westerlies with its axis at 7.6 km above mean sea level roughly along long. 65°E to the north of lat. 32°N persists.
- ❖ The cyclonic circulation over northwest Rajasthan & neighbourhood at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over northeast Assam & neighbourhood extending upto 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over north Bangladesh & neighbourhood at 0.9 km above mean sea level persists.
- ❖ The trough from northeast Jharkhand to south Chhattisgarh at 0.9 km above mean sea level persists.
- ❖ The trough/wind discontinuity from eastern parts of Vidarbha to north Kerala across Madhya Maharashtra, interior Karnataka extending upto 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over Gulf of Mannar & neighbourhood at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over central parts of south Arabian Sea extending upto 1.5 km above mean sea level persists.
- ❖ A fresh Western Disturbance is likely to affect Western Himalayan Region from 04<sup>th</sup> May, 2024.

## Weather Forecast for next 7 days (Upto 0830 hours IST of 05<sup>th</sup> May, 2024)

- ❖ Meteorological sub-division wise detailed 7 days rainfall forecast is given in Table-1.
- ❖ No large change during next 24 hours, fall in maximum temperatures by 2-3°C very likely over northwest India during subsequent 2-3 days.
- ❖ No large change during next 24 hours and then gradual increase by 2-3°C maximum temperatures very likely over Central India during subsequent 3 days.
- ❖ Rise in maximum temperatures by about 1-2 °C very likely over East India during next 2 days and no significant change thereafter.
- ❖ Rise in maximum temperatures by 2-3°C very likely over west India during next 2 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.

## Weather Outlook for subsequent 3 days (During 05<sup>th</sup>-07<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	28-Apr	29-Apr	30-Apr	01-May	02-May	03-May	04-May
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
2	ARUNACHAL PRADESH	ISOL	ISOL	ISOL	ISOL	ISOL	FWS	FWS
3	ASSAM & MEGHALAYA	SCT	FWS	WS	WS	WS	FWS	FWS
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	SCT	SCT	FWS	FWS	WS	WS	FWS
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	ISOL	ISOL	ISOL	SCT	SCT	DRY	DRY
6	GANGETIC WEST BENGAL	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
7	ODISHA	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
8	JHARKHAND	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
9	BIHAR	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL
10	EAST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
11	WEST UTTAR PRADESH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
12	UTTARAKHAND	ISOL	SCT	ISOL	ISOL	DRY	DRY	DRY
13	HARYANA CHANDIGARH & DELHI	ISOL	ISOL	DRY	DRY	DRY	DRY	ISOL
14	PUNJAB	SCT	SCT	ISOL	DRY	DRY	DRY	ISOL
15	HIMACHAL PRADESH	WS	WS	SCT	ISOL	DRY	DRY	ISOL
16	JAMMU & KASHMIR AND LADAKH	WS	WS	WS	ISOL	ISOL	ISOL	ISOL
17	WEST RAJASTHAN	ISOL	DRY	DRY	DRY	DRY	DRY	ISOL
18	EAST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	ISOL
19	WEST MADHYA PRADESH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
20	EAST MADHYA PRADESH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
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	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
25	MARATHAWADA	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
26	VIDARBHA	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
27	CHHATTISGARH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
28	COASTAL ANDHRA PRADESH & YANAM	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
29	TELANGANA	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
30	RAYALASEEMA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
32	COASTAL KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
33	NORTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
34	SOUTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
35	KERALA & MAHE	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
36	LAKSHADWEEP	SCT	SCT	DRY	DRY	DRY	DRY	DRY

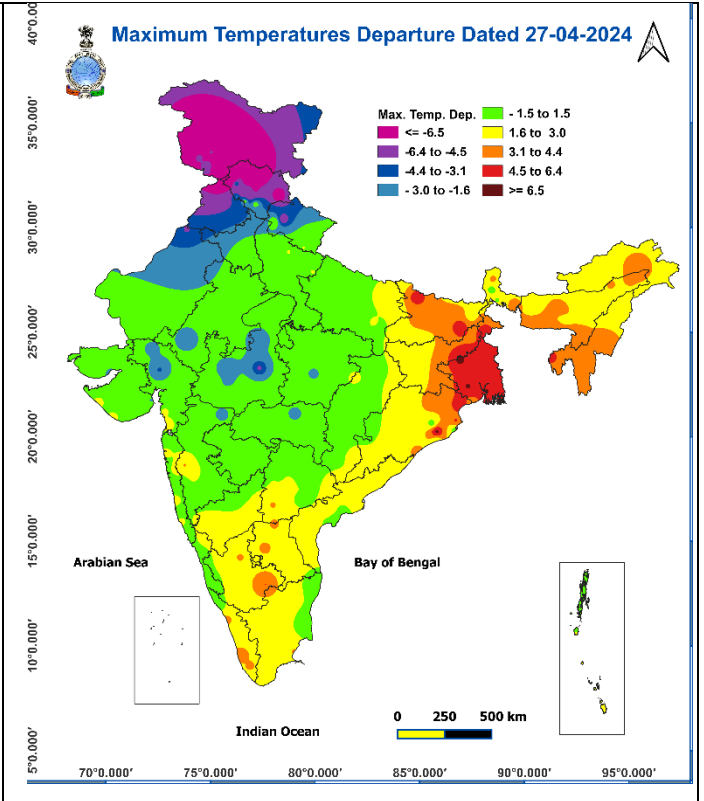
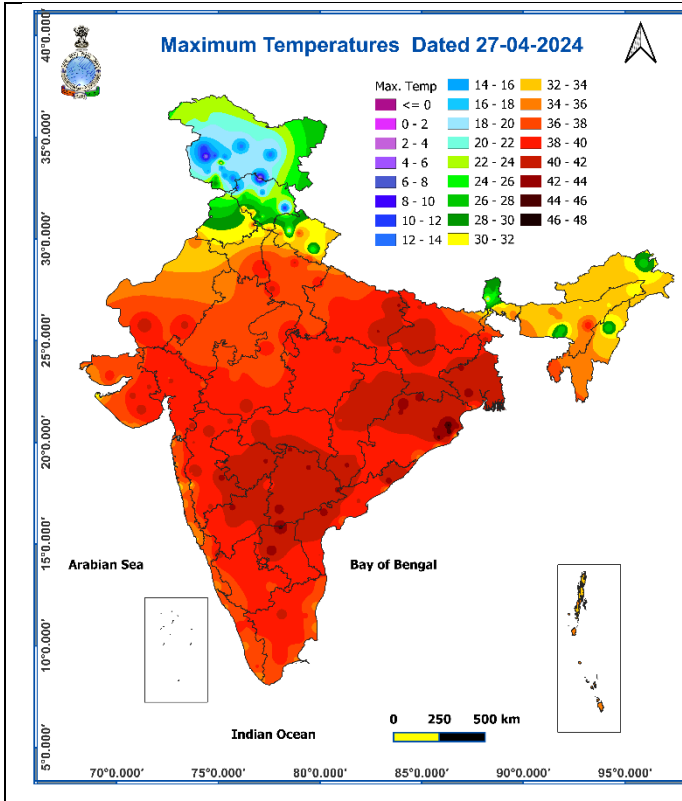
Legend	Category	% Stations
WS	Widespread/Most Places	76-100
FWS	Fairly Widespread/Many Places	51-75
SCT	Scattered/ A Few Places	26-50
ISOL	Isolated Places	1-25
DRY	No Rain	0

