

Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 18th October, 2024

Time of Issue: 1300 hours IST

Subject: (i) A fresh low pressure area likely to form over Central Bay of Bengal around 22nd October.
(ii) Isolated heavy rainfall likely to continue over parts of south Peninsular India during next 3-4 days.

Realised rainfall during past 24 hours till 0830 hours IST of today (Annexure I)
Heavy to very Heavy rainfall at isolated places over South Interior Karnataka; **Heavy rainfall** at isolated places over Konkan & Goa, Tamil Nadu, Puducherry & Karaikal, Rayalaseema, North Interior & Coastal Karnataka.

Weather Systems:

- ❖ Yesterday's **cyclonic circulation** over north Lakshadweep area & neighbourhood now lies over eastcentral Arabian Sea at 0830 hours IST of today and extends upto 5.8 km above mean sea level. Under its influence, a **low pressure area** likely to form over the same region during next 12 hours. It is likely to become more marked and move west-northwestwards away from Indian coasts during subsequent 3 days.
- ❖ A **trough** runs from the above **cyclonic circulation** over eastcentral Arabian Sea to South Andhra Pradesh coast across Karnataka & Rayalaseema and extends upto 3.1 km above mean sea level.
- ❖ A fresh **upper air cyclonic circulation** very likely to form over North Andaman Sea around 20th October. Under its influence, a **low pressure** area likely to form over Central Bay of Bengal around 22nd October, thereafter, it is likely to move northwestwards and intensify further into a depression by 24th October.

Forecast & Warnings (upto 7 days) (Annexure II & III):

South Peninsular India

- ✓ Scattered to Fairly widespread light to moderate rainfall over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep, Karnataka; Isolated to scattered light to moderate rainfall over rest of the region during the week.
- ✓ **Isolated heavy rainfall** very likely over Tamil Nadu, Puducherry & Karaikal on 18th, 20th, 21st & 24th; Rayalaseema on 18th; South Interior Karnataka on 18th, 20th & 21st, North Interior Karnataka on 20 & 21; Coastal Andhra Pradesh & Yanam on 24th October.

East India

- ✓ Fairly widespread to widespread light to moderate rainfall over Andaman & Nicobar Islands; Isolated to Scattered light to moderate rainfall very likely over rest of the region during the week.
- ✓ **Isolated heavy rainfall** very likely over Andaman & Nicobar Islands on 20th & 21st; Gangetic West Bengal and Odisha on 23rd & 24th October.

Northwest, West, Central & Northeast India:

- ✓ No significant rainfall likely over these regions during the week.

Fishermen Warning:

- ✓ Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph very likely to prevail over along and off Kerala, Karnataka, Goa, Maharashtra, adjoining South Gujarat coasts, over Lakshadweep area, over eastcentral Arabian sea and adjoining southeast Arabian sea.

For more details, kindly refer National Weather Bulletin:

https://mausam.imd.gov.in/responsive/all_india_forcast_bulletin.php

For District wise warnings refer:

<https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php>

For Fishermen warnings, kindly refer:

https://rsmcnewdelhi.imd.gov.in/uploads/archive/51/51_bdf575_GRAPHIC.png

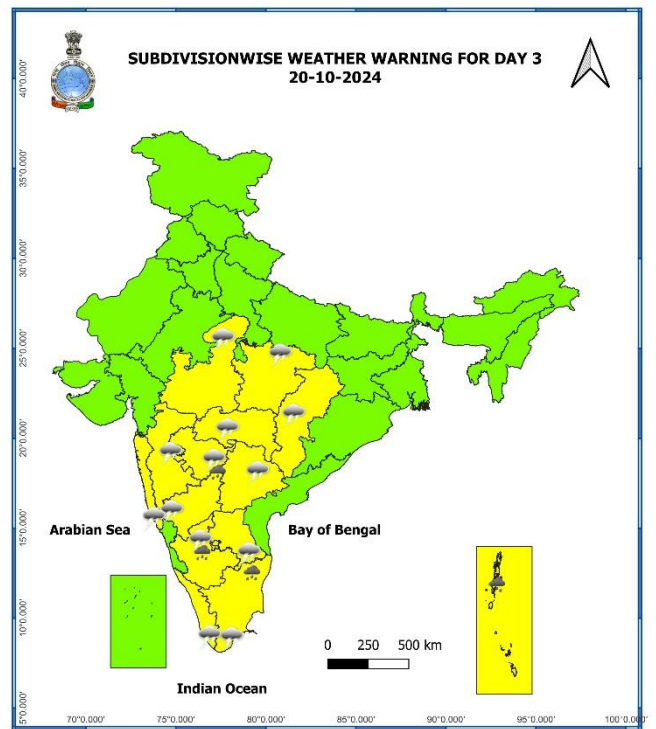
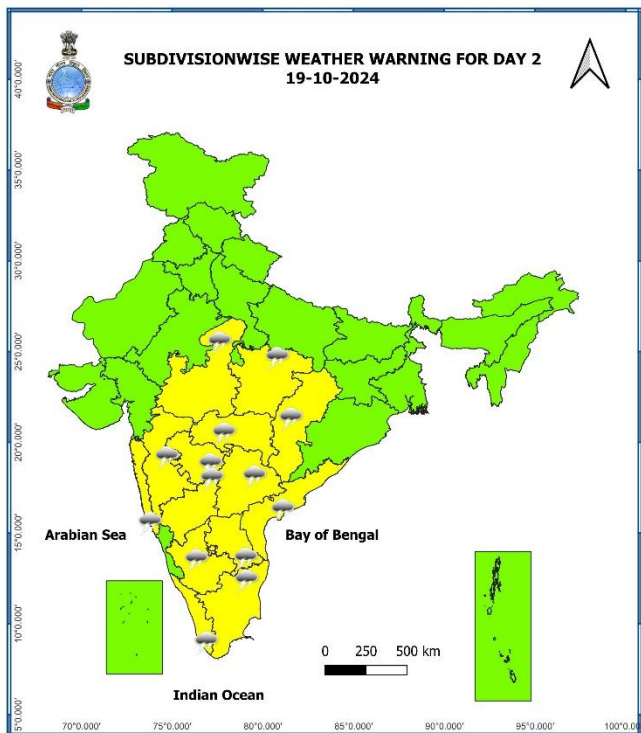
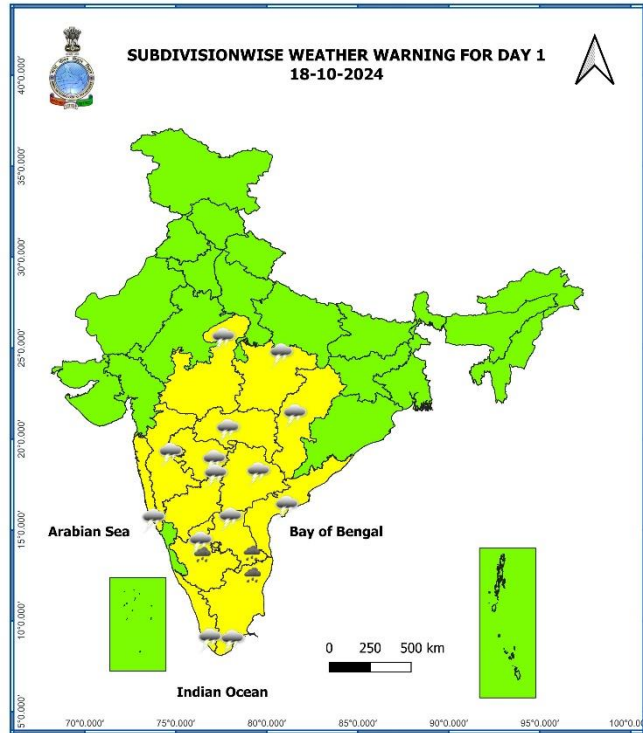
ANNEXURE I

