



Monday 11 July 2022

MORNING

Time of Issue: 0800 hours IST

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

- ◆ A Low Pressure Area lies over coastal areas of south Odisha-north Andhra Pradesh & neighbourhood with the associated cyclonic circulation extending upto upper tropospheric levels tilting southwestwards with height.
- ◆ The monsoon trough is active and south of its normal position
- ◆ An east-west shear zone runs roughly along 20°N in lower & mid tropospheric levels tilting southwestwards with height across North Peninsular India.
- ◆ An off-shore trough at mean sea level runs from Gujarat coast to north Kerala coast.
- ◆ Under their influence;
 - (i) Fairly widespread/widespread rainfall & thunderstorm/lightning with isolated heavy rainfall very likely over Chhattisgarh, Vidarbha, Madhya Pradesh, Odisha, Maharashtra, Gujarat state, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Telangana and Karnataka during next 4-5 days.
 - (a) Isolated very heavy rainfall very likely over Saurashtra & Kutch and Marathwada on 11th & 12th; Coastal Karnataka on 14th & 15th; Kerala & Mahe during 13th-15th; Interior Karnataka on 11th; West Madhya Pradesh on 12th; East Madhya Pradesh on 11th; Odisha during 12th-15th; Vidarbha on 13th; Coastal Andhra Pradesh & Yanam and Chhattisgarh on 12th & 13th July, 2022.
 - (b) Isolated/Scattered heavy to very heavy rainfall with isolated extremely heavy rainfall also likely over Telangana during 11th-12th; Gujarat Region, ghat areas of Madhya Maharashtra and Konkan & Goa during 11th-15th; Saurashtra & Kutch during 13th-15th; Coastal Karnataka during 11th-13th, Chhattisgarh & Coastal Andhra Pradesh on 11th; Vidarbha during 11th - 12th July, 2022.
 - (ii) Isolated/scattered rainfall activity very likely over Rayalaseema and Tamil Nadu, Puducherry & Karaikal during next 5 days.
 - (iii) Fairly widespread to widespread rainfall & isolated thunderstorm/lightning during next 5 days with:
 - (a) Isolated heavy rainfall very likely over Jammu & Kashmir on 11th; Himachal Pradesh during 11th- 13th and over Uttarakhand during 11th- 15th July, 2022.
 - (b) Isolated heavy to very heavy rainfall likely over Uttarakhand during 11th-12th July, 2022.
 - (iv) Scattered/fairly rainfall activity with isolated thunderstorm/lightning very likely Punjab, Haryana, Chandigarh and Rajasthan and isolated/scattered over Uttar Pradesh during next 5 days.
 - (a) Isolated heavy rainfall likely over Punjab and Haryana-Chandigarh during 13th-15th and over East Rajasthan during 11th-15th July, 2022.

Main Weather Observations

* Red color warning does not mean "Red Alert" Red color warning means "Take Action".

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- ◆ **Rainfall/thundershower observed (from 0830 hours IST to 1730 hours IST of yesterday):** at most places over Gujarat, Konkan & Goa, Madhya Maharashtra, Telangana and Coastal Karnataka; at many places over East Rajasthan, Marathwada, Vidarbha, Gangetic West Bengal, North Interior Karnataka, Kerala & Mahe and Andaman & Nicobar Islands; at a few places over Himachal Pradesh, Haryana, Chandigarh & Delhi, West Rajasthan, East Madhya Pradesh, Assam & Meghalaya, Odisha, Chhattisgarh, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal; at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, West Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Jharkhand, West Uttar Pradesh, South Interior Karnataka, Rayalaseema and Lakshadweep.
- ◆ **Heavy rainfall observed (from 0830 hours IST to 1730 hours IST of yesterday):** Heavy rainfall at isolated places over West Rajasthan, Himachal Pradesh and Telangana.
- ◆ **Chief amount of Rainfall observed (from 0830 hours IST to 1730 hours IST of yesterday): (3 cm or more):** Dharmshala and Churu-7 each; Ramgumdum-6; Cannur-5; Rajkot, Surat, Guwahati, Hanakonda, Maya-Bandar, Long Islands and Honavar-4 each; Mangalore, Bhilwara, Kolkata, Bhaunagar, Ranchi and Valprai-3 each.
- ◆ **Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today):** at isolated places over Jammu division, West Rajasthan, Gujarat Region, Madhya Pradesh, Vidarbha, Tripura, Odisha and Gangetic West Bengal.
- ◆ **Minimum Temperature Departures (as on 10-07-2022):** Minimum temperatures were appreciably above normal (3.1°C to 5.1°C) at many places over Sub-Himalayan West Bengal & Sikkim; above normal (1.6°C to 3.0°C) at many places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, East Uttar Pradesh and Arunachal Pradesh; at a few places over Bihar, Assam & Meghalaya and Andaman & Nicobar Islands; at isolated places over East Rajasthan. They were appreciably below normal (-3.1°C to -5.1°C) at many places over West Madhya Pradesh and Telangana; below normal (-1.6°C to -3.0°C) at many places over Coastal Andhra Pradesh & Yanam; at a few places over Gujarat State and at isolated places over East Madhya Pradesh and Tamilnadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 17.0°C was reported at Khargone (West Madhya Pradesh) over the plains of the country.
- ◆ **Maximum Temperature Departures (as on 10-07-2022):** Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over East Uttar Pradesh and Bihar; at many places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; at a few places over East Madhya Pradesh; above normal (1.6°C to 3.0°C) at a few places over Odisha and Gangetic West Bengal; at isolated places over Tamilnadu, Puducherry & Karaikal. They were markedly below normal (-5.1°C or less) at most places over Marathwada and Telangana; appreciably below normal (-3.1°C to -5.0°C) at most places over East Rajasthan, Rayalaseema and Coastal Andhra Pradesh & Yanam; at many places over Vidarbha, Konkan & Goa and Madhya Maharashtra; at a few places over Saurashtra & Kutch; below normal (-1.6°C to -3.0°C) at most places over Gujarat Region, Interior Karnataka and Telangana; at many places over Punjab, Haryana, Chandigarh & Delhi; at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Coastal Karnataka and Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 40.6°C was reported at Banda (East Uttar Pradesh).

