



Thursday 21 July 2022

MORNING

Time of Issue: 0800 hours IST

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

- ◆ The **monsoon trough** at mean sea level is near its normal position. It is very likely to remain so during next 2-3 days and shift gradually southwards thereafter.
- ◆ A Western Disturbance as a cyclonic circulation lies over north Pakistan & neighbourhood at middle tropospheric levels.
- ◆ A cyclonic circulation lies over Jharkhand & adjoining Gangetic West Bengal in lower & middle tropospheric levels tilting southwards with height.
- ◆ A north-south trough runs from South Interior Karnataka to Comorin area in lower tropospheric levels.
- ◆ An eastwest shear zone runs across north Peninsular India in middle tropospheric levels.
- ◆ An off-shore trough runs from Konkan coast to north Kerala coast.
- ◆ Under the influence of above systems;
 - i) Fairly widespread to widespread light/moderate rainfall with **isolated heavy falls** and thunderstorm/lightning very likely over Jammu & Kashmir, Himachal Pradesh, Uttarakhand and East Rajasthan during 21st-24th and Punjab, Haryana-Chandigarh and Uttar Pradesh during 21st-22nd and over West Rajasthan during 21st-24th July, 2022.
 - a) Isolated **very heavy rainfall** very likely over East Uttar Pradesh on 20th; Punjab, Haryana-Chandigarh & Delhi, West Uttar Pradesh & Himachal Pradesh on 21st; Uttarakhand during 21st-23rd July, 2022.
 - ii) Fairly widespread/widespread light/moderate rainfall & thunderstorm/lightning very likely over central India (Chhattisgarh, Vidarbha, Madhya Pradesh) during next 5 days.
 - a) Isolated **heavy rainfall** very likely over Chhattisgarh during 21st-23rd; Vidarbha on 22nd & 23rd; West Madhya Pradesh on 21st & 22nd and over East Madhya Pradesh during 21st-24th July, 2022.
 - iii) Fairly widespread/ widespread rainfall very likely over Odisha, Bihar, Jharkhand and West Bengal & Sikkim during next 5 days.
 - a) Isolated **heavy rainfall** very likely over Odisha, Bihar and Sub-Himalayan West Bengal & Sikkim on 21st; Jharkhand on 23rd July, 2022.
 - b) Isolated **very heavy rainfall** also likely over Odisha during 22nd-25th July, 2022.
 - iv) Fairly widespread/widespread light/moderate rainfall with **heavy falls** very likely over northeast India (Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura) during next 5 days.
 - a) Isolated **very heavy falls** very likely over Arunachal Pradesh on 21st July, 2022.
 - b) Fairly widespread/ widespread rainfall with isolated heavy falls, thunderstorm & lightning very likely over Tamilnadu, Kerala & Mahe on 21 & 22nd and over Gujarat State, Konkan & Goa and ghat areas of Madhya Maharashtra on 23rd-25th July, 2022.
- Isolated **very heavy to extremely heavy falls** very likely over Gujarat State on 23rd-25th July 2022.

Main Weather Observations

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◆ **Rainfall/thundershower observed (from 0830 hours IST to 1730 hours IST of yesterday):** at most places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Arunachal Pradesh, Coastal Karnataka and Lakshadweep; at many places over East Uttar Pradesh and Andaman & Nicobar Islands; at a few places over Himachal Pradesh, Gujarat state, Konkan & Goa, Madhya Maharashtra, Chhattisgarh, Bihar, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam and Kerala & Mahe and at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Rajasthan, Odisha, Madhya Pradesh, Vidarbha, West Bengal & Sikkim, Marathwada, Interior Karnataka, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.

◆ **Heavy rainfall observed (from 0830 hours IST to 1730 hours IST of yesterday):** Heavy rainfall occurred at isolated places over Delhi and Andaman & Nicobar Islands.

◆ **Chief amount of Rainfall observed (from 0830 hours IST to 1730 hours IST of yesterday)(2 cm or more):** Hut Bay-10; Delhi (Palam)-9; Orai-6; Delhi (Ayanagar & Safdarjung), Lucknow and Guwahati-5 each; Nahan, Bhiwani, Maya Bandar, Tiruttani and Udhagamandalam-4 each; Bahraich, Kanpur, Ghazipur, Mahabaleshwar and Agathi-3 each; Shimla, Delhi (Ridge), Pilani, Rohtak, Khajuraho, Hardoi, Hamirpur, Pasighat and Aminidivi-2 each.

