





Friday, April 5, 2024 Time of Issue: 0815 hours IST (MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems and Forecast & Warnings:

- ❖ A Western Disturbance as a trough in middle tropospheric westerlies runs roughly along long. 65°E to the north of lat. 30°N. A cyclonic circulation lies over northeast Rajasthan & neighbourhood in lower tropospheric level. Under their influence:
 - ✓ Isolated to scattered light to moderate rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh during next 2 days and Uttarakhand during next 7 days.
- ❖ The cyclonic circulation over north Bangladesh persists, another cyclonic circulation lies over east Assam & neighbourhood in lower tropospheric levels. Under the influence of these systems:
 - ✓ Faily widespread to widespread light/moderate rainfall/snowfall with isolated **thunderstorms & lightning very likely** over Arunachal Pradesh; scattered to fairly widespread light to moderate rainfall over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 7 days.
 - ✓ Isolated heavy rainfall/snowfall very likely over Arunachal Pradesh during 05th-07th April with possibility of very heavy falls on 06th April, 2024.
 - ✓ Isolated heavy rainfall over Assam & Meghalaya on 05th April.
 - ✓ Isolated light rainfall very likely over Sub-Himalayan West Bengal & Sikkim during next 24 hours and scattered to fairly widespread light to moderate rainfall with isolated **thunderstorms & lightning** during 06th-10th April, 2024.
 - ✓ Isolated to scattered light/moderate rainfall with **thunderstorms & lightning** very likely over Gangetic West Bengal, Odisha, Jharkhand during 06th-09th April; over Bihar on 07th & 08th April, 2024.
- ❖ The trough/wind discontinuity run from south Tamil Nadu to southeast Madhya Pradesh in lower tropospheric levels. Under its influence; Isolated light rainfall likely over Madhya Maharashtra during 05th-09th April; over Konkan & Goa, Marathwada, Madhya Pradesh, Vidarbha, Chhattisgarh, Karnataka, Telangana, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe during 06th-10th April; over Coastal Andhra Pradesh & Yanam during 07th-09th April, 2024.

Maximum temperature observation and forecast for next 5 days:

- ❖ Yesterday, Maximum temperatures were in the range of 40-42°C over many parts of Vidarbha, Telangana and Rayalaseema, some parts of East Uttar Pradesh, Jharkhand, Odisha, Marathwada, Coastal Andhra Pradesh & Yanam and North Interior Karnataka and at isolated pockets over Gangetic West Bengal, Madhya Pradesh, Chhattisgarh, Madhya Maharashtra, Tamil Nadu and Kerala. Maximum temperatures departures are above normal by 3-4°C at isolated pockets over Uttar Pradesh, Haryana, East Madhya Pradesh, Odisha, Vidarbha, Jharkhand, Chhattisgarh, Gangetic West Bengal, Rayalaseema, Kerala and Tamil Nadu.
- ❖ Yesterday, the maximum temperature exceeded 98th percentile over isolated pockets over north Uttar Pradesh, Rayalaseema, Karnataka and Kerala.
- ❖ The maximum temperature likely to exceed 98th percentile at isolated pockets over Karnataka, south Kerala & Rayalaseema during 05th-07th and north interior Tamil Nadu on 06th & 07th April, 2024.
- ❖ Yesterday, Minimum temperatures were **above normal by 3-5°C** at many places over Manipur, Tripura, Gujarat Region, East Rajasthan; at isolated places over North Interior Karnataka, Odisha, Vidarbha, southwest Rajasthan, central Madhya Pradesh, Madhya Maharashtra and Marathwada.

Heat wave, Warm Night and Hot & Humid weather warning for next 5 days:

- ❖ Heat wave conditions very likely in isolated pockets over North Interior Karnataka, Odisha, Gangetic West Benga, Jharkhand, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana and Vidarbha on 05th & 06th April, 2024.
- **♦ Warm night conditions** very likely to prevail in isolated pockets over Odisha and North Interior Karnataka during 05th- 06th, Chhattisgarh on 05th and Vidarbha on 05th & 06th April, 2024.
- ♦ Hot and humid weather very likely to prevail over Kerala & Mahe, Tamil Nadu and Puducherry & Karaikal during 05th-08th; over Coastal Karnataka during 05th-06th and over Konkan & Goa during 05th-07th April, 2024.