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Meteorological Analysis (Based on 0530 hours IST)

- ◆ The **Low Pressure Area** over coastal areas of south Odisha-north Andhra Pradesh & neighbourhood with the associated cyclonic circulation extending upto 7.6 km above mean sea level tilting southwestwards with height persists.
- ◆ The monsoon trough now passes through Bikaner, Kota, Sagar, Raipur, centre of Low Pressure Area over coastal areas of south Odisha-north Andhra Pradesh & neighbourhood and thence southeastwards to Eastcentral Bay of Bengal extending upto 1.5 km above mean sea level.
- ◆ The off-shore trough at mean sea level from Gujarat coast to north Kerala coast persists.
- ◆ The east-west shear zone roughly along 20°N tilting southwestwards with height between 3.1 km & 5.8 km above mean sea level across North Peninsular India persists.

Weather Forecast for next 5 days * upto 0830 hours IST of 16th 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 16th July-18th July, 2022

- ◆ Widespread rainfall activity with isolated heavy to very heavy rainfall likely along the west coast and over parts of East & adjoining Central India.
- ◆ Fairly widespread rainfall activity likely over Northwest & adjoining Central India and Northeast India.
- ◆ Scattered rainfall activity likely over remaining parts of the country except West Rajasthan, Rayalaseema and Tamilnadu where isolated activity is likely.



Weather Warning during next 5 days *

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11 July (Day 1): ♦ **Heavy to very heavy rainfall at a few places with extremely heavy falls** at isolated places very likely over Telangana and Coastal Karnataka; **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Vidarbha, Chhattisgarh, Gujarat region, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Madhya Maharashtra; **heavy to very heavy rainfall** at isolated places over Uttarakhand, Madhya Pradesh, Saurashtra & Kutch, Marathawada and Interior Karnataka and **heavy rainfall** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, East Rajasthan, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Andaman & Nicobar Islands, Odisha and Kerala & Mahe.

♦ **Thunderstorm accompanied with lightning & Gusty winds (speed reaching 30-40 kmph)** very likely at isolated places over Andaman & Nicobar Islands and **with lightning** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Rayalaseema and Tamilnadu, Puducherry & Karaikal.

♦ **Squally weather** (wind speed 45-55 kmph gusting to 65 kmph) very likely over along and off Kerala, Karnataka, Goa, Maharashtra, Gujarat coasts, north east Arabian Sea, central parts of central Bay of Bengal, north coastal Odisha, Andaman Sea. **Strong winds** of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea, central parts of Arabian Sea and 45-55 kmph gusting to 65 kmph over east central Arabian Sea and off Kerala, Karnataka, Maharashtra, Gujarat coasts, south Bay of Bengal and adjoining central Bay of Bengal, south Andaman Sea. Fishermen are advised not to venture into these seas.

12 July (Day 2): ♦ **Heavy to very heavy rainfall at a few places with extremely heavy falls** at isolated places very likely over Gujarat region and Telangana; **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Vidarbha, Konkan & Goa, Coastal Karnataka and Madhya Maharashtra; **heavy to very heavy rainfall** at isolated places over Uttarakhand, West Madhya Pradesh, Chhattisgarh, Odisha, Saurashtra & Kutch, Marathawada and Coastal Andhra Pradesh & Yanam and **heavy rainfall** at isolated places over Himachal Pradesh, West Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Andaman & Nicobar Islands, Interior Karnataka and Kerala & Mahe.