\* 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)



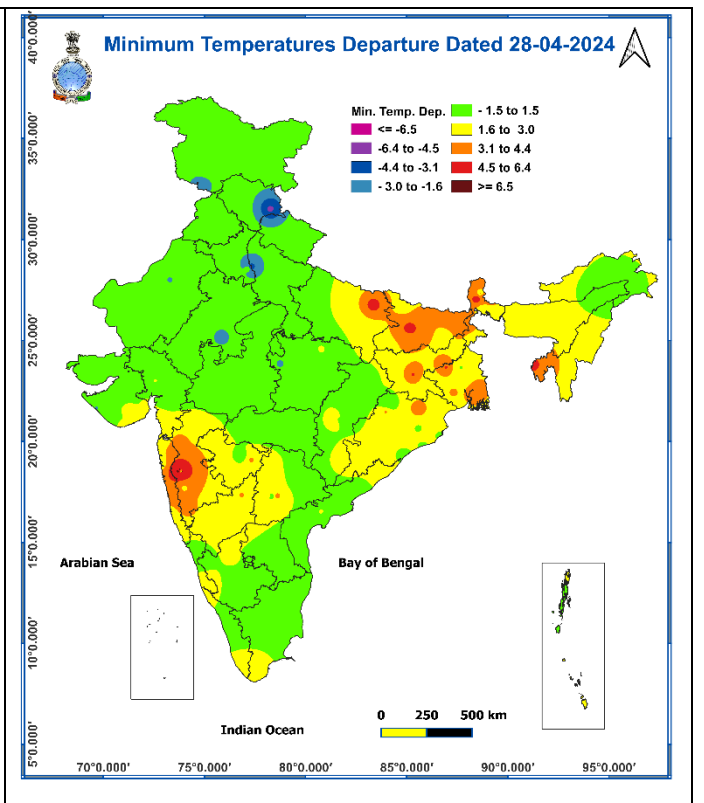
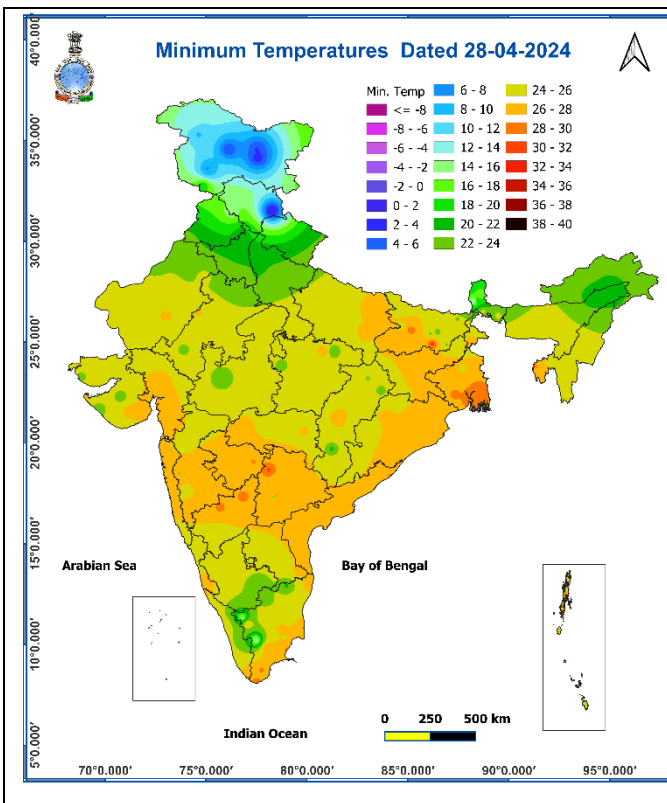
**Fig. 1: Maximum Temperatures**