Main Weather Observations:

- * Rainfall/snowfall distribution (from 0830 hours IST to 1730 hours IST of yesterday): at isolated places over Arunachal Pradesh.
- ❖ Rainfall distribution (from 0830 hours IST to 1730 hours IST of yesterday): at isolated places over Kerala.
- ❖ Significant amount of rainfall (from 0830 hours IST to 1730 hours IST of yesterday): (in cm): Kerala: Thiruvananthapuram-1.
- ❖ Minimum Temperature Departures (as on 04-04-2024): Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Tripura, Manipur; at isolated places over Marathwada, Madhya Maharashtra, east Rajasthan, Madhya Pradesh, Odisha; above normal (1.6°C to 3.0°C) at most places over West Uttar Pradesh, North Interior Karnataka, Jharkhand, Mizoram; at many places over East Uttar Pradesh, West Bengal & Sikkim, Haryana-Chandigarh-Delhi, Gujarat Region, Vidarbha, Telangana, Chhattisgarh; at a few places over Uttarakhand, Saurashtra & Kutch, Bihar, Assam & Meghalaya; at isolated places over Punjab, Himachal Pradesh, Coastal Karnataka, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Konkan & Goa, Rayalaseema. These were below normal (-1.6°C to -3.0°C) at isolated places over South Interior Karnataka and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 14.3°C was reported at Nahan (Haryana) over the plains of the country.
- ❖ Maximum Temperature Departures (as on 04-04-2024): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Haryana-Chandigarh-Delhi, Uttar Pradesh, Jharkhand, Chhattisgarh, Rayalaseema, East Madhya Pradesh; above normal (1.6°C to 3.0°C) at most places over Himachal Pradesh, Punjab, Bihar, West Bengal & Sikkim, Vidarbha, Interior Karnataka, Tamil Nadu, Puducherry & Karaikal; at many places over Uttarakhand, Odisha, Marathwada, Kerala & Mahe; at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam; at isolated places over Rajasthan. These were below normal (-1.6°C to -3.0°C) at isolated places over Gujarat state and Arunachal Pradesh and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 43.3°C was reported at Anantapur (Rayalaseema) over the country.





Meteorological Analysis (Based on 0530 hours IST)

- The Western Disturbance as a trough in middle & upper tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along long. 65°E to the north of lat. 30°N persists.
- The cyclonic circulation over north Bangladesh & neighbourhood at 0.9 km above mean sea level persists.
- The trough/wind discontinuity from south Tamil Nadu to southeast Madhya Pradesh across interior Karnataka & Vidarbha at 0.9 km above mean sea level persists.
- The cyclonic circulation over northeast Rajasthan & neighbourhood at 0.9 km above mean sea level persists.
- The cyclonic circulation over East Assam & neighbourhood between 1.5 km and 3.1 km above mean sea level persists.

Weather Forecast for next 7 days (Upto 0830 hours IST of 12th April, 2024)

- ❖ Meteorological sub-division wise detailed 7 days rainfall forecast is given in Table-1.
- ❖ Gradual rise in maximum temperatures by 2-3°C very likely over many parts of East India during next 2 days and gradual fall by 3-4°C thereafter.
- ❖ No significant change in maximum temperatures very likely over Maharashtra during next 24 hours and gradual fall by 2-3°C thereafter.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country.

Weather Outlook for subsequent 3 days (During 12th-14th April, 2024)

- ❖ Isolated to scattered light/moderate rainfall/snowfall likely over Northeast India and Western Himalayan Region.
- ❖ Isolated light rainfall likely over parts of Andaman & Nicobar Islands East, Central & south Peninsular India.
- ❖ Dry weather likely to prevail over rest parts of the country.



राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विज्ञान विभाग पृथ्वी विज्ञान मंत्रालय



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

Table-1

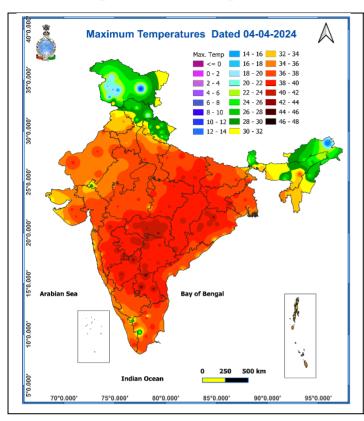
7 Days Rainfall Forecast								
S. No.	Subdivision	05- Apr	06- Apr	07- Apr	08- Apr	09- Apr	10- Apr	11- Apr
140.		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	DRY						
2	ARUNACHAL PRADESH	WS	WS	WS	FWS	FWS	FWS	FWS
3	ASSAM & MEGHALAYA	FWS	FWS	FWS	SCT	SCT	SCT	SCT
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	SCT	SCT	SCT	ISOL	SCT	SCT	SCT
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	ISOL	SCT	FWS	FWS	SCT	SCT	SCT
6	GANGETIC WEST BENGAL	DRY	ISOL	SCT	ISOL	ISOL	DRY	DRY
7	ODISHA	DRY	ISOL	SCT	SCT	ISOL	DRY	DRY
8	JHARKHAND	DRY	ISOL	ISOL	ISOL	ISOL	DRY	DRY
9	BIHAR	DRY	DRY	ISOL	ISOL	DRY	DRY	DRY
10	EAST UTTAR PRADESH	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
11	WEST UTTAR PRADESH	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
12	UTTARAKHAND	ISOL						
13	HARYANA CHANDIGARH & DELHI	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	DRY						
15	HIMACHAL PRADESH	ISOL	ISOL	DRY	DRY	DRY	ISOL	ISOL
16	JAMMU & KASHMIR AND LADAKH	SCT	ISOL	DRY	DRY	DRY	ISOL	ISOL
17	WEST RAJASTHAN	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
19	WEST MADHYA PRADESH	DRY	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
20	EAST MADHYA PRADESH	DRY	ISOL	ISOL	SCT	ISOL	ISOL	ISOL
21	GUJARAT REGION	DRY						
22	SAURASHTRA & KUTCH	DRY						
23	KONKAN & GOA	DRY	DRY	ISOL	ISOL	ISOL	DRY	DRY
24	MADHYA MAHARASHTRA	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
25	MARATHAWADA	DRY	ISOL	ISOL	ISOL	ISOL	DRY	DRY
26	VIDARBHA	DRY	DRY	ISOL	SCT	ISOL	ISOL	ISOL
27	CHHATTISGARH	DRY	ISOL	SCT	SCT	ISOL	DRY	DRY
28	COASTAL ANDHRA PRADESH & YANAM	DRY	DRY	ISOL	ISOL	ISOL	DRY	DRY
29	TELANGANA	DRY	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
30	RAYALASEEMA	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	DRY	DRY	DRY	ISOL	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
33	NORTH INTERIOR KARNATAKA	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
34	SOUTH INTERIOR KARNATAKA	DRY	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
35	KERALA & MAHE	ISOL						
36	LAKSHADWEEP	DRY						

Legend	Legend Category	
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





Fig. 2: Departure of Maximum Temperatures



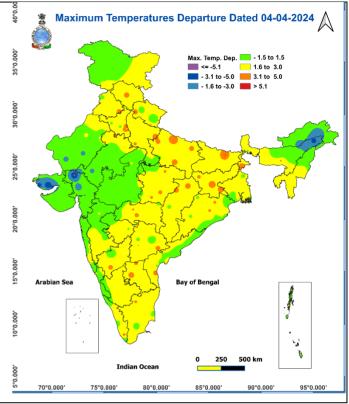
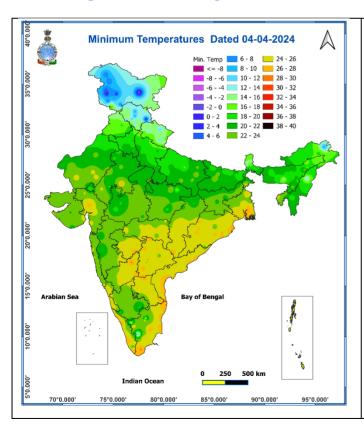
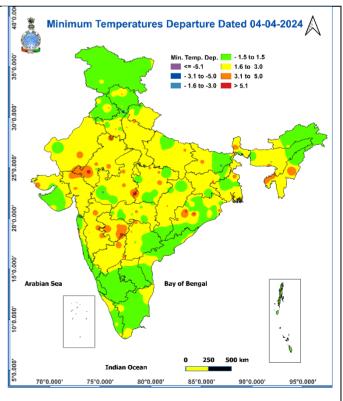