♦ **Thunderstorm accompanied with lightning & Gusty winds (speed reaching 30-40 kmph)** very likely at isolated places over Andaman & Nicobar Islands and **with lightning** at isolated places over Himachal Pradesh, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand and Rayalaseema.

♦ **Squally weather** (wind speed 45-55 kmph gusting to 65 kmph) likely over along and off Kerala, Karnataka, Goa, Maharashtra, Gujarat coasts, north east Arabian Sea, central parts of central Bay of Bengal, north Andaman Sea and adjoining east central Bay of Bengal. **Strong winds** of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea, central parts of Arabian Sea and 45-55 kmph gusting to 65 kmph over east central Arabian Sea and off Kerala, Karnataka, Maharashtra, Gujarat coasts, south Bay of Bengal and adjoining central Bay of Bengal, south Andaman Sea. Fishermen are advised not to venture into these seas.

13 July (Day 3): ♦ **Heavy to very heavy rainfall at a few places with extremely heavy falls** at isolated places very likely over Gujarat region and Konkan & Goa; **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Saurashtra & Kutch, Coastal Karnataka and Madhya Maharashtra; **heavy to very heavy rainfall** at isolated places over Vidarbha, Chhattisgarh, Odisha and Kerala & Mahe and **heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, East Rajasthan, Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Andaman & Nicobar Islands, Marathawada, Telangana and Interior Karnataka.

♦ **Thunderstorm accompanied with lightning & Gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Andaman & Nicobar Islands and **with lightning** at isolated places over Himachal Pradesh, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar and Gangetic West Bengal.

♦ **Squally weather** (wind speed 45-55 kmph gusting to 65 kmph) very likely over along and off Kerala, Karnataka, Goa, Maharashtra, Gujarat coasts, north east Arabian Sea, central parts of central Bay of Bengal, north Andaman Sea and adjoining east central Bay of Bengal. **Strong winds** of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea, central parts of Arabian Sea and 45-55 kmph gusting to 65 kmph off Kerala, Karnataka, Maharashtra, Gujarat coasts, south Bay of Bengal and adjoining central Bay of Bengal, Andaman Sea. Fishermen are advised not to venture into these seas.

14 July (Day 4): ♦ **Heavy to very heavy rainfall at a few places with extremely heavy falls** at isolated places likely over Gujarat region and Konkan & Goa; **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Saurashtra & Kutch and Madhya Maharashtra; **heavy to very heavy rainfall** at isolated places over Odisha, Coastal Karnataka and Kerala & Mahe and **heavy rainfall** at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Coastal Andhra Pradesh & Yanam and Interior Karnataka.

♦ **Thunderstorm accompanied with lightning & Gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Andaman & Nicobar Islands and **with lightning** at isolated places over Himachal Pradesh, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar and Gangetic West Bengal.

♦ **Squally weather** (wind speed 45-55 kmph gusting to 65 kmph) likely over along and off Kerala, Karnataka, Goa, Maharashtra, Gujarat coasts, north east Arabian Sea, central parts of central Bay of Bengal, north Andaman Sea and adjoining east central Bay of Bengal. **Strong winds** of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea, central parts of Arabian Sea and 45-55 kmph gusting to 65 kmph over east central Arabian Sea and off Kerala, Karnataka, Maharashtra, Gujarat coasts, south Bay of Bengal and adjoining central Bay of Bengal, south Andaman Sea. Fishermen are advised not to venture into these seas.

15 July (Day 5): ♦ **Heavy to very heavy rainfall at a few places with extremely heavy falls** at isolated places likely over Gujarat region and Konkan & Goa; **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Saurashtra & Kutch and Madhya Maharashtra; **heavy to very heavy rainfall** at isolated places over Odisha, Coastal Karnataka and Kerala & Mahe and **heavy rainfall** at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Coastal Andhra Pradesh & Yanam and Interior Karnataka.

♦ **Thunderstorm accompanied with lightning & Gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Andaman & Nicobar Islands and **with lightning** at isolated places over Himachal Pradesh, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar and Gangetic West Bengal.

♦ **Squally weather** (wind speed 45-55 kmph gusting to 65 kmph) likely over along and off Kerala, Karnataka, Goa, Maharashtra, Gujarat coasts, north east Arabian Sea, central parts of central Bay of Bengal, north Andaman Sea and adjoining east central Bay of Bengal. **Strong winds** of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea, central parts of Arabian Sea and 45-55 kmph gusting to 65 kmph over east central Arabian Sea and off Kerala, Karnataka, Maharashtra, Gujarat coasts, south Bay of Bengal and adjoining central Bay of Bengal, south Andaman Sea. Fishermen are advised not to venture into these seas.

