



Wednesday 20 July 2022

MORNING

Time of Issue: 0730 hours IST

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

- ◆ A cyclonic circulation lies over West Madhya Pradesh & neighbourhood in lower tropospheric levels.
- ◆ The monsoon trough is near to its normal position and very likely to continue to shift further northwards during next 2-3 days.
- ◆ An east-west shear zone runs across north Peninsular India in middle tropospheric levels.
- ◆ An off-shore trough runs from south Gujarat coast to Karnataka 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, Punjab, Haryana, Chandigarh, Rajasthan & Uttar Pradesh during 20th-24th July, 2022.
 - a) Isolated **very heavy rainfall** very likely over Himachal Pradesh & Haryana- Chandigarh on 20th; Punjab & Uttar Pradesh on 20th & 21st and over Uttarakhand during 21st-24th July, 2022.
 - b) Isolated/scattered **extremely heavy falls** also likely over Uttarakhand on 20th July, 2022.
 - ii) Fairly widespread/widespread light/moderate rainfall with **heavy falls** very likely over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 5 days.
 - a) Isolated **very heavy falls** also likely over Sub-Himalayan West Bengal & Sikkim on 20th; over Arunachal Pradesh and Assam & Meghalaya on 20th & 21st July, 2022.
 - iii) Fairly widespread/widespread light/moderate rainfall & thunderstorm/lightning very likely over Chhattisgarh, Vidarbha, Madhya Pradesh, Konkan & Goa, Kerala & Mahe, Coastal Karnataka and Lakshadweep during next 5 days.
 - a) Isolated **heavy rainfall** very likely over Kerala & Mahe on 20th & 21st; West Madhya Pradesh during 20th-23rd; East Madhya Pradesh on 20th & 23rd; Vidarbha & Chhattisgarh during 21st-24th July, 2022.
 - b) Isolated **very heavy rainfall** also likely over over East Madhya Pradesh on 21st, 22nd and 24th and West Madhya Pradesh on 24th July, 2022.
 - iv) Scattered to fairly widespread rainfall very likely over Odisha, Bihar, Jharkhand, Gujarat State, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal, Interior Karnataka, Coastal Andhra Pradesh & Yanam and Telangana during next 5 days.
 - a) Isolated **heavy rainfall** very likely over Bihar on 20th & 21st; Odisha on 21st & 22nd; Tamil Nadu on 20th & 21st; Gujarat State on 23rd and over Telangana on 22nd & 23rd July, 2022.
 - b) Isolated **very heavy rainfall** also likely over Odisha on 23rd & 24th 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 Arunachal Pradesh and Gujarat Region; at many places over Himachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch, West Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, Coastal & North Interior Karnataka and Andaman & Nicobar Islands; at a few places over Assam & Meghalaya, Gangetic West Bengal, Odisha and Vidarbha and at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Rajasthan, Bihar, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, East Madhya Pradesh, Marathwada, Coastal Andhra Pradesh & Yanam, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.
- ◆ **Heavy rainfall observed (from 0830 hours IST to 1730 hours IST of yesterday):** Heavy rainfall occurred at isolated places over Himachal Pradesh and West Madhya Pradesh.
- ◆ **Chief amount of Rainfall observed (from 0830 hours IST to 1730 hours IST of yesterday)(2 cm or more):** Khandwa-9; Nahan-7; Manali, Gandhinagar & Maya Bandar-3 each; Ludhiana, Ambala, Vallabh Vidyanagar, Bulsar, Matheran, Mahabaleshwar & Bhubaneswar-2 each.
- ◆ **Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today):** at isolated places over Assam & Meghalaya, Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, West Madhya Pradesh, Gujarat Region, Bihar, Odisha and Tamil Nadu, Puducherry & Karaikal.
- ◆ **Minimum Temperature Departures (as on 19-07-2022):** Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Punjab; above normal (1.6°C to 3.0°C) at most places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Haryana, Chandigarh & Delhi, West Uttar Pradesh; at many places over Uttarakhand, Bihar, Assam & Meghalaya; at a few places over Odisha and at isolated places over West Rajasthan and East Madhya Pradesh. They were below normal (-1.6°C to -3.0°C) at a few places over Vidarbha, Coastal Andhra Pradesh & Yanam, Telangana and North Interior Karnataka; at isolated places over East Rajasthan, West Madhya Pradesh, Gujarat Region, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 16.4° was reported at Khargone (West Madhya Pradesh) over the plains of the country.
- ◆ **Maximum Temperature Departures (as on 19-07-2022):** Maximum temperatures were markedly above normal (5.1°C or more) at a few places over East Uttar Pradesh; appreciably above normal (3.1°C to 5.0°C) at most places over Bihar; at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, West Uttar Pradesh and Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at most places over Punjab and Sub-Himalayan West Bengal & Sikkim; at many places over Gangetic West Bengal; at a few places over Haryana, Chandigarh & Delhi, Odisha, Coastal Andhra Pradesh & Yanam, Rayalaseema, South Interior Karnataka and Kerala & Mahe; at isolated places over Assam & Meghalaya and Telangana. They were markedly below normal (-5.1°C or less) at many places over West Madhya Pradesh; at isolated places over Vidarbha and Gujarat Region; appreciably below normal (-3.1°C to -5.0°C) at a few places over East Madhya Pradesh; at isolated places over Arunachal Pradesh; below normal (-1.6°C to -3.0°C) at a few places over Saurashtra & Kutch, Chhattisgarh and Andaman & Nicobar Islands; at isolated places over Madhya Maharashtra and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 40.2°C was reported at Hamirpur & Banda (East Uttar Pradesh).