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures





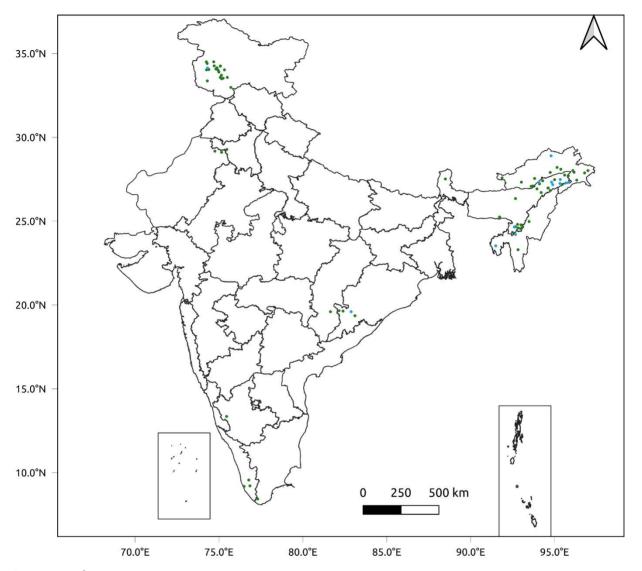








24 Hr cumulative rainfall recorded over different stations during 0830 IST of 3-4-2024 to 0830 IST of 4-4-2024

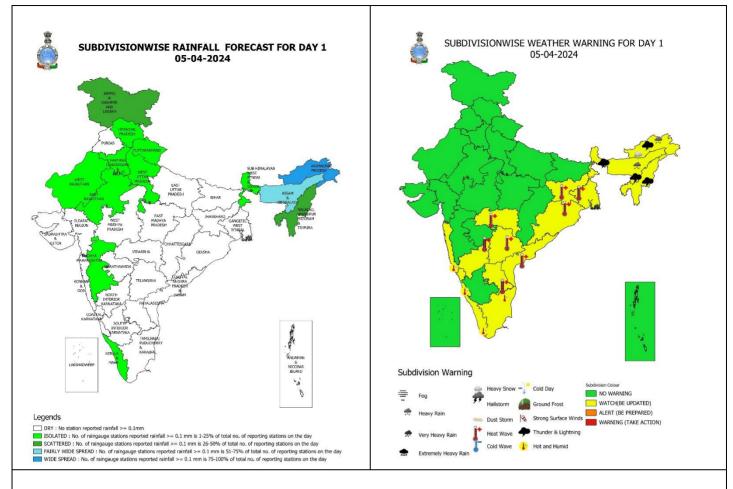


Legends

- 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 (>=204.5 mm)





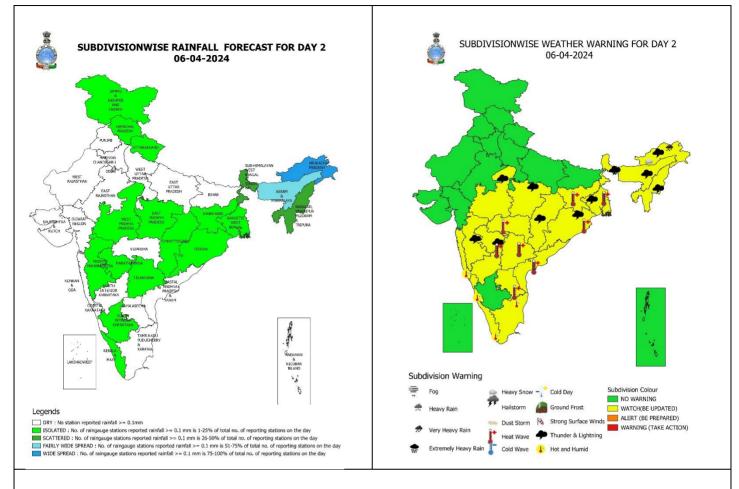


05 April (Day 1):

- ❖ Thunderstorm accompanied with lightning & squall (speed reaching 50-60 kmph) very likely at isolated places over Assam & Meghalaya; with lightning & gusty winds (speed reaching 40-50 kmph) at isolated places over 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.
- Heavy rainfall/snowfall very likely at isolated places over Arunachal Pradesh; Heavy rainfall at isolated places over Assam & Meghalaya.
- ❖ Warm night very likely to prevail in isolated pockets over Vidarbha, Chhattisgarh and North Interior Karnataka.
- ❖ Heat wave conditions very likely at isolated places over Vidarbha, Gangetic West Bengal, Jharkhand, Odisha, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and North Interior Karnataka.
- ❖ Hot and humid weather very likely to prevail over Coastal Karnataka, Konkan & Goa, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.