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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)
11-July-2022

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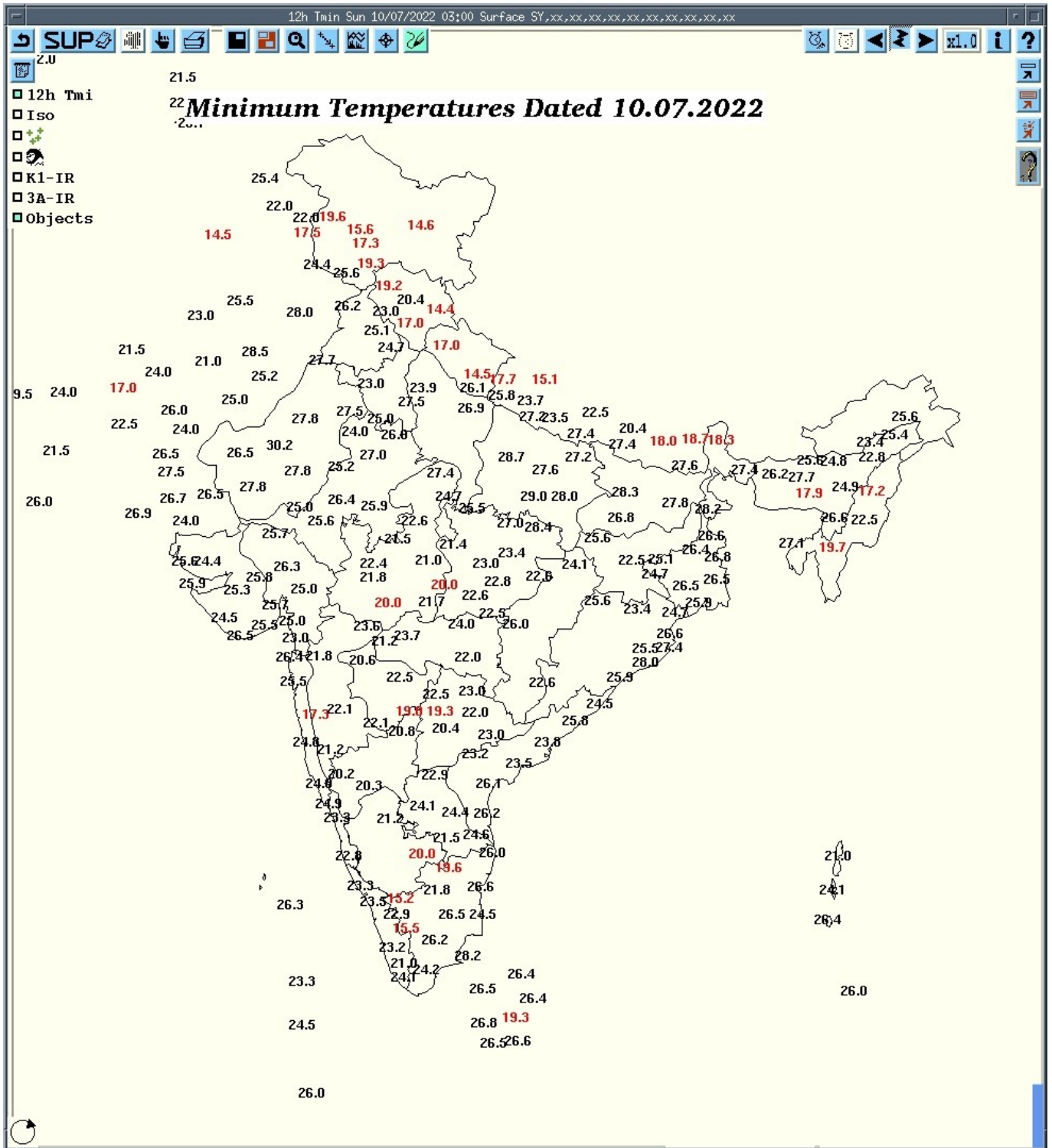
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Fig. 3: Minimum Temperature during past 24 hours