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Meteorological Analysis (Based on 0530 hours IST)

- ◆ The cyclonic circulation over West Madhya Pradesh & neighbourhood extending upto 3.1 km above mean sea level persists.
- ◆ The **monsoon trough** now passes through Ganganagar, Hissar, Delhi, Lucknow, Varanasi, Hazaribagh, Bankura, Kolkata and thence east-southeastwards to Northeast Bay of Bengal.
- ◆ The east-west shear zone roughly along 20°N between 4.5 km & 5.8 km above mean sea level persists.
- ◆ The cyclonic circulation over south Jharkhand & neighbourhood at 3.1 km above mean sea level persists.
- ◆ The off-shore trough from south Gujarat coast to Karnataka coast persists.

Weather Forecast for next 5 days * upto 0830 hours IST of 25th 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 25th July-27th July 2022

- ◆ Widespread rainfall activity likely over Gujarat State, West Coast and over parts of Northwest, Central, East & Northeast India and Islands.
- ◆ Isolated/scattered rainfall activity over remaining parts of Peninsular India.

Weather Warning during next 5 days *

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

♦ **Thunderstorm accompanied with lightning** likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, 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 are very likely over westcentral and adjoining southwest Arabian Sea and 40-50 kmph gusting to 60 kmph are very likely over adjoining eastcentral Arabian Sea. Fishermen are advised not to venture into these areas.

21 July (Day 2): ♦ **Heavy to very heavy rainfall** at isolated places very likely over Uttarakhand, Punjab, Uttar Pradesh, East Madhya Pradesh, Arunachal Pradesh and Assam & Meghalaya; **heavy rainfall** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Haryana, Chandigarh & Delhi, West Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.

♦ **Thunderstorm accompanied with lightning** likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Bihar, Jharkhand, Odisha and Tamil Nadu, Puducherry & Karaikal

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

22 July (Day 3): ♦ **Heavy to very heavy rainfall** at isolated places very likely over Uttarakhand and East Madhya Pradesh; **heavy rainfall** at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, West Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Telangana.

♦ **Thunderstorm accompanied with lightning** very likely at isolated places over Jharkhand.

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

23 July (Day 4): ♦ **Heavy to very heavy rainfall** at isolated places likely over Uttarakhand and Odisha; **heavy rainfall** at isolated places over Himachal Pradesh, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat State and Telangana.

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

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

24 July (Day 5): ♦ **Heavy to very heavy rainfall** at isolated places likely over Uttarakhand, Madhya Pradesh, Gujarat State and Odisha; **heavy rainfall** at isolated places over Himachal Pradesh, Uttar Pradesh, Rajasthan, Vidarbha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

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

♦ **Strong winds** with speed reaching 45-55 kmph gusting to 65 kmph are very likely over westcentral and adjoining southwest 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)
20-July-2022