◆ **Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today):** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Punjab, Haryana, Chandigarh & Delhi, Coastal Andhra Pradesh & Yanam, Uttar Pradesh, Rajasthan, Madhya Pradesh, Saurashtra & Kutch, Bihar, Odisha, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.

◆ **Minimum Temperature Departures (as on 20-07-2022):** Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over East Uttar Pradesh; above normal (1.6°C to 3.0°C) at many places over West Uttar Pradesh and Sub-Himalayan West Bengal & Sikkim; at a few places over Assam & Meghalaya, Haryana, Chandigarh & Delhi, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam and Kerala & Mahe and at isolated places over East Rajasthan, Bihar, Madhya Pradesh and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. **Yesterday, the lowest minimum temperature of 17.5°** was reported at **Khargone (West Madhya Pradesh)** over the plains of the country.

◆ **Maximum Temperature Departures (as on 20-07-2022):** Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over East Uttar Pradesh, Bihar and Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at many places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Gangetic West Bengal, Jharkhand and Nagaland, Manipur, Mizoram & Tripura; at a few places over Assam & Meghalaya, Telangana and Karnataka; at isolated places over Odisha, Coastal Andhra Pradesh & Yanam and Kerala & Mahe. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over West Madhya Pradesh and Vidarbha; below normal (-1.6°C to -3.0°C) at many places over Uttarakhand and Lakshadweep; at a few places over East Madhya Pradesh; at isolated places over West Uttar Pradesh and Andaman & Nicobar Islands and near normal over rest parts of the country. **Yesterday, the highest maximum temperature of 38.2°C** was reported at **Bikaner (West Rajasthan)**.

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Meteorological Analysis (Based on 0530 hours IST)

- ◆ The **monsoon trough** at mean sea level now passes through Ganganagar, Hissar, Bareilly, Prayagraj, Patna, Bankura, Digha and thence east-southeastwards to Northeast Bay of Bengal.
- ◆ The Western Disturbance as a cyclonic circulation over north Pakistan & neighbourhood at 5.8 km above mean sea level persists.
- ◆ The cyclonic circulation over Jharkhand & adjoining Gangetic West Bengal between 1.5 km & 5.8 km above mean sea level tilting southwards with height persists.
- ◆ The east-west shear zone roughly along 20°N between 4.5 km & 5.8 km above mean sea level persists.
- ◆ The north-south trough from South Interior Karnataka to Comorin area extending upto 1.5 km above mean sea level persists.
- ◆ The off-shore trough from Konkan coast to north Kerala coast persists.

Weather Forecast for next 5 days * upto 0830 hours IST of 26th July 2022

- ◆ Meteorological sub-division wise detailed 5 days precipitation forecast is given in Table-1.
- ◆ No significant change in maximum temperatures very likely over rest parts of the country during next 5 days.

Weather Outlook for subsequent 2 days During 26th July-28th July 2022

- ◆ Widespread Light/Moderate rainfall activity likely over many parts of northwest, central, east & northeast India. Scattered Light/Moderate rainfall likely over remaining parts of country.
- ◆ Isolated/scattered rainfall activity over remaining parts of Peninsular India.

Weather Warning during next 5 days *

21 July (Day 1): ♦ Heavy to very heavy rainfall at isolated places very likely over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh, West Uttar Pradesh and Arunachal Pradesh; **Heavy rainfall** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, East Uttar Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.

♦ **Thunderstorm accompanied with lightning** likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Tamil Nadu, Puducherry & Karaikal.

♦ **Strong winds** with speed reaching 45-55 kmph gusting to 65 kmph very likely over westcentral and adjoining southwest Arabian Sea. Fishermen are advised not to venture into these areas.

22 July (Day 2): ♦ Heavy to very heavy rainfall at isolated places very likely over Uttarakhand and Odisha; **Heavy rainfall** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.

♦ **Thunderstorm accompanied with lightning** likely at isolated places over Madhya Pradesh, Jharkhand, Gangetic West Bengal, Gujarat Region, Marathwada and Tamil Nadu, Puducherry & Karaikal.