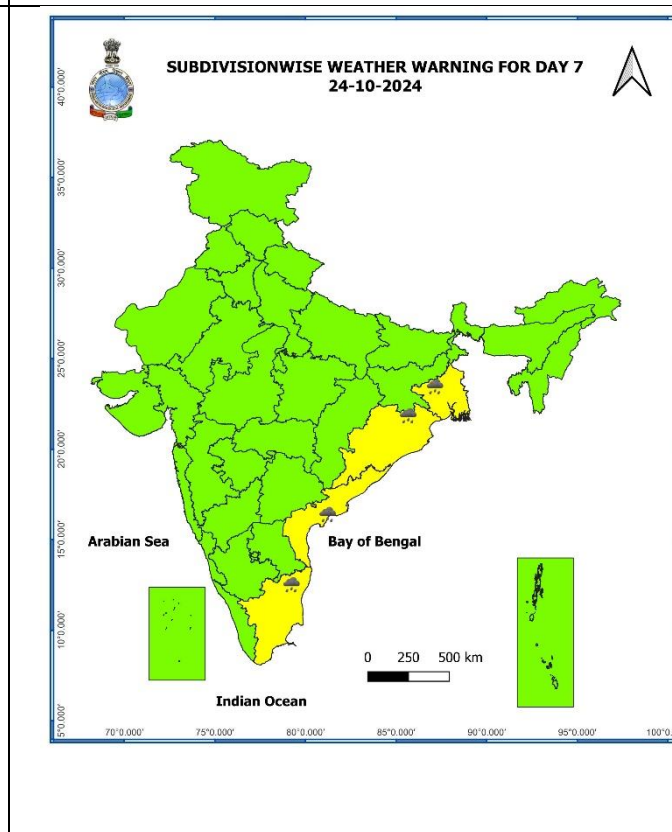
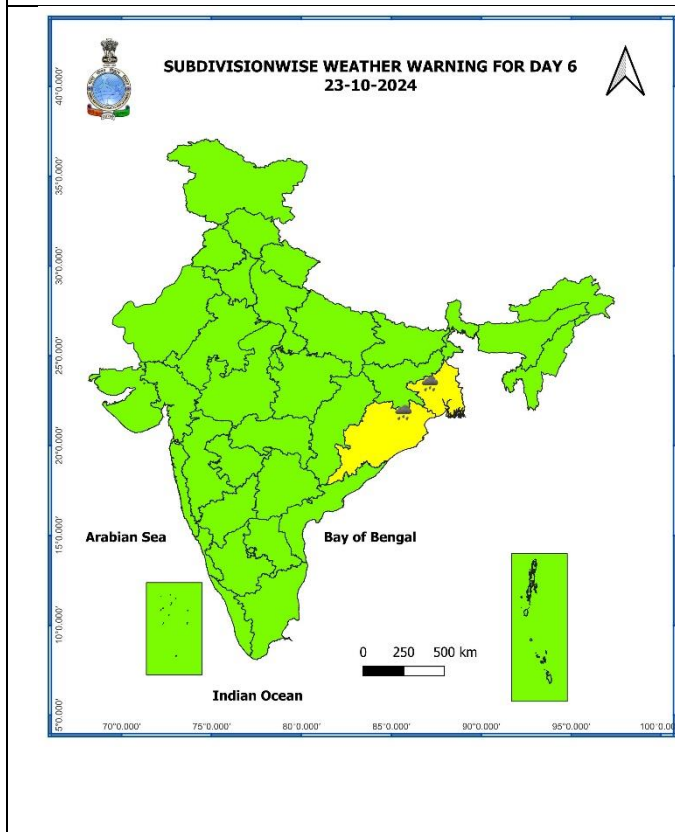
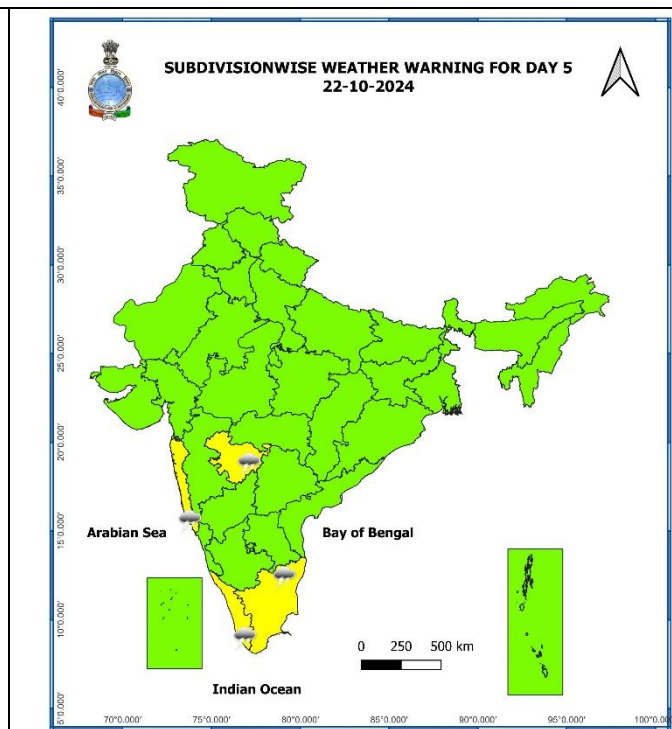
