

National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

Monday 13 March 2023
<u>MID-DAY</u>
Time of Issue: 1330 hours IST

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

- ♦ A cyclonic circulation lies over south Assam & neighbourhood in lower tropospheric levels. Under its influence:
- ⇒ Isolated to Scattered light rainfall activity with **thunderstorm, lightning &gusty winds (speed 30-40 kmph)** very likely over Sub-Himalayan West Bengal & Sikkim and northeast India during 13th-14th March.
- ♦ The **Western Disturbance** as a trough in westerlies in middle & upper tropospheric levels runs roughly along Long. 65°E and to the north of 25°N and an induced cyclonic circulation lies over southwest Rajasthan & neighbourhood in lower tropospheric levels. Under its influence:
- ⇒ Isolated to scattered rainfall with thunderstorm & lightning very likely over Western Himalayan Region during 13th-15th; over Punjab and Rajasthan on 13th March, 2023. Isolated hailstorm activity also likely over Uttarakhand on 13th March.
- ♦ Due to likely interaction of middle tropospheric westerly trough with lower level easterly winds over central parts of Peninsular India and East & Northeast India:
- ⇒ Scattered light/moderate rainfall with **thunderstorm, lightning & gusty winds (speed 30-40 kmph)** likely over north interior Tamil Nadu, Andhra Pradesh, Telangana, Karnataka, Gujarat, Maharashtra, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Odisha, West Bengal and Jharkhand during 15th-17th March and over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Uttar Pradesh and Rajasthan on 16th & 17th March, 2023.
- ⇒ Scattered to fairly widespread light to moderate rainfall activity with **thunderstorm, lightning & gusty winds (speed 30-40 kmph)** very likely over Sub-Himalayan West Bengal & Sikkim and northeast India during 15th -17th March with isolated **hailstorm** over the region on 15th March, 2023.
- ⇒ Isolated **heavy rainfall** likely over Arunachal Pradesh on 15th march, 2023.
- ⇒ Isolated **hailstorm** activity also likely over northeast Madhya Pradesh, Vidarbha, Chhattisgarh and Telangana on 16^{th} & 17^{th} ; over Madhya Maharashtra on 15^{th} & 16^{th} ; over Marathawada on 16^{th} and over Himachal Pradesh Uttarakhand, Haryana, West Uttar Pradesh and East Rajasthan on 17^{th} March 2023.

Main Weather Observations

- ♦ Rainfall/thundershowers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu & Kashmir, Himachal Pradesh, Uttarakhand and Arunachal Pradesh.
- ◆ Thunderstorm and hailstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Uttarakhand.
- ♦ Yesterday, **heat wave conditions** prevailed in isolated pockets of Konkan.
- ♦ Minimum Temperature Departures (as on 13-03-2023): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over Punjab, West Rajasthan, Gujarat State and Madhya Maharashtra and at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, East Rajasthan and Konkan & Goa; above normal (1.6°C to 3.0°C) at many places over Haryana, Chandigarh & Delhi and East Uttar Pradesh; at a few places over Uttarakhand, Himachal Pradesh, Bihar and Andaman & Nicobar Islands and at isolated places over Madhya Pradesh, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. They are appreciably below normal (-3.1°C to -5.0°C) at a few places over Coastal Andhra Pradesh & Yanam and Rayalaseema; below normal (-1.6°C to -3.0°C) at a few places over Gangetic West Bengal and Assam & Meghalaya and near normal over rest parts of the country. Today, the lowest minimum temperature of 13.4°C is reported at Malanjkhand (East Madhya Pradesh) over plains of the country.
- ♦ Maximum Temperature Departures (as on 12-03-2023): Maximum temperatures were markedly above normal (5.1°C or more) at a few places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Haryana, Chandigarh & Delhi and Konkan & Goa and at isolated places over West Rajasthan; appreciably above normal (3.1°C to 5.0°C) at many places over Punjab; at a few places over Himachal Pradesh, Saurashtra & Kutch and Assam & Meghalaya and at isolated places over West Uttar Pradesh and Sub-Himalayan West Bengal & Sikkim; above normal (1.6°C to 3.0°C) at many places over East Uttar Pradesh, Coastal Karnataka and Nagaland, Manipur, Mizoram & Tripura; at a few places over East Rajasthan, Madhya Pradesh, Chhattisgarh, Odisha, Bihar, Jharkhand and Gangetic West Bengal and at isolated places over Uttarakhand, Vidarbha and Coastal Andhra Pradesh & Yanam. They were below normal (-1.6°C to -3.0°C) at a few places over Telangana and Rayalaseema and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 39.4°C was reported at Mumbai-Santacruz (Konkan).