♦ **Strong winds** with speed reaching 45-55 kmph gusting to 65 kmph are very likely over westcentral Arabian Sea. Fishermen are advised not to venture into these areas.

23 July (Day 3): ♦ Heavy to very heavy rainfall with extremely heavy falls at isolated places likely over Gujarat State; **heavy to very heavy rainfall** at isolated places likely over Uttarakhand and Odisha; **Heavy rainfall** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Rajasthan, East Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Konkan & Goa.

♦ **Thunderstorm accompanied with lightning** likely at isolated places over Gujarat Region and Marathwada.

♦ **Strong winds** with speed reaching 45-55 kmph gusting to 65 kmph are very likely over westcentral Arabian Sea, along & off Gujarat-north Konkan coasts and adjoining Northeast Arabian sea. Fishermen are advised not to venture into these areas.

24 July (Day 4): ♦ Heavy to very heavy rainfall with extremely heavy falls at isolated places likely over Saurashtra & Kutch; **heavy to very heavy rainfall** at isolated places likely over Odisha and Gujarat Region; **heavy rainfall** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Rajasthan, East Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Konkan & Goa.

♦ **Strong winds** with speed reaching 45-55 kmph gusting to 65 kmph are very likely over westcentral Arabian Sea, along & off Gujarat-north Konkan coasts and adjoining Northeast Arabian sea. Fishermen are advised not to venture into these areas.

25 July (Day 5): ♦ Heavy to very heavy rainfall with extremely heavy falls at isolated places likely over Saurashtra & Kutch; **heavy to very heavy rainfall** at isolated places likely over Odisha and Gujarat Region; **heavy rainfall** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Rajasthan, East Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Konkan & Goa.

♦ **Strong winds** with speed reaching 45-55 kmph gusting to 65 kmph are very likely over westcentral Arabian Sea, along & off Gujarat-north Konkan coasts and adjoining Northeast Arabian sea. Fishermen are advised not to venture into these areas.

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.

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Table-1
5 Day Rainfall Forecast (MORNING)
21-July-2022

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

% Station Reporting Rainfall

% 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)
No Rain	Dry		

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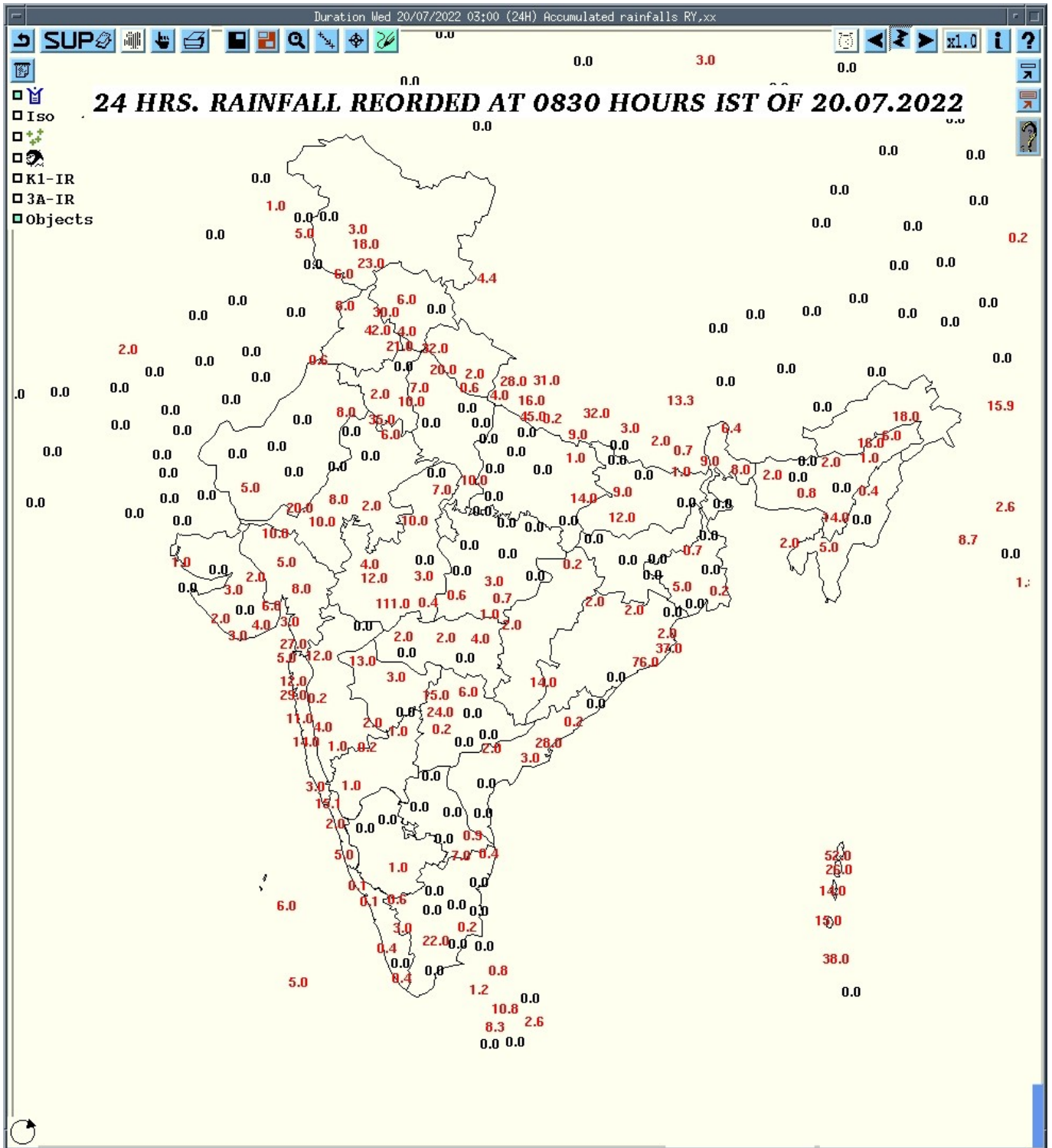
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Fig. 1: Accumulated Rainfall (mm) during past 24 hours