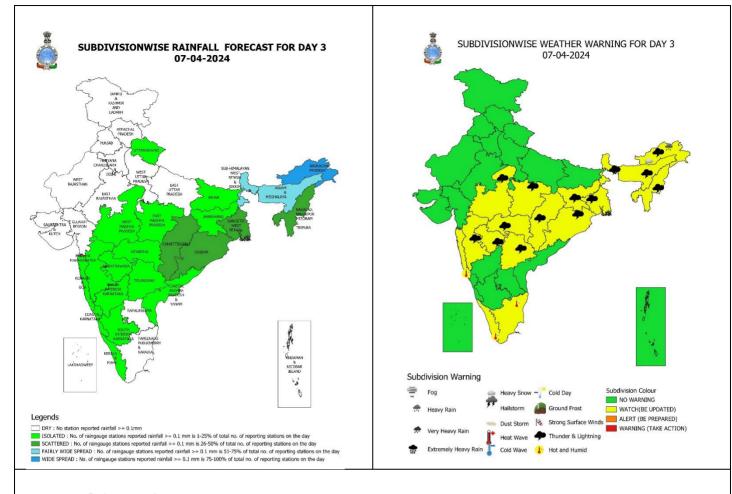


06 April (Day 2):

- ❖ Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph) very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Madhya Pradesh, Chhattisgarh; with lightning at isolated places over Gangetic West Bengal, Odisha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Marathwada.
- ❖ Heavy to very heavy rainfall/snowfall very likely at isolated places over Arunachal Pradesh.
- ❖ Warm night very likely to prevail in isolated pockets over Vidarbha, Odisha and North Interior Karnataka
- ❖ Heat wave conditions very likely at isolated places over Vidarbha, Gangetic West Bengal, Jharkhand, Odisha, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and North Interior Karnataka
- Hot and humid weather very likely to prevail over Coastal Karnataka, Konkan & Goa, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.





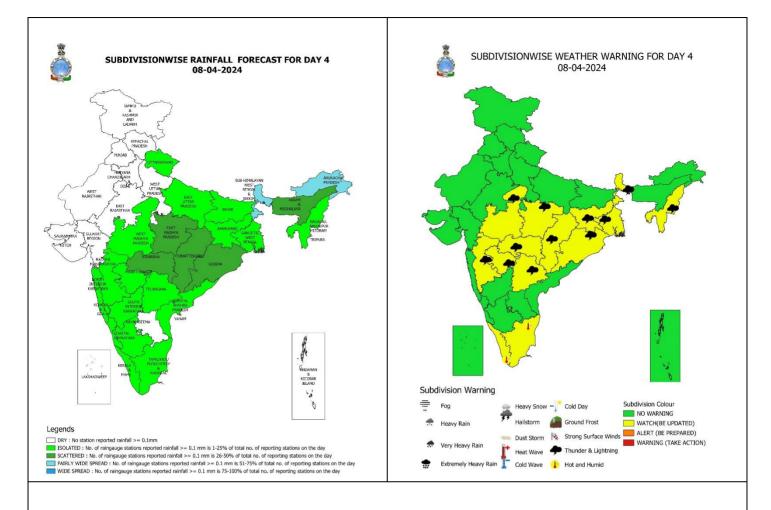


07 April (Day 3):

- Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph) likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, West Bengal & Sikkim, Odisha; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over Jharkhand, Telangana; with lightning at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur and Mizoram & Tripura, Madhya Maharashtra, Marathwada
- ❖ Heavy rainfall/snowfall likely at isolated places over Arunachal Pradesh.
- ❖ Hot and humid weather likely to prevail over Konkan & Goa, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.