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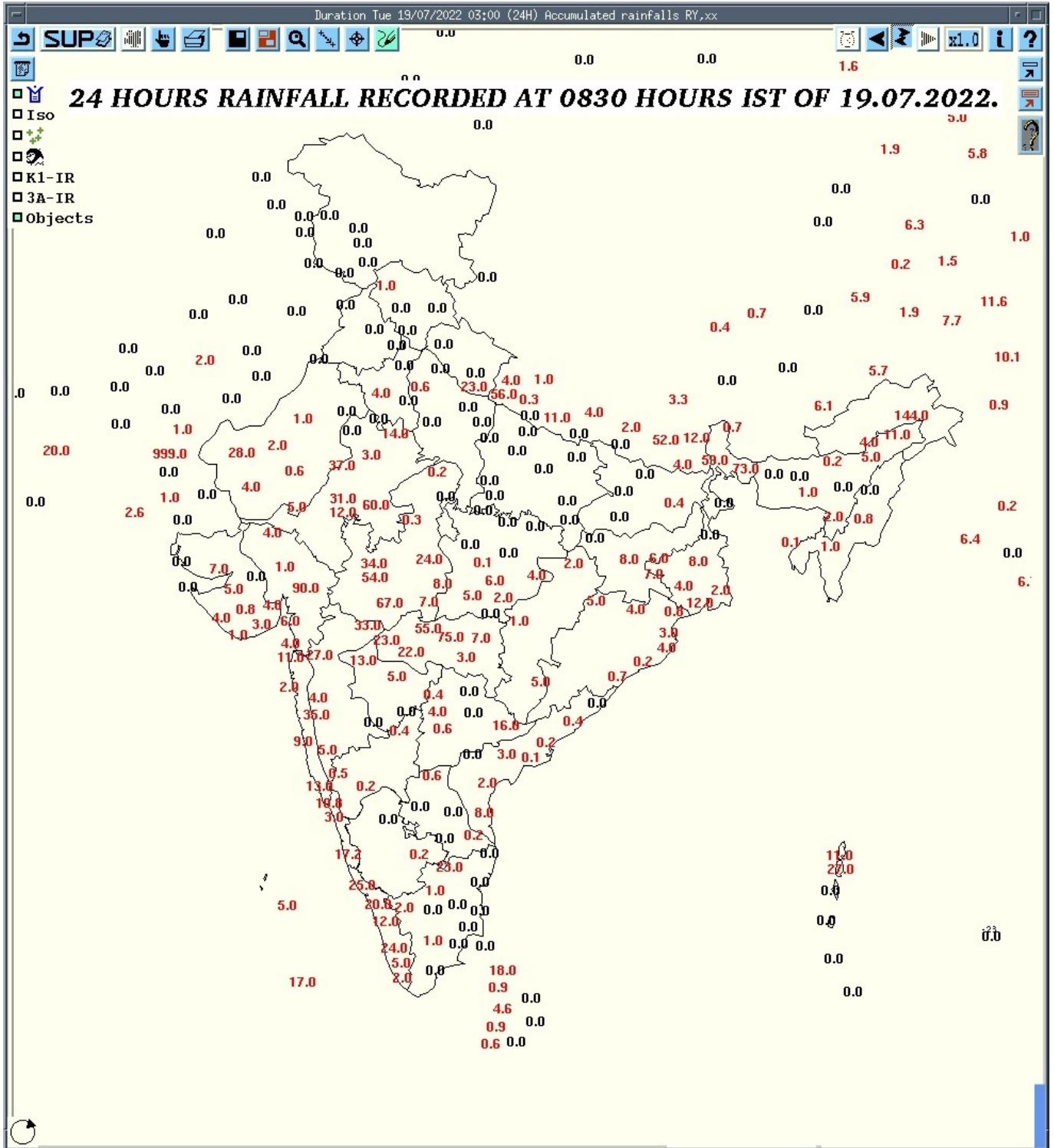
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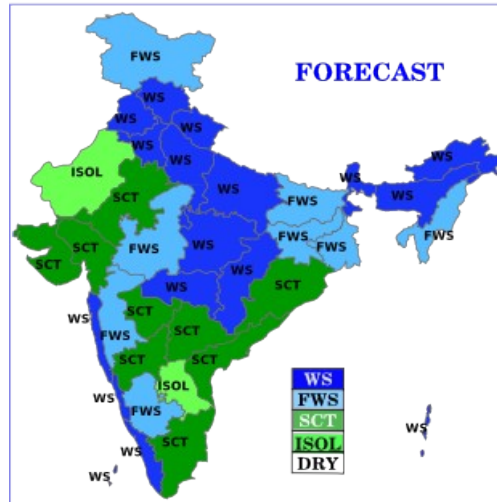


Fig. 1: Accumulated Rainfall (mm) during past 24 hours



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Wednesday 20 July 2022



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

♦ **Thunderstorm accompanied with lightning** likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, 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 are very likely over westcentral and adjoining southwest Arabian Sea and 40-50 kmph gusting to 60 kmph are very likely over adjoining eastcentral Arabian Sea. Fishermen are advised not to venture into these areas.