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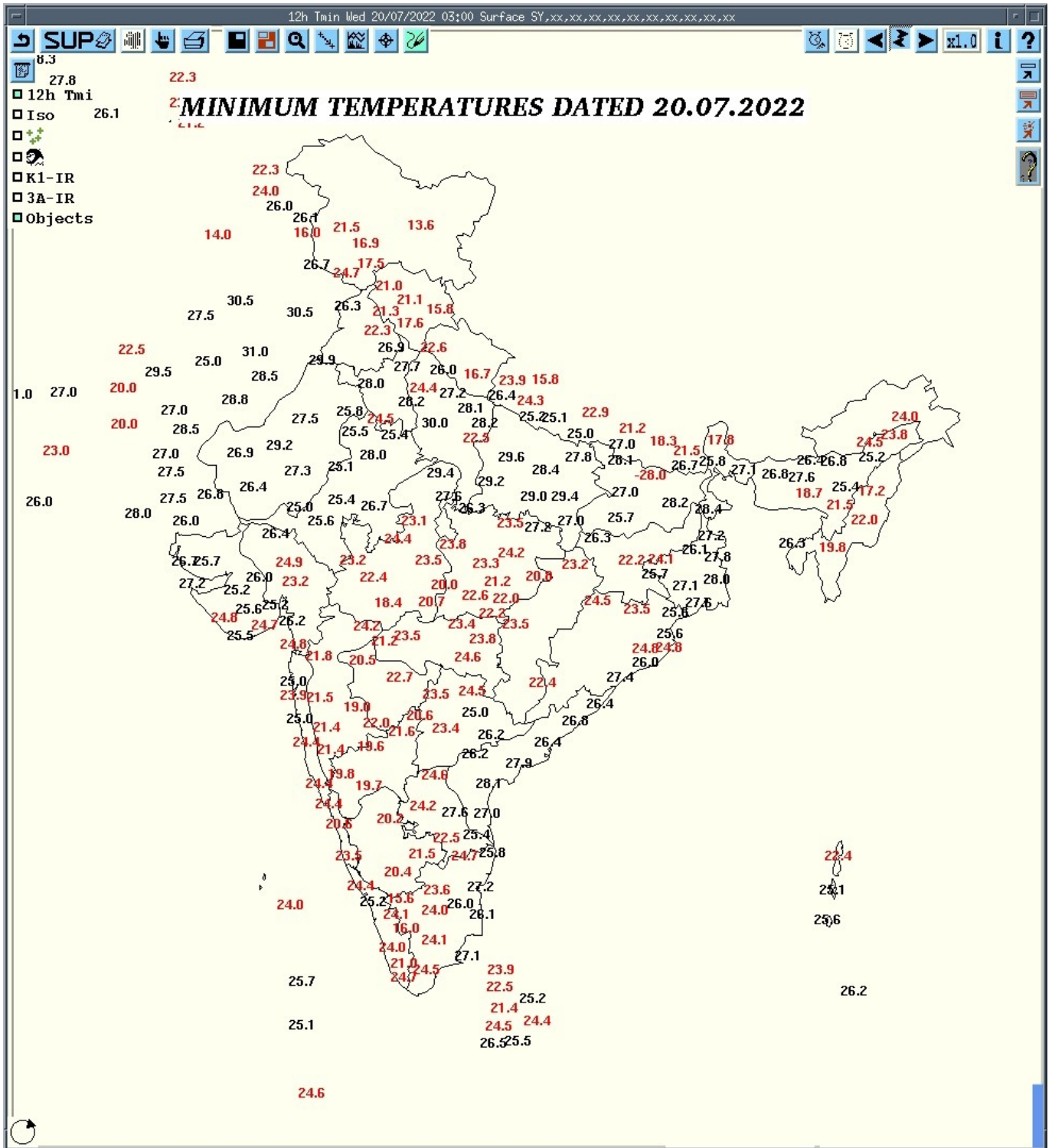
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(Created by the MetInfo app 1977)