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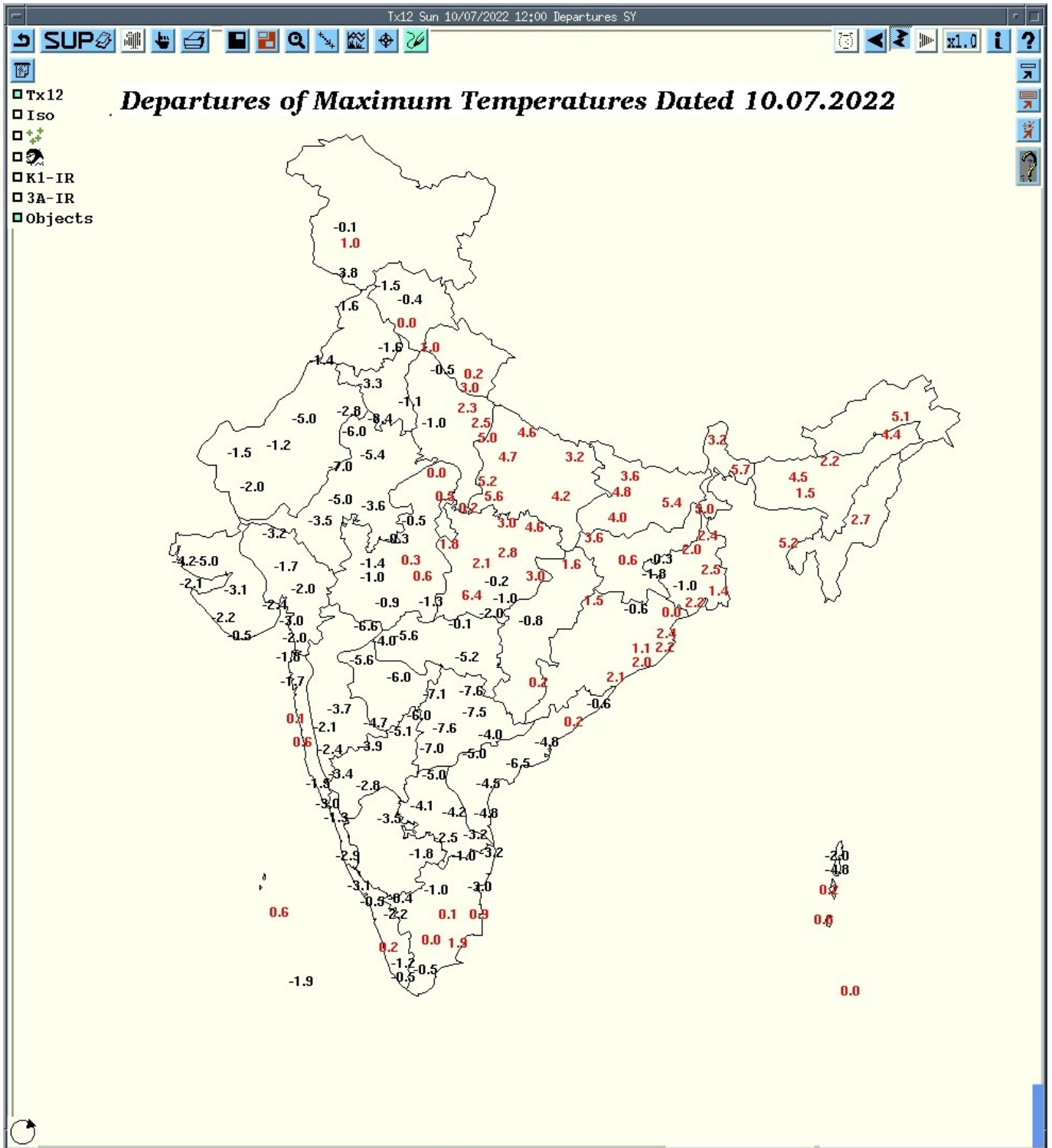
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(Created by the MetInfo app 10/7/2022)



Fig. 4 : Departure from Normal of Maximum Temperatures



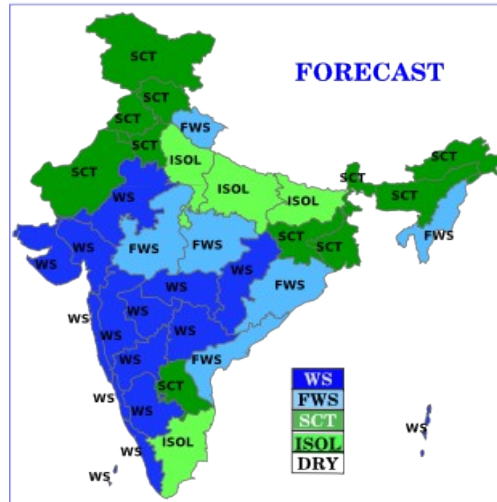
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Monday 11 July 2022



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♦ **Thunderstorm accompanied with lightning & Gusty winds (speed reaching 30-40 kmph) very likely** at isolated places over Andaman & Nicobar Islands and **with lightning** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Rayalaseema and Tamilnadu, Puducherry & Karaikal.