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



**Fig. 3: Minimum Temperatures**

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



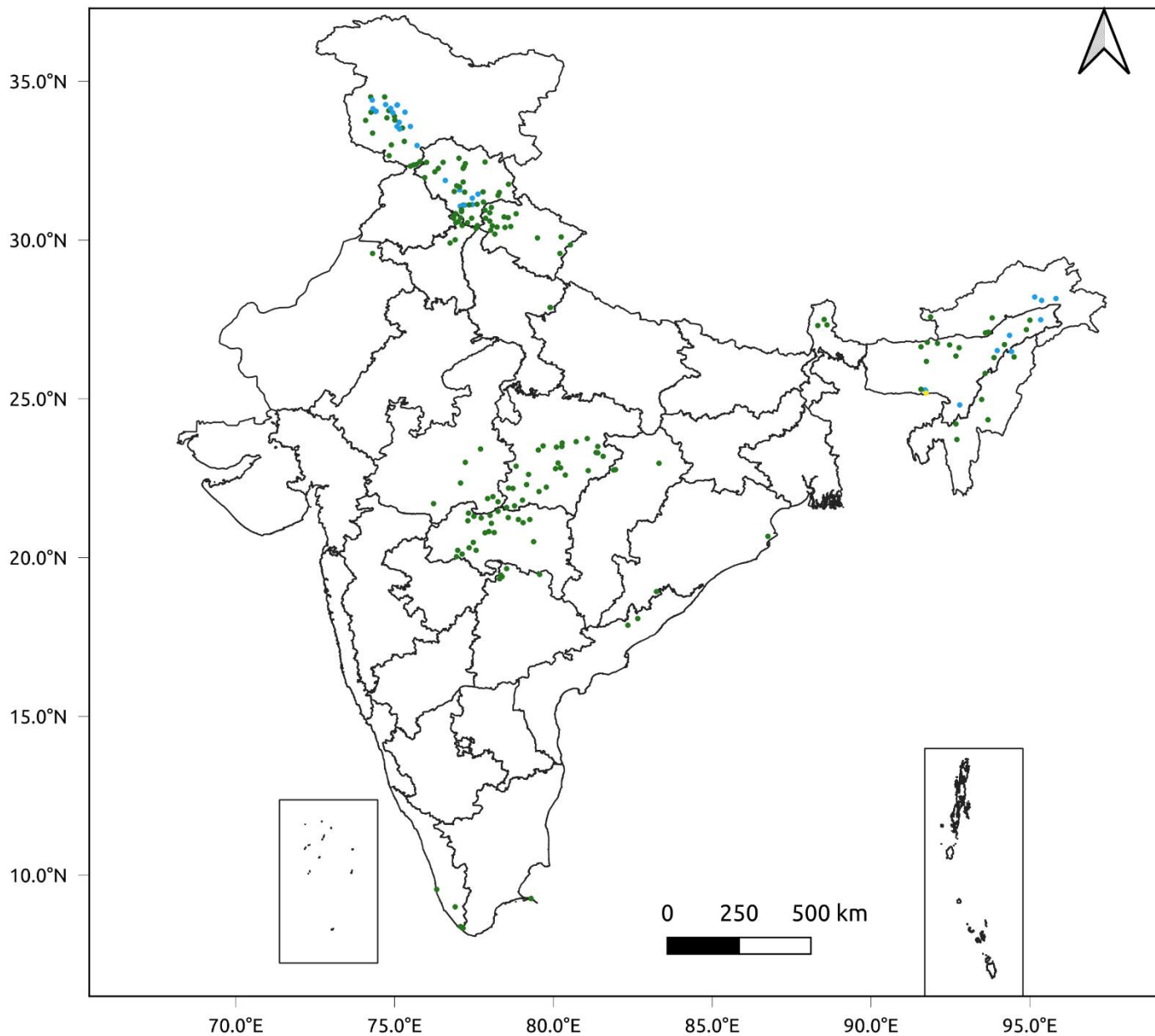
**Maximum temperatures reported ( $\geq 40^\circ\text{C}$ ) at 1730 hrs IST of today, the 27th April 2024**

MORADABAD	40.2	BERHAMPORE	41.2	RAIPUR-MANA	41.2	NIZAMABAD	43
ALWAR	40.1	AMBIKAPUR	40	DURG	41.6	MEDAK	42
DEOMALI	41.4	KALAIKUNDA	45.8	DHENKANAL	42.1	RAMGUNDAM	42.4
FATEHGARH	41.4	PURULIA	42.7	SAMBALPUR	42.2	HANAMKONDA	41
LAKHIMPUR KHERI	40	BANKURA	43.2	JHARSUGUDA	43.6	SOLAPUR	42
HARDOI	40.2	SRI NIKETAN	42	KEONJHARGARH	41.5	GULBARGA	42.9
BAHRAICH	41	KRISHNANAGAR	42	BALASORE	41.7	HYDERABAD	40.9
VALMIKI NAGAR	40.4	ASANSOL	42.5	CONTAI	41	NALGONDA	41.5
SULTANPUR	40.2	BAGATI	40.5	NASHIK	40.1	KOTHAGUDEM (BHADRACHALAM)	42.6
GORAKHPUR	41	RAJKOT (A)	40.9	MALEGAON	42	SANGLI	40.5
BALLIA (MIRDHA)	41	SURENDRANAGAR	40.3	AKOLA	41.4	MAHBUBNAGAR	43.5
JHANSI	40.3	NARSINGHPUR	41	WASHIM	43	RENTACHINTALA	43.2
ORAI	40.2	PENDRA ROAD	41	AMRAOTI	40	VIJAYAWADA-GANNAVARAM	41.2
FATEHPUR	40.2	BILASPUR	41.4	WARDHA	41.4	NANDIGAMA	41.8
PRAYAGRAJ	42.2	ROURKELA	42.7	YEOTMAL	41.7	NANDYAL	44.9
VARANASI (BABATPUR) (A)	42.2	JAMSHEDPUR (A)	43.2	BRAHMPURI	42.7	KURNOOL	44.5
VARANASI	41.2	MIDNAPORE	43.5	GADCHIROLI	42	ANANTAPUR	43.7
CHAPRA	40.6	KOLKATA-Howrah-ULUBERIA	41.5	RAJNANDGAON	41.5	CUDDAPAH	43.4
PATNA-Airport	41.4	KOLKATA-Alipur	41.1	BHUBANESHWAR	44.6	NELLORE	41.1
BHAGALPUR	40.1	KOLKATA (DUM DUM) (A)	41	CHANDBALI	42.4	AROGYAVARAM	40
MALDA	40.6	DIAMOND HARBOUR	41	BEED (BIR)	41.2	TIRUPATHI	42.9
TIKAMGARH	40.8	CANNING	42	PARBHANI	41.5	TIRUTTANI	40.2
KHAJURAHO	40.2	KOLKATA-Salt Lake	41.8	NANDED	42.4	DHARMAPURI	41
SATNA	40.5	KESHOD (A)	40.4	ADILABAD	42.3	TIRUPPATTUR	41.8
SIDHI	42	AMRELI	41.2	CHANDRAPUR (CHANDA)	42.8	VELLORE	40.1
DALTONGANJ	42.8	KHARGONE	41.2	BARAMATI	40.1	SALEM	41.9
DEHRI	41.2	JALGAON	41.5	JEUR	43	PALAKKAD (PALGHAT)	41.8
GAYA	42	KHANDWA	41.5	UDGIR	40.6	KARUR PARAMATHI	40.5
	40-40.9°C	<b>Highest maximum temperature of 45.8°C has been observed over Kalaikunda (Gangetic West Bengal).</b>					
	41-41.9°C						
	42-42.9°C						
	43-46°C						