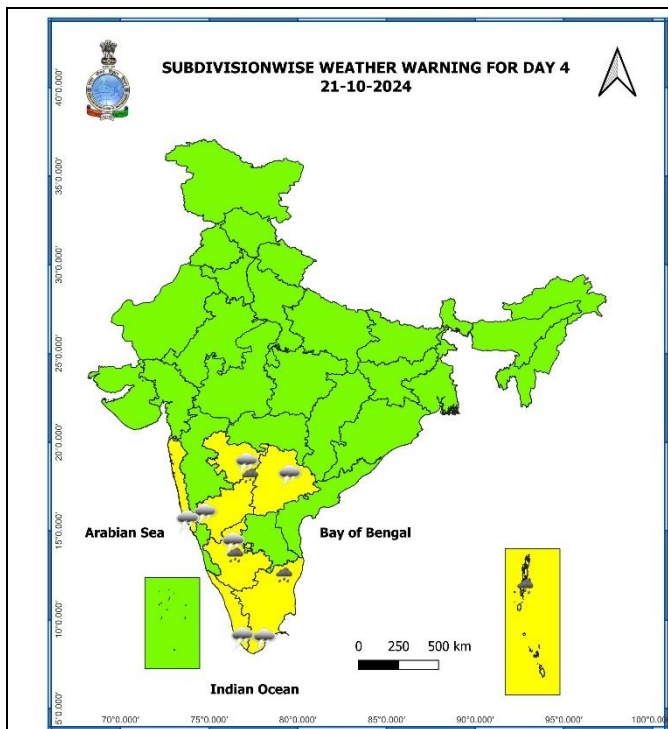
Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 18.10.2024 (in cm):