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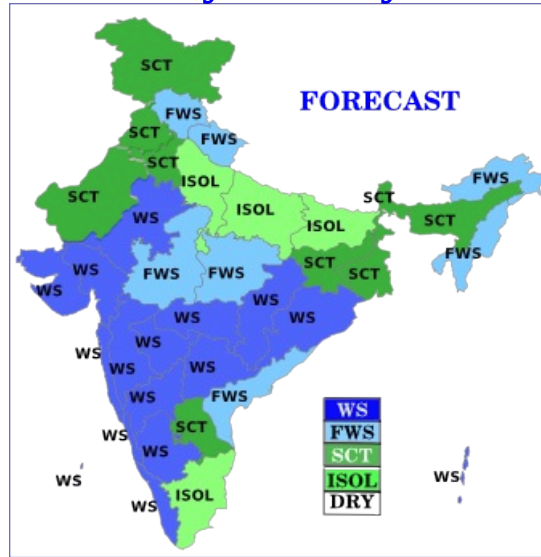
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(Copies to the Meteorologist (R))

Tuesday 12 July 2022



12 July (Day 2): ♦ **Heavy to very heavy rainfall at a few places with extremely heavy falls** at isolated places very likely over Gujarat region and Telangana; **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Vidarbha, Konkan & Goa, Coastal Karnataka and Madhya Maharashtra; **heavy to very heavy rainfall** at isolated places over Uttarakhand, West Madhya Pradesh, Chhattisgarh, Odisha, Saurashtra & Kutch, Marathwada and Coastal Andhra Pradesh & Yanam and **heavy rainfall** at isolated places over Himachal Pradesh, West Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Andaman & Nicobar Islands, Interior Karnataka and Kerala & Mahe.

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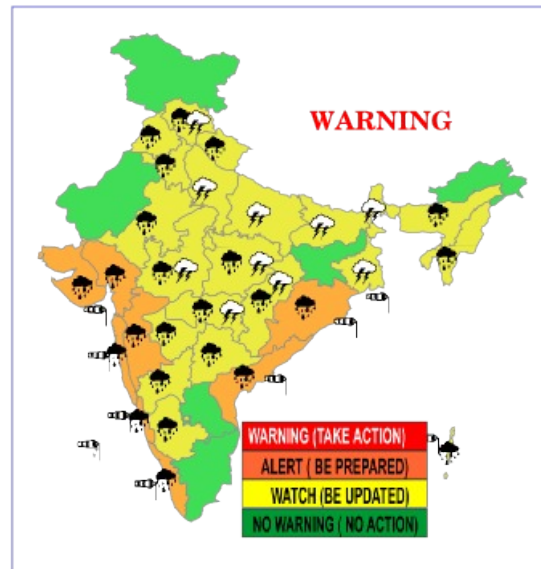
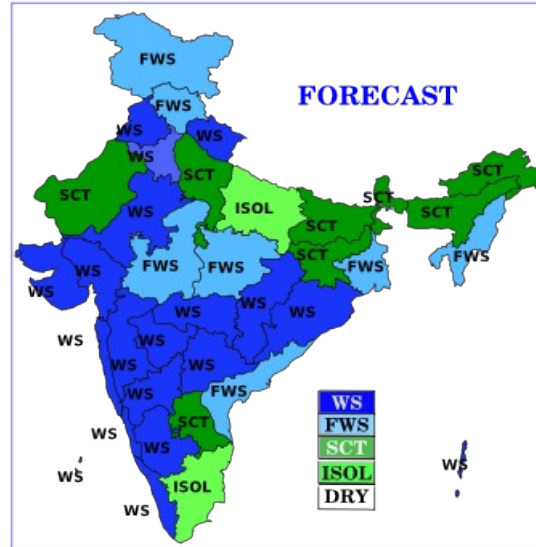
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(Circle as the National flag 497)

Wednesday 13 July 2022



13 July (Day 3): ♦ **Heavy to very heavy rainfall at a few places with extremely heavy falls** at isolated places very likely over Gujarat region and Konkan & Goa; **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Saurashtra & Kutch, Coastal Karnataka and Madhya Maharashtra; **heavy to very heavy rainfall** at isolated places over Vidarbha, Chhattisgarh, Odisha and Kerala & Mahe and **heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, East Rajasthan, Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Andaman & Nicobar Islands, Marathwada, Telangana and Interior Karnataka.

♦ **Thunderstorm accompanied with lightning & Gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Andaman & Nicobar Islands and **with lightning** at isolated places over Himachal Pradesh, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar and Gangetic West Bengal.