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

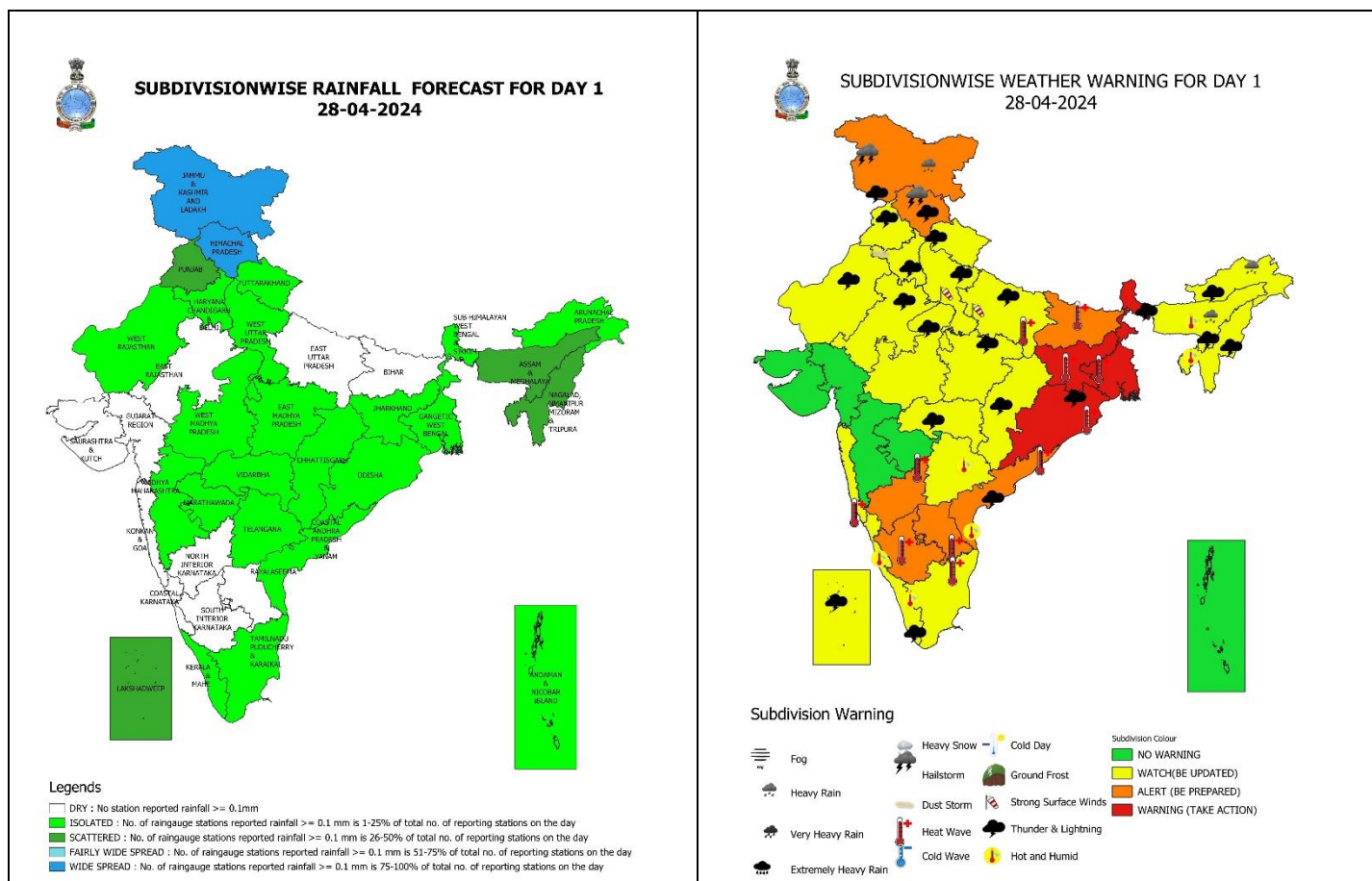


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 27-4-2024 to 0830 IST of 28-4-2024