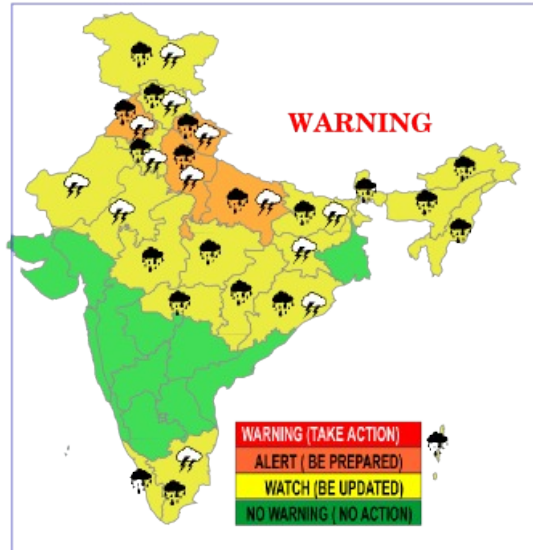
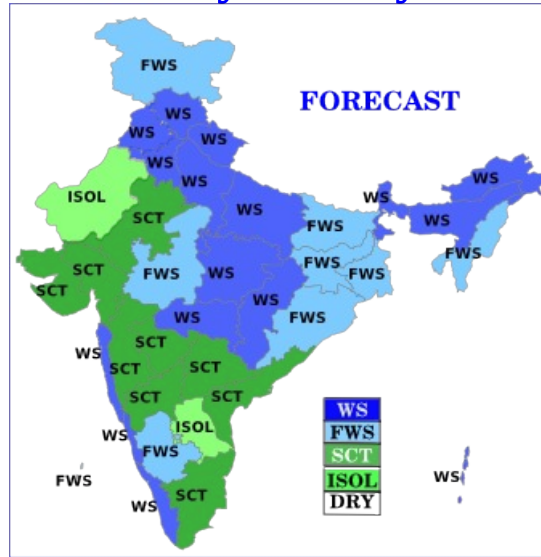
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Thursday 21 July 2022



21 July (Day 2): ♦ **Heavy to very heavy rainfall** at isolated places very likely over Uttarakhand, Punjab, Uttar Pradesh, East Madhya Pradesh, Arunachal Pradesh and Assam & Meghalaya; **Heavy rainfall** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Haryana, Chandigarh & Delhi, West Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.

♦ **Thunderstorm accompanied with lightning** likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Bihar, Jharkhand, Odisha and Tamil Nadu, Puducherry & Karaikal

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

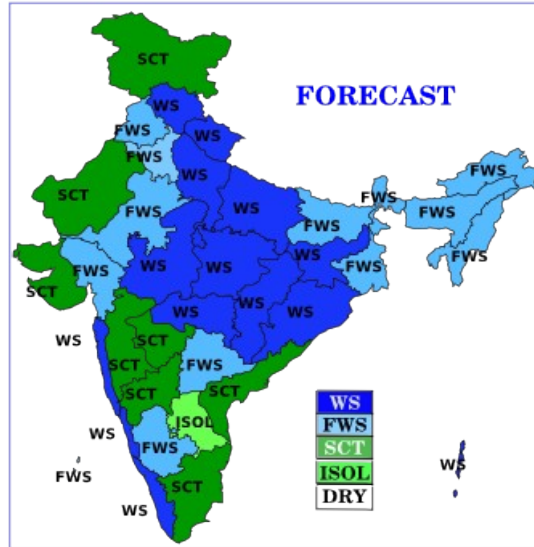
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Friday 22 July 2022



22 July (Day 3): ♦ **Heavy to very heavy rainfall** at isolated places very likely over Uttarakhand and East Madhya Pradesh; **heavy rainfall** at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, West Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Telangana.