♦ **Squally weather** (wind speed 45-55 kmph gusting to 65 kmph) very likely over along and off Kerala, Karnataka, Goa, Maharashtra, Gujarat coasts, north east Arabian Sea, central parts of central Bay of Bengal, north Andaman Sea and adjoining east central Bay of Bengal. **Strong winds** of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea, central parts of Arabian Sea and 45-55 kmph gusting to 65 kmph off Kerala, Karnataka, Maharashtra, Gujarat coasts, south Bay of Bengal and adjoining central Bay of Bengal, Andaman Sea. Fishermen are advised not to venture into these seas.

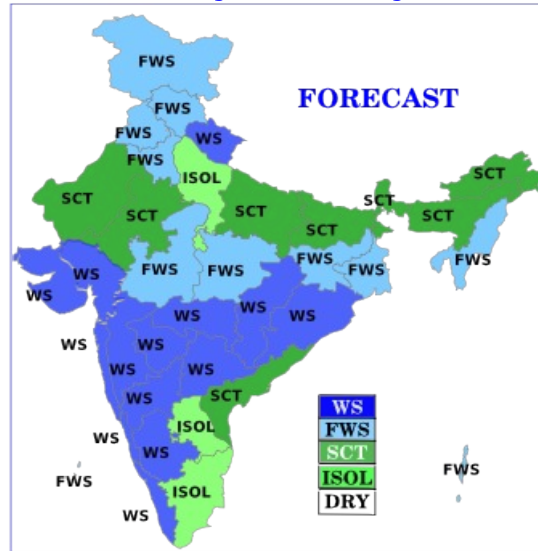
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(Copies to the Ministry till 10:30)

Thursday 14 July 2022



14 July (Day 4): ♦ **Heavy to very heavy rainfall at a few places with extremely heavy falls** at isolated places likely over Gujarat region and Konkan & Goa; **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Saurashtra & Kutch and Madhya Maharashtra; **heavy to very heavy rainfall** at isolated places over Odisha, Coastal Karnataka and Kerala & Mahe and **heavy rainfall** at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Coastal Andhra Pradesh & Yanam and Interior Karnataka.

♦ **Thunderstorm accompanied with lightning & Gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Andaman & Nicobar Islands and **with lightning** at isolated places over Himachal Pradesh, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar and Gangetic West Bengal.

♦ **Squally weather** (wind speed 45-55 kmph gusting to 65 kmph) likely over along and off Kerala, Karnataka, Goa, Maharashtra, Gujarat coasts, north east Arabian Sea, central parts of central Bay of Bengal, north Andaman Sea and adjoining east central Bay of Bengal. **Strong winds** of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea, central parts of Arabian Sea and 45-55 kmph gusting to 65 kmph over east central Arabian Sea and off Kerala, Karnataka, Maharashtra, Gujarat coasts, south Bay of Bengal and adjoining central Bay of Bengal, south Andaman Sea. Fishermen are advised not to venture into these seas.

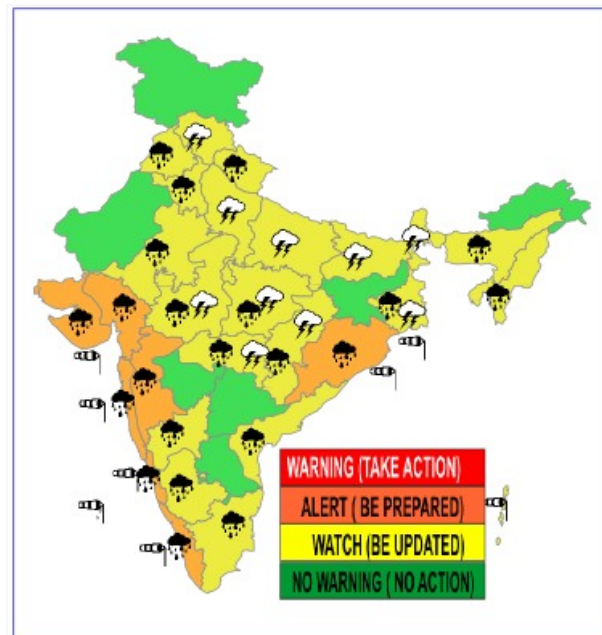
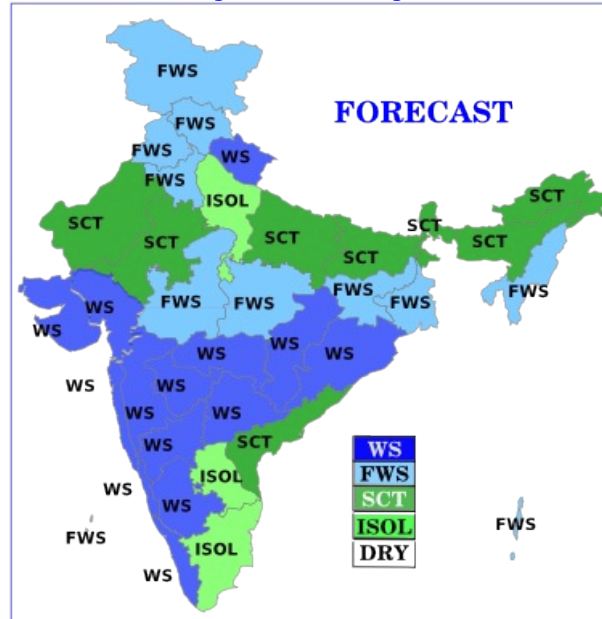
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(Copies to the Media upto 1070)