## Legends

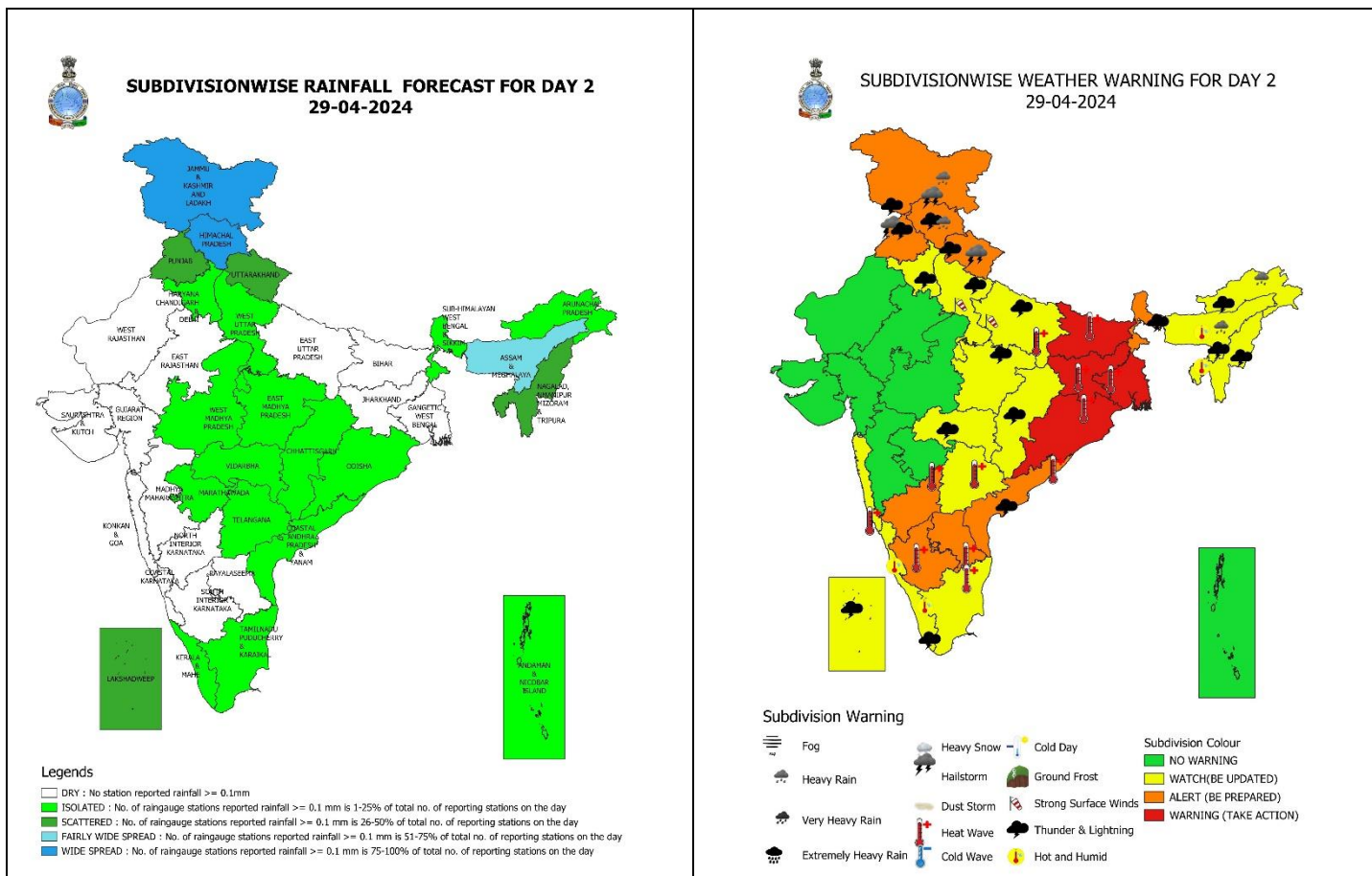
- Very Light to Light Rainfall (0.1 - 15.5 mm)
- Moderate Rainfall (15.6 - 64.4 mm)
- Heavy Rainfall (64.5 - 115.5 mm)
- Very Heavy Rainfall (115.6 - 204.4 mm)
- Extremely Heavy Rainfall ( $\geq 204.5$  mm)



**28 April (Day 1):**

- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph) & hailstorm** very likely at isolated places over Himachal Pradesh; **with lightning & gusty winds (speed reaching 40-50 kmph)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand, Punjab, East Madhya Pradesh, Vidarbha, Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; **with lightning, gusty winds (speed reaching 35-45 kmph) &** at isolated places over Uttar Pradesh, **with lightning, duststorm & gusty winds (speed reaching 30-40 kmph)** at isolated places over Haryana-Chandigarh-Delhi and West Uttar Pradesh; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over West Rajasthan, West Madhya Pradesh, Odisha, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam **with lightning** at isolated places over Arunachal Pradesh, Kerala & Mahe Sub-Himalayan West Bengal & Sikkim, Lakshadweep.
- ❖ **Heavy rainfall** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Arunachal Pradesh and Assam & Meghalaya.
- ❖ **Hot and humid weather** very likely to prevail over west Assam, Meghalaya, Tripura, Kerala & Mahe and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** very likely to prevail at many places over Gangetic West Bengal, Odisha and Bihar; at isolated places over Jharkhand, Sub-Himalayan West Bengal; **heat wave conditions** in isolated pockets over East Uttar Pradesh, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema, Tamil Nadu, Puducherry & Karaikal and Interior Karnataka.

