



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

Tuesday, October 1, 2024 Time of Issue: 1315 hours IST (MID-DAY)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems:

- ✓ Conditions are becoming favourable for the further withdrawal of southwest monsoon from some more parts of Rajasthan, Haryana, Punjab and some parts of Jammu-Kashmir-Ladakh-Gilgit-Baltistan Muzaffarabad & Himachal Pradesh during next 2-3 days.
- A cyclonic circulation over Comorin area & adjoining Equatorial Indian Ocean and a trough runs from this cyclonic circulation to North Interior Karnataka in lower tropospheric levels.
- \checkmark A cyclonic circulation over northeast Assam & neighbourhood in middle tropospheric levels.

Forecast & Warnings (upto 7 days):

East & Northeast India

- ✓ Fairly widespread to widespread light to moderate rainfall very likely over northeast region, Andaman & Nicobar Islands during the week; Scattered to Fairly widespread light to moderate rainfall very likely over West Bengal & Sikkim during the week and Isolated to Scattered light to moderate rainfall over remaining region during the week.
- ✓ **Isolated heavy to very Heavy rainfall** very likely over northeast region on 02nd & 03rd October.
- ✓ **Isolated heavy rainfall** very likely over Arunachal Pradesh on during 01st 05th October; Assam & Meghalaya during the week and Nagaland, Manipur, Mizoram & Tripura during 01st 06th October.

South Peninsular India

- ✓ Fairly widespread to widespread light to moderate rainfall very likely over Kerala & Mahe, South Interior Karnataka, Lakshadweep during the week; Scattered to Fairly widespread light to moderate rainfall very likely over Tamil Nadu, Puducherry & Karaikal, Coastal Karnataka during the week; Isolated to Scattered light to moderate rainfall very likely over Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana during the week.
- ✓ **Isolated heavy rainfall** very likely over Tamil Nadu, Puducherry & Karaikal during 01st to 05th October; Kerala & Mahe during 01st -03rd October; South Interior Karnataka and Lakshadweep on 01st October.

Northwest, West & Central India:

No significant rainfall likely over these regions during next one week.







Main Weather Observations:

- * Rainfall distribution (from 0830 hours IST of yesterday to 0830 hours IST of today): at many places over Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura; at a few places over Vidarbha, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Kerala & Mahe, Lakshadweep, Coastal Karnataka; at isolated places over Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Gangetic West Bengal, Bihar, Jharkhand, Odisha, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra, Marathwada, Gujarat state, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Interior Karnataka.
- Heavy rainfall recorded (from 0830 hours IST of yesterday to 0830 hours IST of today): Heavy to very Heavy rainfall at isolated places over Assam & Meghalaya; Heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim.
- ❖ Significant amount of rainfall (from 0830 hours IST of yesterday to 0830 hours IST of today): (in cm): Assam & Meghalaya: Barpeta/sarbhog_aws (dist Barpeta) 19, Dhekiajuli (dist Shonitpur) 18, B P Ghat (dist Karimganj) 17, Barpeta (dist Barpeta) 16, A P Ghat (dist Cachar) 15, Tihu Arg (dist Nalbari) 14, Bhumuraguri (dist Shonitpur) 12, Lakhipur Arg (dist Cachar) 10, Tezpur (dist Shonitpur) 9, Beky Rly.bridge (dist Barpeta) 9, Silchar (dist Cachar) 9, Lakhipur (dist Cachar) 8, Matijuri (dist Hailakandi) 8, Manash Nh Xing (dist Barpeta) 7; Sub-Himalayan West Bengal & Sikkim: Hasimara (dist Alipurduar) 10.
- ❖ Minimum Temperature Departures (as on 01-10-2024): Minimum temperatures are appreciably above normal (3.0°C to 5.0°C) at a few places over West Rajasthan; at isolated places over East Rajasthan, Gujarat state, East Madhya Pradesh, Gangetic West Bengal; above normal (1.6°C to 3.0°C) at many places over Andaman & Nicobar Islands, Vidarbha; at a few places over Himachal Pradesh, Uttar Pradesh, West Madhya Pradesh, Chhattisgarh, Odisha, Coastal Andhra Pradesh & Yanam, Kerala & Mahe, Madhya Maharashtra; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Haryana-Chandigarh-Delhi, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Telangana, Marathwada, Konkan & Goa, Rayalaseema, Tamil Nadu, Puducherry & Karaikal. Today, the lowest minimum temperature of 20.9°C is reported at Delhi Ridge (New Delhi) over the plains of the country. (Fig.4)
- * Maximum Temperature Departures (as on 30-09-2024): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; above normal (1.6°C to 3.0°C) at most places over Coastal Andhra Pradesh & Yanam, Odisha, Rayalaseema, North Interior Karnataka; at many places over Madhya Maharashtra, Konkan & Goa, Telangana, Marathwada, Chhattisgarh; at a few places over South Interior Karnataka, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya; at isolated places over Himachal Pradesh, Uttarakhand, Bihar, Coastal Karnataka, East Madhya Pradesh, Vidarbha, Kerala & Mahe. These were below normal (-1.6°C to 3.0°C) at isolated places Gujarat state, Haryana-Chandigarh-Delhi, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the highest Maximum Temperature of 39.4°C was reported at Phalodi (West Rajasthan) over the country. (Fig. 2)