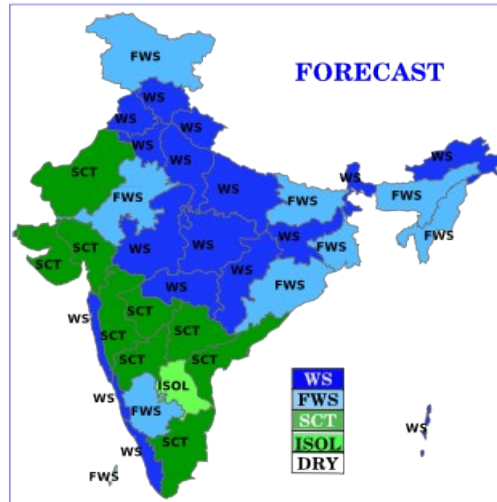


Fig. 3: Minimum Temperature during past 24 hours



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Thursday 21 July 2022



21 July (Day 1): ♦ Heavy to very heavy rainfall at isolated places very likely over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh, West Uttar Pradesh and Arunachal Pradesh; **Heavy rainfall** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, East Uttar Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.

♦ **Thunderstorm accompanied with lightning** likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Tamil Nadu, Puducherry & Karaikal.

♦ **Strong winds** with speed reaching 45-55 kmph gusting to 65 kmph very likely over westcentral and adjoining southwest Arabian Sea. Fishermen are advised not to venture into these areas.

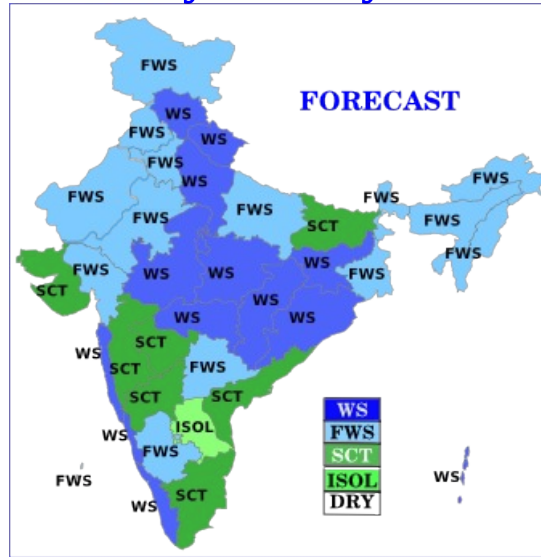
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Friday 22 July 2022



22 July (Day 2): ♦ **Heavy to very heavy rainfall** at isolated places very likely over Uttarakhand and Odisha; **Heavy rainfall** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.

♦ **Thunderstorm accompanied with lightning** likely at isolated places over Madhya Pradesh, Jharkhand, Gangetic West Bengal, Gujarat Region, Marathwada and Tamil Nadu, Puducherry & Karaikal.