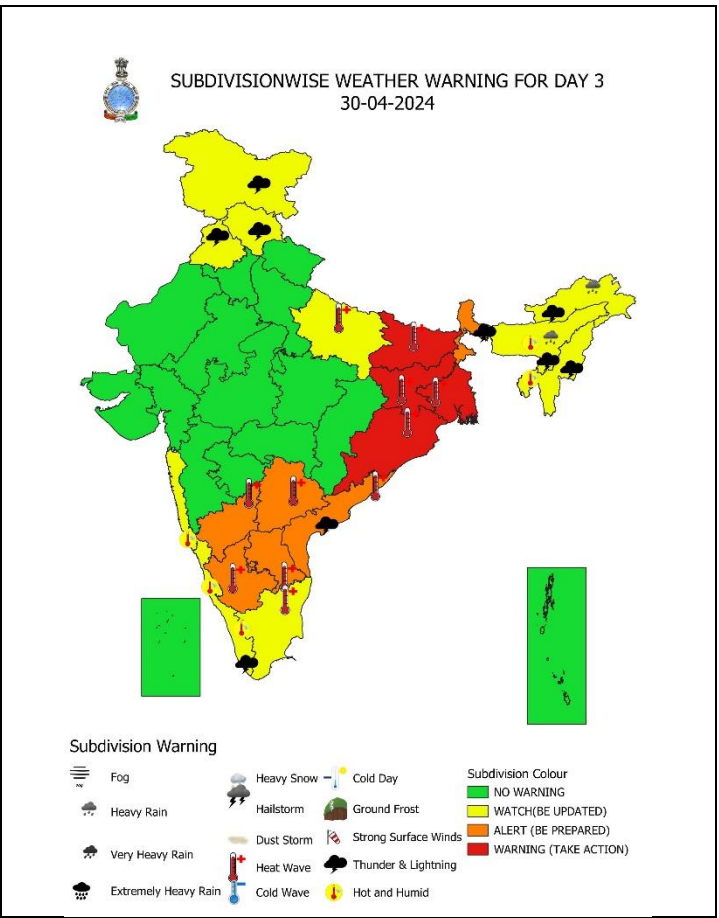
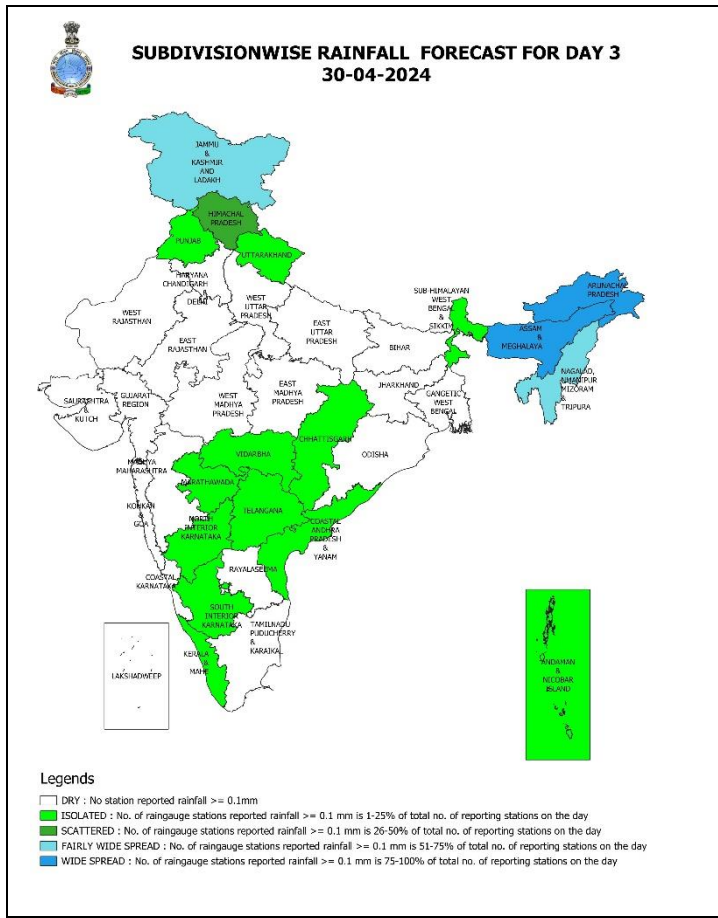