- ❖ **South Interior Karnataka:** Nayakanahatty (dist Chitradurga) 15;
- ❖ **North interior Karnataka:** Sindhanur (dist Raichur) 9;
- ❖ **Konkan & Goa:** Rameshwar_agri (dist Sindhudurg) 9, Kankavli (dist Sindhudurg) 7, Devgad (dist Sindhudurg) 7, Vaibhavwadi (dist Sindhudurg) 7, Mulde_ Agri (dist Sindhudurg) 6, Rajapur (dist Ratnagiri) 6;
- ❖ **Coastal Karnataka:** Haliyal (dist Uttara Kannada) 8;
- ❖ **Rayalaseema:** Pakala (dist Tirupati) 7, Kamalapuram (dist Ysr District) 7, Kadiri (dist Sri Sathyasai District) 6, Settur (dist Anantapuramu) 6;
- ❖ **Tamil Nadu, Puducherry & Karaikal:** Arani (dist Tiruvannamalai) 7.

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

- As the lead period increases forecast accuracy decreases.





- Action may be taken based on **ORANGE AND RED COLOUR** warnings.
- **Vulnerable regions likely urban and hilly areas** action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

Agromet advisories for Heavy Rainfall likely over various parts of the country

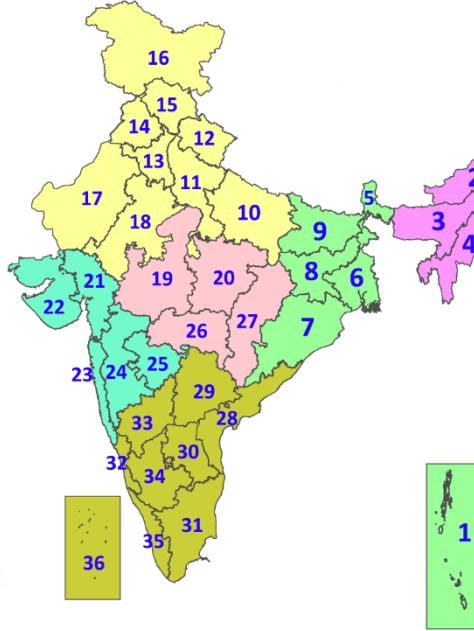
- ✓ In **Tamil Nadu**, drain out excess water from rice nurseries and fields of rice, maize, pepper and newly planted turmeric. Provide support to banana plantations.
- ✓ Make necessary arrangements for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in South Interior Karnataka and Rayalaseema.
- ✓ Keep the harvested produce at safer places.
- ✓ Provide mechanical support to horticultural crops & staking to vegetables.

Legends & abbreviations:

- ❖ **Heavy Rain:**64.5-115.5mm; **Very Heavy Rain:**115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station; **ARG:** Automatic Rain Gauge; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation; **PTO:** Part Time Office, **Aero:** Aerodrome, **IAF:** Indian Air Force.
- ❖ **Region wise classification of meteorological Sub-Divisions:**
 - **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
 - **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
 - **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
 - **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
 - **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathawada.
 - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

LEGENDS

1. अंडमान और निकोबार द्वीपसमूह
2. अरुणाचल प्रदेश
3. असम और मेघालय
4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
5. उप-हिमालयी पश्चिम बंगाल और सिक्किम
6. गंगीय पश्चिम बंगाल
7. ओडिशा
8. झारखंड
9. बिहार
10. पूर्वी उत्तर प्रदेश
11. पश्चिम उत्तर प्रदेश
12. उत्तराखंड
13. हरियाणा, चंडीगढ़ और दिल्ली
14. पंजाब
15. हिमाचल प्रदेश
16. जम्मू और कश्मीर और लद्दाख
17. पश्चिम राजस्थान
18. पूर्वी राजस्थान
19. पश्चिम मध्य प्रदेश
20. पूर्वी मध्य प्रदेश
21. गुजरात
22. सौराष्ट्र
23. कोंकण और गोवा
24. मध्य महाराष्ट्र
25. मराठवाड़ा
26. विदर्भ
27. छत्तीसगढ़
28. तटीय आंध्र प्रदेश और यनम
29. तेलंगाना
30. रायलसेमा
31. तमिलनाडु, पुडुचेरी और कराईकल
32. तटीय कर्नाटक
33. आंतरिक उत्तरी कर्नाटक
34. आंतरिक दक्षिणी कर्नाटक
35. केरल और 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. Odisha
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chandigarh & 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. Marathwada
26. Vidarbha
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)