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

Meteorological Analysis (Based on 0830 hours IST)

- ♦ The **Western Disturbance** as a trough in westerlies in middle tropospheric levels with its axis at 5.8 km above mean sea level now runs roughly along Long. 65°E and to the north of 25°N.
- ♦ The induced cyclonic circulation over south Pakistan & neighbourhood now lies over southwest Rajasthan & neighbourhood and extends upto 3.1 km above mean sea level.
- ♦ A cyclonic circulation lies over south Assam & neighbourhood and extends upto 3.1 km above mean sea level.
- ♦ A fresh Western Disturbance is likely to affect Western Himalayan Region from 16th March, 2023.
- ♦ The **trough** in **westerlies** roughly along Long. 89°E and to the north of 22°N between 3.1 km & 7.6 km above mean sea level has become less marked.

Weather Forecast for next 5 days * upto 0830 hours IST of 18th March, 2023

- ♦ Meteorological sub-division wise detailed 5 days temperature forecast is given in Table-1.
- ♦ **Northwest India**: No significant change in maximum temperatures very likely during next 3 days and fall by 2-3°C thereafter.
- ♦ **West India**: Gradual fall by 2-4°C in Maximum Temperatures very likely over Gujarat state during next 5 days.
- ◆ **Central India:** No significant change in maximum temperatures very likely during next 2 days and fall by 2-4°C thereafter.
- ♦ **East India:** No significant change in maximum temperatures very likely during next 2 days and fall by 2-3°C thereafter.
- ♦ **Rest parts of the Country:** No significant change in Maximum Temperatures very likely during next 5 days.

Weather Outlook for subsequent 2 days during 18th-20th March, 2023

♦ Scattered to fairly widespread light/moderate rainfall/thundershowers likely over most parts of the country except over Gujarat State, Konkan & Goa, Madhya Maharashtra, Karnataka, Kerala, Lakshadweep and Andaman & Nicobar Islands where very light rainfall likely at isolated places.



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

Weather Warning during next 5 days *

- **12 March (Day 1): ♦ Thunderstorm accompanied with lightning & hail** very likely at isolated places over Uttarakhand; **with lightning** at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Himachal Pradesh, Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad and Gujarat State.
- ♦ **Heat wave conditions** very likely in isolated pockets over Konkan.
- **14 March (Day 2): ♦ Thunderstorm accompanied with lightning & hail** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim; **with lightning & gusty winds** (30-40 kmph) over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; **with lightning** over Himachal Pradesh, Gujarat state and south Konkan & Goa.
- **15 March (Day 3): ♦ Heavy rainfall** very likely at isolated places over Arunachal Pradesh.
- ♦ Thunderstorm accompanied with lightning, hail & gusty winds (40-50 kmph) very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; with lightning & hail at isolated places over Sub-Himalayan West Bengal & Sikkim, Madhya Maharashtra; with lightning over Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Odisha, Gujarat state, Konkan & Goa, Marathwada, Telangana, Interior Karnataka and Kerala & Mahe.
- **16 March (Day 4): ◆ Thunderstorm accompanied with lightning, hail & gusty winds** (40-50 kmph) likely at isolated places over Vidarbha; **with lightning, hail & gusty winds** (30-40 kmph) at isolated places over East Madhya Pradesh, Chhattisgarh, Telangana; **with lightning & hail** over Madhya Maharashtra, Marathawada; **with lightning & gusty winds** (40-50 kmph) over Gangetic West Bengal, Odisha; **with lightning & gusty winds** (30-40 kmph) over West Madhya Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Jharkhand, Coastal Andhra Pradesh, Rayalaseema; **with lightning** over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Uttar Pradesh, Rajasthan, Bihar, Sub-Himalayan West Bengal & Sikkim, Gujarat state, Konkan & Goa, Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe.
- **17 March (Day 5):** ♦ **Heavy rainfall** very likely at isolated places over Coastal Andhra Pradesh and Telangana.
- ♦ Thunderstorm accompanied with lightning, hail & gusty winds (40-50 kmph) likely at isolated places over Vidarbha; with lightning, hail & gusty winds (30-40 kmph) at isolated places over East Madhya Pradesh, Chhattisgarh, Telangana; with lightning & hail over Himachal Pradesh, Uttarakhand, Haryana, West Uttar Pradesh, East Rajasthan; with lightning & gusty winds (40-50 kmph) over Gangetic West Bengal, Odisha; with lightning & gusty winds (30-40 kmph) over West Madhya Pradesh, Jharkhand, Coastal Andhra Pradesh & Yanam, Rayalaseema; with lightning over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Uttar Pradesh, West Rajasthan, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Bihar, Sub-Himalayan West Bengal & Sikkim, Gujarat state, Madhya Maharashtra, Marathawada, Interior Karnataka and Tamilnadu, Puducherry & Karaikal.