♦ **Strong winds** with speed reaching 45-55 kmph gusting to 65 kmph are very likely over westcentral Arabian Sea. Fishermen are advised not to venture into these areas.

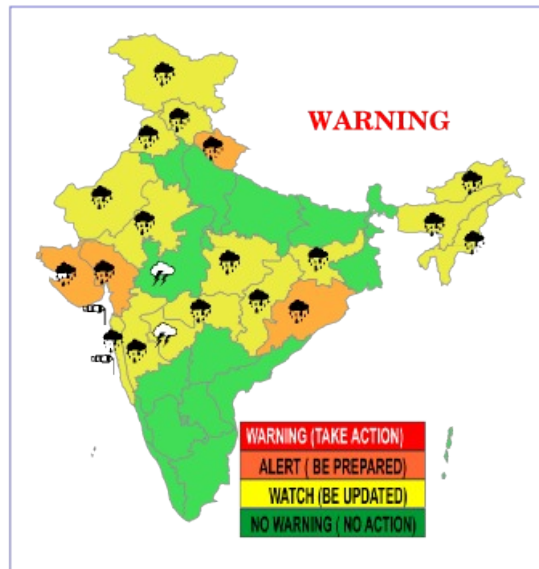
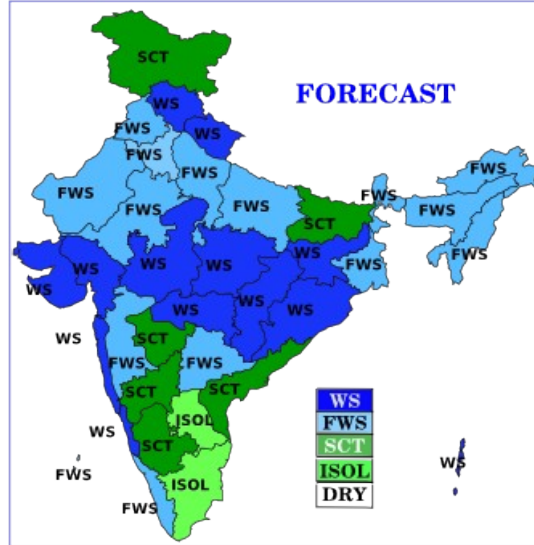
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Saturday 23 July 2022



23 July (Day 3): ♦ **Heavy to very heavy rainfall with extremely heavy falls** at isolated places likely over Gujarat State; **heavy to very heavy rainfall** at isolated places likely over Uttarakhand and Odisha; **Heavy rainfall** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Rajasthan, East Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Konkan & Goa.

♦ **Thunderstorm accompanied with lightning** likely at isolated places over Gujarat Region and Marathwada.

♦ **Strong winds** with speed reaching 45-55 kmph gusting to 65 kmph are very likely over westcentral Arabian Sea, along & off Gujarat-north Konkan coasts and adjoining Northeast Arabian sea. Fishermen are advised not to venture into these areas.

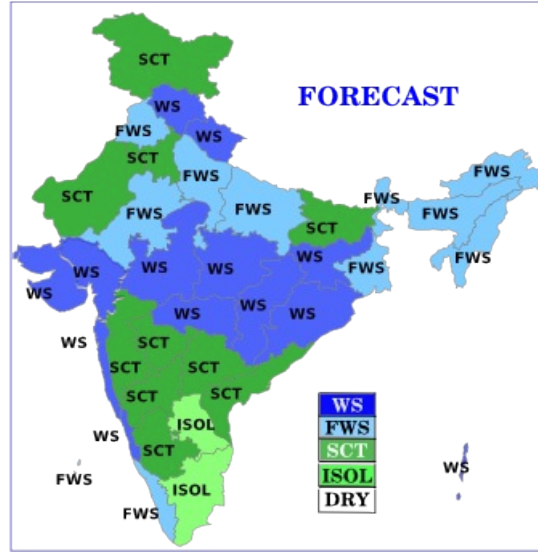
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Sunday 24 July 2022



24 July (Day 4): ♦ **Heavy to very heavy rainfall with extremely heavy falls** at isolated places likely over Saurashtra & Kutch; **heavy to very heavy rainfall** at isolated places likely over Odisha and Gujarat Region; **heavy rainfall** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Rajasthan, East Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Konkan & Goa.