Friday 15 July 2022



15 July (Day 5): ♦ **Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places likely over Gujarat region and Konkan & Goa; Heavy to very heavy rainfall with extremely heavy falls at isolated places over Saurashtra & Kutch and Madhya Maharashtra; heavy to very heavy rainfall at isolated places over Odisha, Coastal Karnataka and Kerala & Mahe and heavy rainfall at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Meghalaya & Tripura, Coastal Andhra Pradesh & Yanam and Interior Karnataka.**

♦ **Thunderstorm accompanied with lightning & Gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Andaman & Nicobar Islands and **with lightning** at isolated places over Himachal Pradesh, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar and Gangetic West Bengal.

♦ **Squally weather** (wind speed 45-55 kmph gusting to 65 kmph) likely over along and off Kerala, Karnataka, Goa, Maharashtra, Gujarat coasts, north east Arabian Sea, central parts of central Bay of Bengal, north Andaman Sea and adjoining east central Bay of Bengal. **Strong winds** of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea, central parts of Arabian Sea and 45-55 kmph gusting to 65 kmph over east central Arabian Sea and off Kerala, Karnataka, Maharashtra, Gujarat coasts, south Bay of Bengal and adjoining central Bay of Bengal, south Andaman Sea. Fishermen are advised not to venture into these seas.

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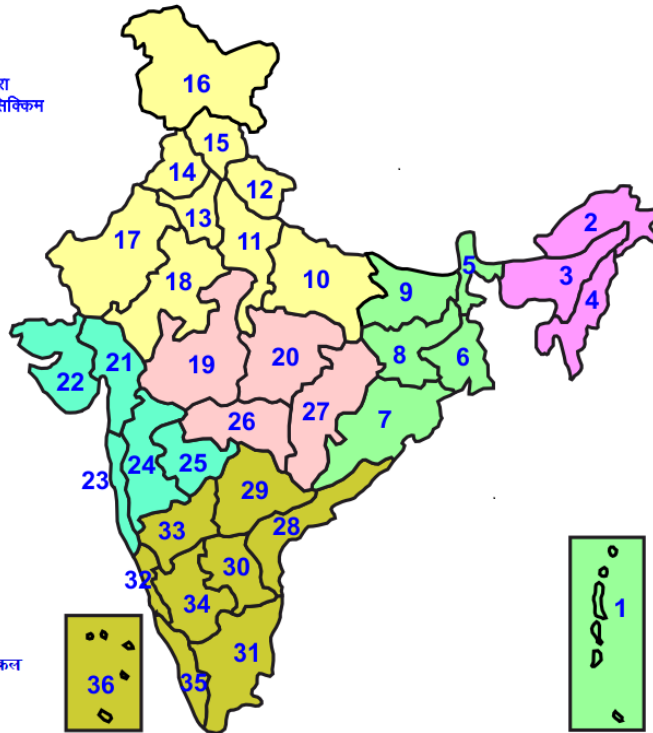
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LEGENDS

- 1 अंडमान और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड मनीपुर मीजोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एंवम् सिक्किम
- 6 पश्चिम गंगोय बंगाल
- 7 ओडिशा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा चंडिगढ़ एंवम् दिल्ली
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एंवम् कश्मीर एंवम् लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात क्षेत्र
- 22 सौराष्ट्र एंवम् कच्छ
- 23 कोंकण एंवम् गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठावाडा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 तटीय आंध्र प्रदेश एवं यनम
- 29 तेलंगाना
- 30 रायलसीमा
- 31 तमिलनाडु, पुदुचेरी एंवम् कराईकल
- 32 तटिय कर्नाटक
- 33 आंतरिक उत्तरी कर्नाटक
- 34 आंतरिक दक्षिणी कर्नाटक
- 35 केरल एंवम् 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

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(Copies to the Media upto 1070)

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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