- | | | |
|----------------------|----------------------|--------------|
| Fog | Heavy Snow | Cold Wave |
| Heavy Rain | Dust Storm | Cold Day |
| Very Heavy Rain | Heat Wave | Ground Frost |
| Extremely Heavy Rain | Warm Night | |
| Thunder & Lightning | Hot Day | |
| Hailstorm | Hot & Humid | |
| Dust Raising Winds | Strong Surface Winds | |

COLOUR CODED WARNING

- No Warning (No Action)
- Watch (Be Aware)
- Alert (Be Prepared To Take Action)
- Warning (Take Action)

Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

* Red colour warning does not mean "Red Alert", Red colour 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 <https://mausam.imd.gov.in> or contact: 011-2434-4599
(Service to the Nation since 1875)

DEFINITION/CRITERIA

Rain/ Snow *	<p>Heavy: 64.5 to 115.5 mm/cm *</p> <p>Very Heavy: 115.6 to 204.4 mm/cm*</p> <p>Extremely Heavy: > 204.4 mm/cm *</p>
Heat Wave	<p>When maximum temperature of a station reaches $\geq 40^\circ\text{C}$ for plains and $\geq 30^\circ\text{C}$ for hilly regions</p> <p>(a) Based on Departure from normal</p> <p>Heat Wave: Maximum Temperature Departure from normal 4.5°C to 6.4°C.</p> <p>Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^\circ\text{C}$</p> <p>(b). Based on Actual maximum temperature</p> <p>Heat Wave: When actual maximum temperature $\geq 45^\circ\text{C}$.</p> <p>Severe Heat Wave: When actual maximum temperature $\geq 47^\circ\text{C}$</p> <p>(c). Criteria for heat wave for coastal stations</p> <p>When maximum temperature departure is $>4.5^\circ\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^\circ\text{C}$</p>
Warm Night	<p>When maximum temperature remains 40°C</p> <p>Warm Night: When minimum temperature departure 4.5°C to 6.4°C.</p> <p>Severe Warm Night: When minimum temperature departure $>6.4^\circ\text{C}$.</p>
Cold Wave	<p>When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions.</p> <p>(a). Based on departure</p> <p>Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C.</p> <p>Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^\circ\text{C}$</p> <p>(b) Based on actual Minimum Temperature (for Plains only)</p> <p>Cold Wave : When Minimum Temperature is $\leq 4.0^\circ\text{C}$</p> <p>Severe Cold Wave: When Minimum Temperature is $\leq 2.0^\circ\text{C}$</p> <p>(c) For Coastal Stations</p> <p>When Minimum Temperature departure is $\leq -4.5^\circ\text{C}$ & actual Minimum Temperature is $\leq 15^\circ\text{C}$</p>
Cold Day	<p>When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions</p> <p>Based on departure</p> <p>Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C.</p> <p>Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^\circ\text{C}$</p>
Fog	<p>Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$</p> <p>Moderate Fog: When the visibility between 500-200 metres</p> <p>Dense Fog: when the visibility between 50- 200 metres</p> <p>Very Dense Fog: when the visibility < 50 metres</p>
Thunderstorm	<p>Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)</p>
Dust/Sand Storm	<p>An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.</p>
Frost	<p>Ice deposits on ground</p> <p>Air temperature $\leq 4^\circ\text{C}$ (over Plains)</p>
Squall	<p>A strong wind that rises suddenly, lasts for atleast 1 minute.</p> <p>Moderate: Wind speed 52-61 kmph</p> <p>Severe: Wind speed 62-87 kmph</p> <p>Very Severe: Wind speed >87 kmph</p>
Sea State	<p>Effect of various waves in the sea over specific area</p> <p>Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre</p> <p>High to very high: Wind speed 63-117 kmph (34-63 knots) & Wave height 6-14 metre</p> <p>Phenomenal: Wind speed >117 kmph (>63 knots) & Wave height >14 metre</p>
Cyclone	<p>Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)</p> <p>Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)</p> <p>Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)</p> <p>Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)</p> <p>Super Cyclone Strom: Wind speed >220 kmph (>119 knots)</p>

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