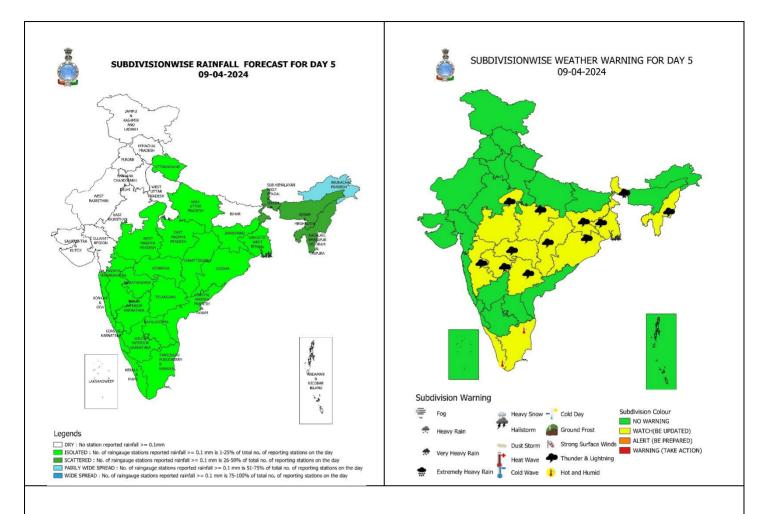


08 April (Day 4):

- ❖ Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph) likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over West Bengal & Sikkim, Jharkhand, Telangana; with lightning at isolated places over Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Marathwada
- ❖ Hot and humid weather likely to prevail over Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.







09 April (Day 5):

- ❖ Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph) likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha; with lightning & gusty winds (speed reaching 30-40 kmph) at isolated places over West Bengal & Sikkim, Jharkhand, Telangana; with lightning at isolated places over Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Marathwada
- ❖ Hot and humid weather likely to prevail over Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.







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 Widespred (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 Probabilistic Forecast WARNING Probability of Occurrence (%) WARNING (TAKE ACTION) Terms ALERT (BE PREPARED) Likely WATCH (BE UPDATED) Very Likely Most Likely > 75 Heavy: 64.5 to 115.5 mm/cm * Very Heavy: 115.6 to 204.4 mm/cm* Extremely Heavy: > 204.4 mm/cm Rain/ Snow When maximum temperature of a station reaches ≥40° C for plains and ≥30° 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 ≥6.5° C (b). Based on Actual maximum temperature **Heat Wave** Heat Wave: When actual maximum temperature ≥45°C Severe Heat Wave: When actual maximum temperature ≥47°C (c). Criteria for heat wave for coastal stations When maximum temperature departure is >4.5°C from normal. Heat Wave may be described provided maximum temperature ≥37°C When maximum temperature remains 40°C **J+**Warm Night Warm Night: When minimum temperature departure 4.5 °C to 6.4 °C Severe Warm Night: When minimum temperature departure >6.4 °C. When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions. (a). Based on departure Cold Wave: Minimum Temperature Departure from normal -4.5 °C to -6.4 °C. Severe Cold Wave: Minimum Temperature Departure from normal ≤ -6.5 °C (b) Based on actual Minimum Temperature (for Plains only) Cold Wave Cold Wave : When Minimum Temperature is ≤ 4.0 °C Severe Cold Wave: When Minimum Temperature is ≤ 2.0 °C When Minimum Temperature departure is ≤-4.5 °C & actual Minimum Temperature is ≤ 15 °C When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions Based on departure Cold Day: Maximum Temperature Departure from normal -4.5 °C to -6.4 °C. **Cold Day** Severe Cold Day: Maximum Temperature Departure from normal ≤ -6.5 °C Phenomenon of small droplets suspended in air and the horizontal visibility < 1km Moderate Fog: When the visibility between 500-200 metres 0 Dense Fog: when the visibility between 50-200 metres Fog Very Dense Fog: when the visibility < 50 metres 44 Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder) Thunderstorm An ensemble of particles of dust or sand energetically lifted to great heights by a strong and **Dust/Sand** turbulent wind. Storm Ice deposits on ground 55 Air temperature ≤4°C (over Plains) Frost A strong wind that rises suddenly, lasts for atleast 1 minute. Moderate: Wind speed 52-61 kmph 4 Severe: Wind speed 62-87 kmph Squall Very Severe: Wind speed >87 kmph 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 Sea State Phenomenal: Wind speed >117 kmph (>63 knots) & Wave height >14 metre Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots) Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots) 9 Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots) Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots) Cyclone Super Cyclone Strom: Wind speed >220 kmph (>119 knots)