♦ **Thunderstorm accompanied with lightning** very likely at isolated places over Jharkhand.

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

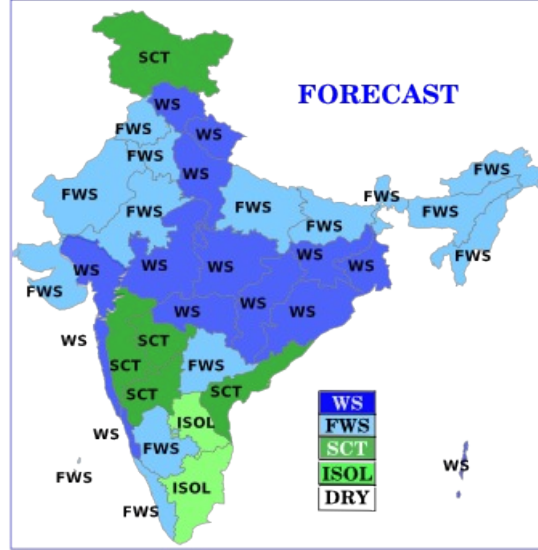
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Saturday 23 July 2022



23 July (Day 4): ♦ **Heavy to very heavy rainfall** at isolated places likely over Uttarakhand and Odisha; **heavy rainfall** at isolated places over Himachal Pradesh, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat State and Telangana.

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

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

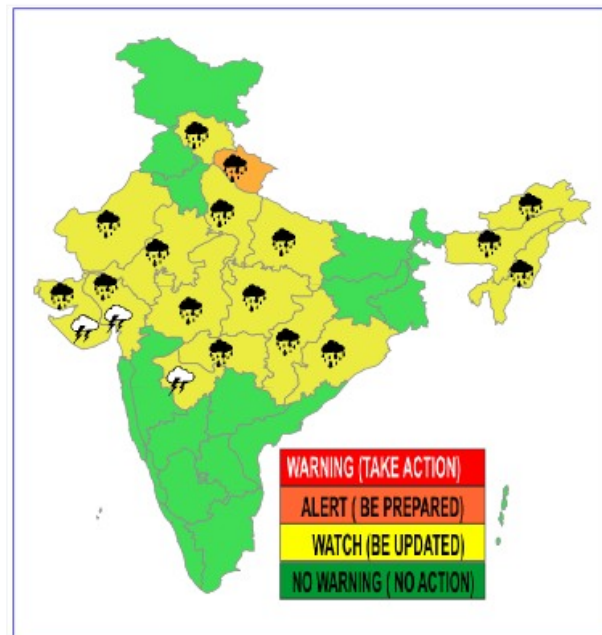
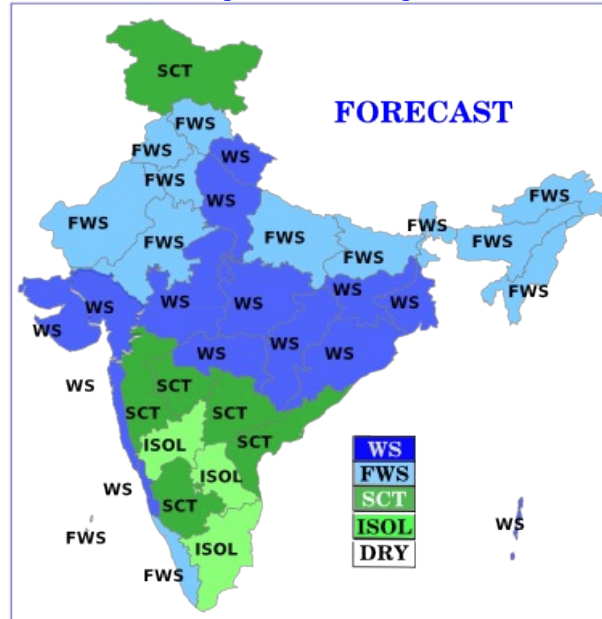
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Sunday 24 July 2022



24 July (Day 5): ♦ **Heavy to very heavy rainfall** at isolated places likely over Uttarakhand, Madhya Pradesh, Gujarat State and Odisha; **heavy rainfall** at isolated places over Himachal Pradesh, Uttar Pradesh, Rajasthan, Vidarbha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

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

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

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(Created by the MetInfo app 1/22)

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 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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