Kindly download MAUSAM APP for location specific forecast & warning, MEGHDOOT APP for Agromet advisory and DAMINI APP for Lightning Warning & visit state MC/RMC websites for district wise warning.





Table-1 5 Day Rainfall Forecast (MID-DAY)

13-March-2023

Met-Sub-Division	13-Mar Today	14Mar Tue	15Mar Wed	16Mar Thu	17Mar Fri
1. Andaman & Nicobar Islands	ISOL	ISOL	ISOL	ISOL	ISOL
2. Arunachal Pradesh	ISOL	SCT	FWS	FWS	FWS
3. Assam & Meghalaya	ISOL	SCT	FWS	FWS	FWS
4. N. M. M. & T.	ISOL	ISOL	FWS	FWS	SCT
5. S.H. West Bengal & Sikkim	ISOL	SCT	SCT	SCT	SCT
6. Gangetic West Bengal	DRY	DRY	ISOL.	SCT	SCT
7. Odisha	DRY	DRY	ISOL	SCT	SCT
8. Jharkhand	DRY	ISOL	ISOL	SCT	SCT
9. Bihar	DRY	DRY	ISOL	SCT	SCT
10. East Uttar Pradesh	ISOL	ISOL	DRY	DRY	ISOL
11. West Uttar Pradesh	ISOL	ISOL	DRY	ISOL	ISOL
12. Uttarakhand	SCT	ISOL	ISOL	ISOL	SCT
13. Haryana, Chd & Delhi	ISOL	DRY	DRY	ISOL	ISOL
14. Punjab	ISOL.	DRY	DRY	DRY	ISOL
15. Himachal Pradesh	SCT	ISOL	ISOL.	ISOL	FWS
16. J & K and Ladakh	ISOL	DRY	DRY	SCT	FWS
17. West Rajsthan	ISOL	DRY	DRY	ISOL	ISOL
18. East Rajasthan	ISOL	DRY	DRY	ISOL	ISOL
19. West Madhya Pradesh	ISOL	DRY	ISOL	SCT	SCT
20. East Madhya Pradesh	DRY	ISOL	ISOL	SCT	SCT
21. Gujarat Region	ISOL	ISOL	ISOL	SCT	ISOL
22. Saurashtra & Kutch	DRY	DRY	ISOL	ISOL	ISOL
23. Konkan & Goa	ISOL	ISOL	ISOL	ISOL	DRY
24. Madhya Maharashtra	ISOL.	ISOL.	SCT	SCT	ISOL
25. Marathawada	ISOL	ISOL	ISOL	FWS	FWS
26. Vidharbha	DRY	DRY	ISOL	FWS	FWS
27. Chhattisgarh	DRY	ISOL	ISOL	SCT	FWS
28. Coastal A. P. & Yanam	DRY	DRY	ISOL	FWS	FWS
29. Telangana	DRY	DRY	ISOL	FWS	FWS
30. Rayalaseema	DRY	DRY	ISOL	SCT	FWS
31. T.N., Puducherry & Karaikal	DRY	DRY	ISOL	SCT	SCT
32. Coastal Karnataka	ISOL	ISOL	ISOL	ISOL	ISOL
33. North Interior Karnataka	DRY	DRY	ISOL	SCT	SCT
34. South Interior Karnataka	DRY	ISOL	ISOL	SCT	SCT
35. Kerala & Mahe	ISOL.	ISOL.	ISOL	SCT	ISOL
36. Lakshadweep	DRY	DRY	DRY	DRY	DRY

% Station Reporting Rainfall

% 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)	
No Rain	Dry			