**29 April (Day 2):**

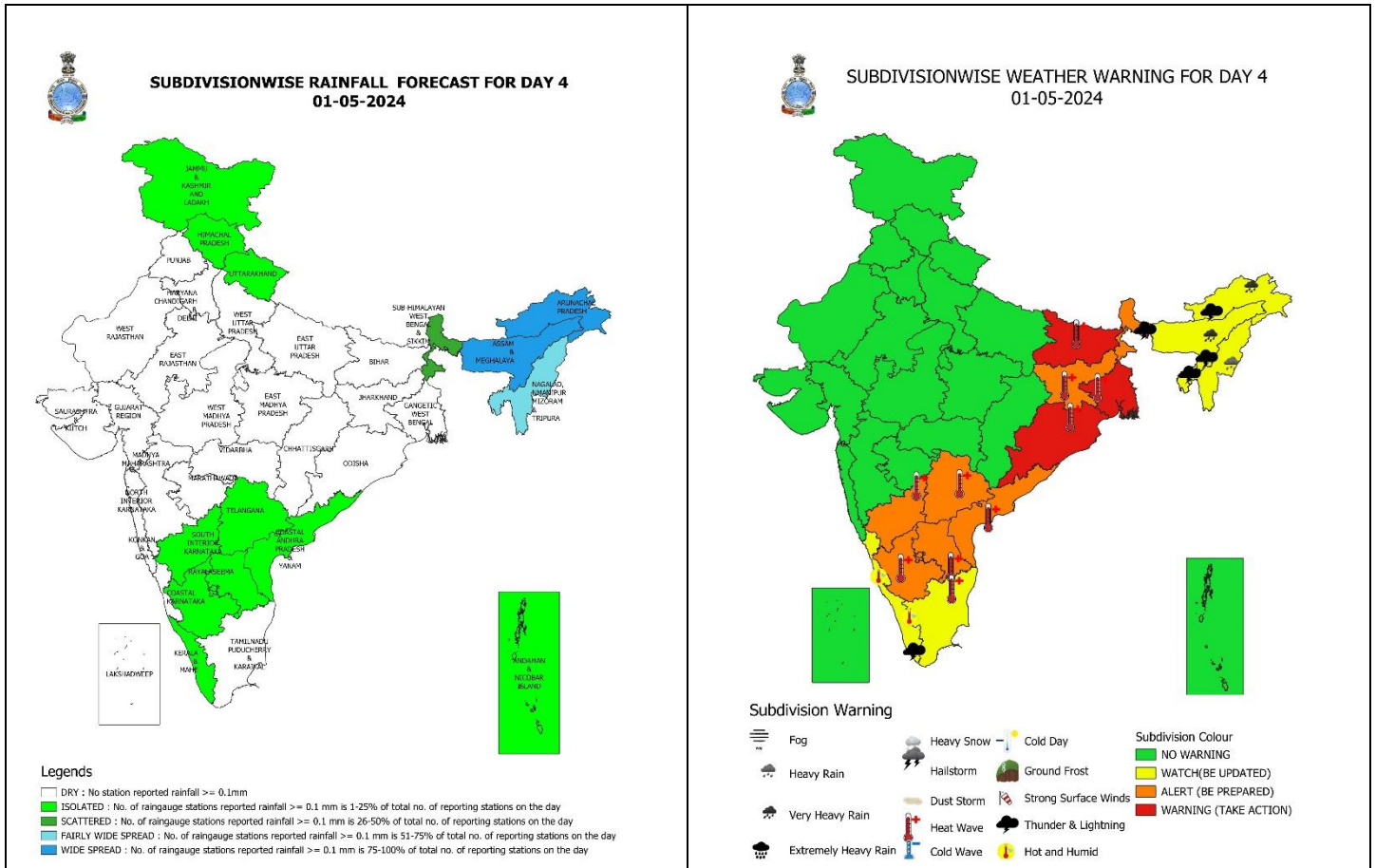
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph) & hailstorm** very likely at isolated places over Himachal Pradesh, Uttarakhand and Punjab; **with lightning & gusty winds (speed reaching 40-50 kmph)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; **with lightning, gusty winds (speed reaching 35-45 kmph) &** at isolated places over Uttar Pradesh, **with lightning, duststorm & gusty winds (speed reaching 30-40 kmph)** at isolated places over Haryana-Chandigarh-Delhi; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over West Rajasthan, East Madhya Pradesh, Vidarbha, Chhattisgarh, Coastal Andhra Pradesh & Yanam **with lightning** at isolated places over Arunachal Pradesh, Kerala & Mahe, Sub-Himalayan West Bengal & Sikkim and Lakshadweep.
- ❖ **Heavy rainfall** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Arunachal Pradesh and Assam & Meghalaya.
- ❖ **Hot and humid weather** very likely to prevail over west Assam, Meghalaya, Tripura, Kerala & Mahe and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** very likely to prevail at many places over Gangetic West Bengal, Bihar; at some places over Jharkhand, Odisha; **heat wave conditions** in isolated pockets over East Uttar Pradesh, Sub-Himalayan West Bengal, Konkan & Goa, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Interior Karnataka.

\* 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)