♦ **Strong winds** with speed reaching 45-55 kmph gusting to 65 kmph are very likely over westcentral Arabian Sea, along & off Gujarat-north Konkan coasts and adjoining Northeast Arabian sea. Fishermen are advised not to venture into these areas.

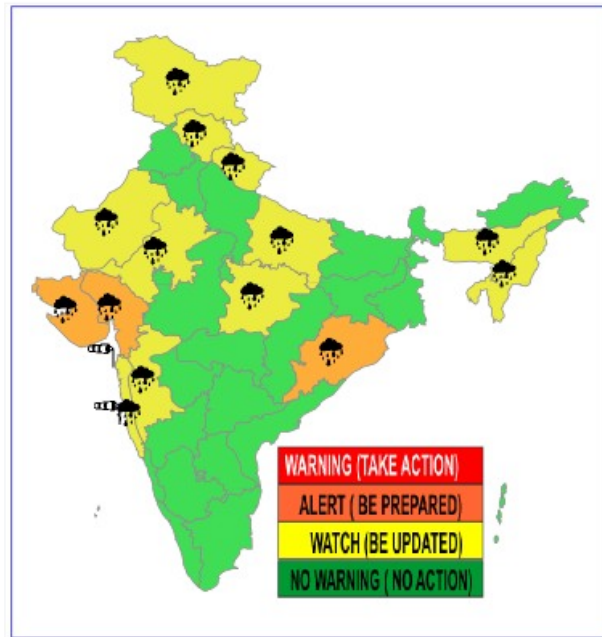
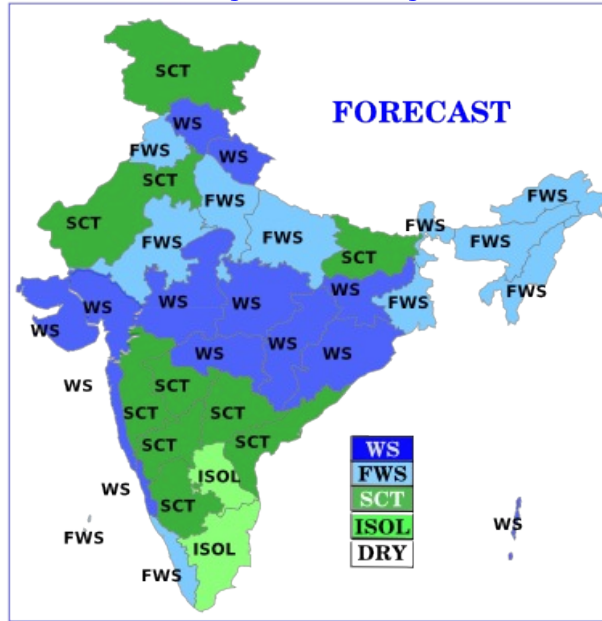
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Monday 25 July 2022



25 July (Day 5): ♦ **Heavy to very heavy rainfall with extremely heavy falls** at isolated places likely over Saurashtra & Kutch; **heavy to very heavy rainfall** at isolated places likely over Odisha and Gujarat Region; **heavy rainfall** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Rajasthan, East Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Konkan & Goa.

♦ **Strong winds** with speed reaching 45-55 kmph gusting to 65 kmph are very likely over westcentral Arabian Sea, along & off Gujarat-north Konkan coasts and adjoining Northeast Arabian sea. Fishermen are advised not to venture into these areas.

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LEGENDS

- 1 अंडमान और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड मनीपुर मीजोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम गंगोय बंगाल
- 7 ओडिशा
- 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

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



Heavy Rain



Heavy Snow



Thunderstorm



Dust Storm



Strong Winds



Visibility



Cyclone



Squall/ Hail



Frost



Cold Wave



Heat Wave



Sea State

* Red color warning does not mean "Red Alert" Red color 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 www.imd.gov.in or contact : +91 11 24631913, 24643965, 24629798

(Copies of the Notices (1977))

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°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 $\geq 37^{\circ}\text{C}$



Warm Night

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 $> 6.4^{\circ}\text{C}$.



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°C to -6.4°C .

Severe Cold Wave: Minimum Temperature Departure from normal $\geq -6.5^{\circ}\text{C}$

(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 $\leq -4.5^{\circ}\text{C}$ or 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°C to -6.4°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)

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(Created by the Meteorologist)