**30 April (Day 3):**

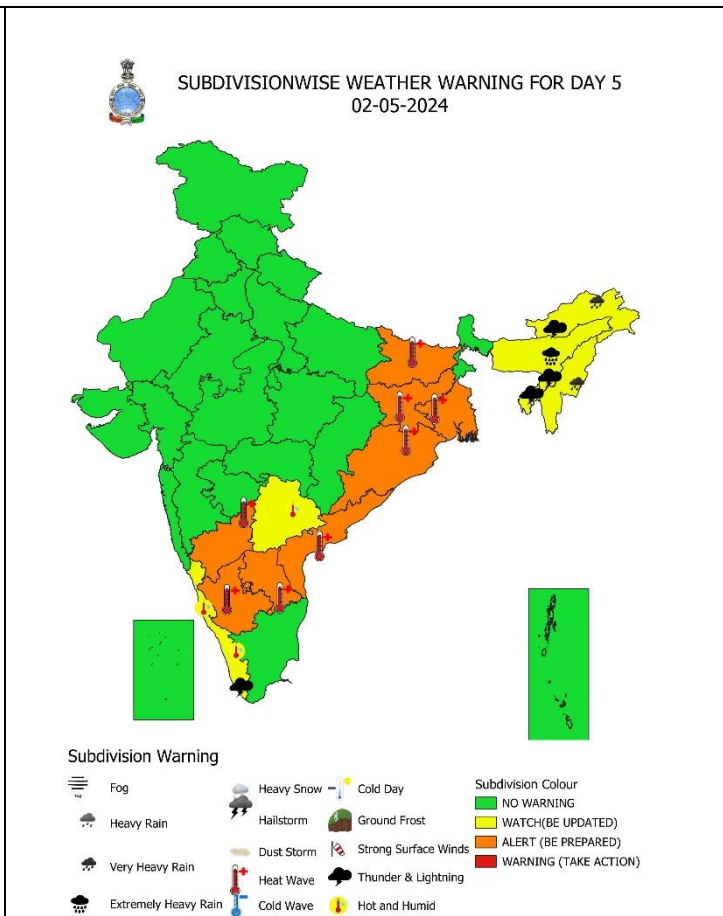
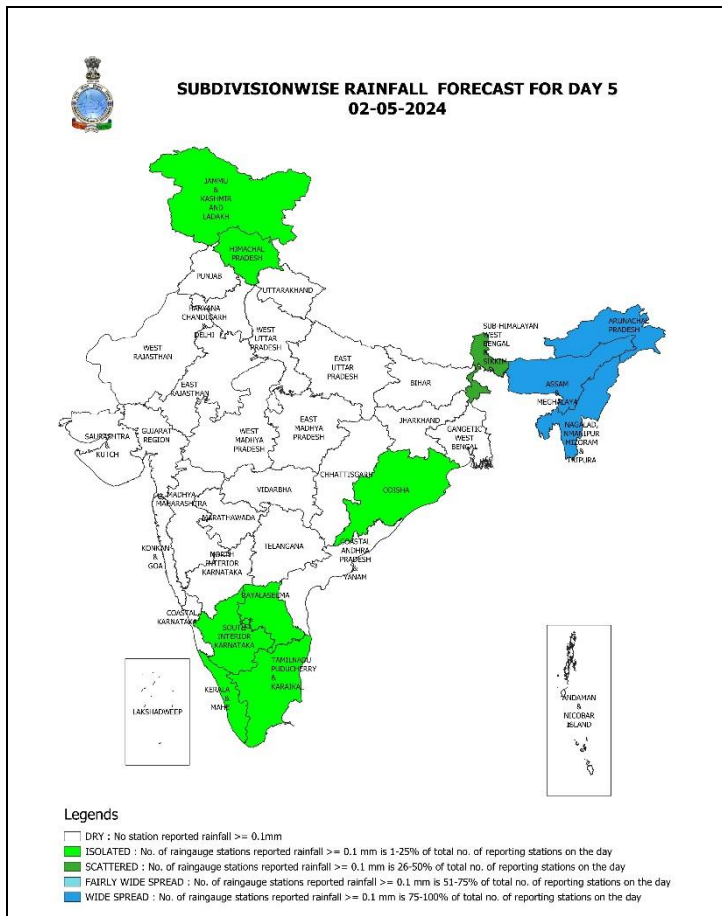
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Nagaland, Manipur, Mizoram & Tripura; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Assam & Meghalaya, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Coastal Andhra Pradesh & Yanam **with lightning** at isolated places over Himachal Pradesh, Arunachal Pradesh, Kerala & Mahe, Sub-Himalayan West Bengal & Sikkim.
- ❖ **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, Kerala & Mahe, Konkan & Goa and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** very likely to prevail at many places over Gangetic West Bengal; at some places over Odisha, Bihar and Jharkhand; **heat wave conditions** in isolated pockets over Sub-Himalayan West Bengal, East Uttar Pradesh, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Interior Karnataka.



## 01 May (Day 4):

- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Assam & Meghalaya, **with lightning** at isolated places over Kerala & Mahe.
- ❖ **Heavy to very heavy rainfall** likely at isolated places over Arunachal Pradesh and Assam & Meghalaya; **Heavy rainfall** very likely at isolated places over Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Hot and humid weather** very likely to prevail over Kerala & Mahe and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** very likely to prevail at many places over Gangetic West Bengal; at some places over Odisha, Bihar and Jharkhand; **heat wave conditions** in isolated pockets over Sub-Himalayan West Bengal, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Interior Karnataka.





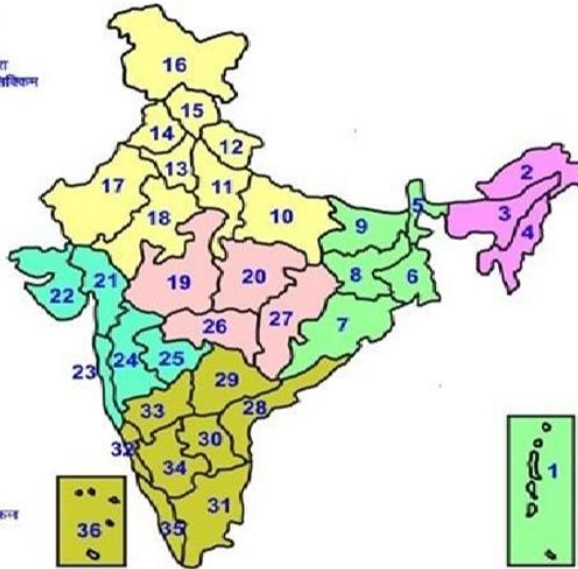
**02 May (Day 5):**

- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Assam & Meghalaya **with lightning** at isolated places over Kerala & Mahe.
- ❖ **Heavy to very heavy rainfall with extremely heavy falls** likely at isolated places over Assam & Meghalaya and **Heavy to very heavy rainfall** at isolated places over Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Hot and humid weather** likely to prevail over Kerala & Mahe, Telangana and Coastal Karnataka.
- ❖ **Heat wave conditions** likely to prevail at isolated places over Gangetic West Bengal, Odisha, Bihar, Jharkhand, Coastal Andhra Pradesh & Yanam, Rayalaseema and 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 सौराष्ट्र
- 23 कोंकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठवाड़ा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 आंध्र प्रदेश एवं यानम
- 29 तेलंगाना
- 30 तमिलनाडु, पुदुचेरी एवं कराईकल
- 31 उत्तरीय कर्नाटक
- 32 दक्षिणी कर्नाटक
- 33 उत्तरीय कर्नाटक
- 34 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. 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

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

## 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)

\* 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)