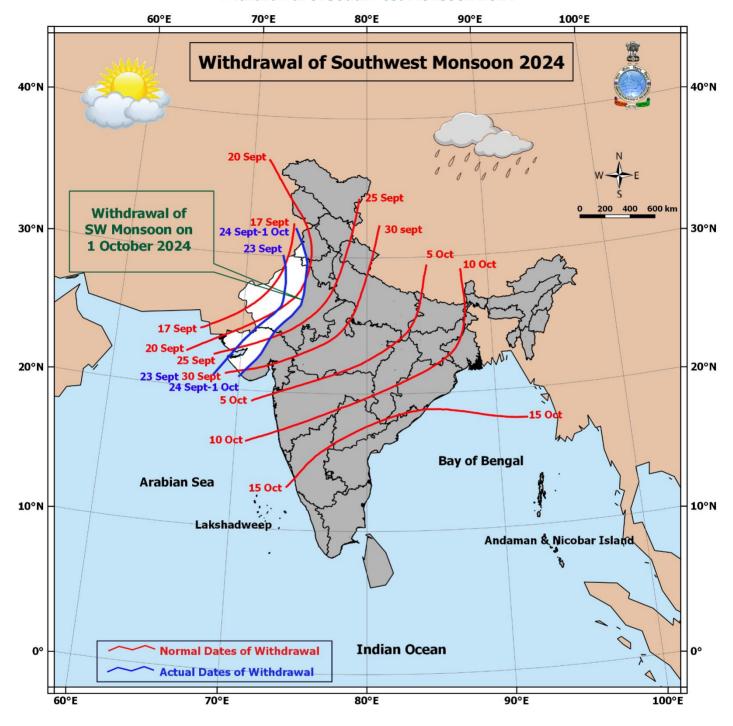
Meteorological Analysis (Based on 0830 hours IST)

- ❖ Conditions are becoming favourable for the **further withdrawal** of southwest monsoon from some more parts of Rajasthan, Haryana, Punjab and some parts of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad & Himachal Pradesh during next 2-3 days.
- ❖ The line of withdrawal of southwest monsoon continues to pass through Firozpur, Sirsa, Churu, Ajmer, Mount Abu, Deesa, Surendranagar, Junagarh and 21°N/70°E.
- ❖ A **cyclonic circulation** lies over Comorin area & adjoining Equatorial Indian Ocean and extends upto 1.5 km above mean sea level.
- ❖ The **trough** from Comorin area to south Coastal Karnataka now runs from the above cyclonic circulation over Comorin area to North Interior Karnataka across Interior Tamil Nadu at 0.9 km above mean sea level.
- ❖ The **trough** from north Konkan to southeast Uttar Pradesh now runs from north Konkan to northeast Madhya Pradesh across Interior Maharashtra at 3.1 km above mean sea level.
- ❖ The **cyclonic circulation** over northeast Assam & neighbourhood persists and now extends upto 4.5 km above mean sea level.





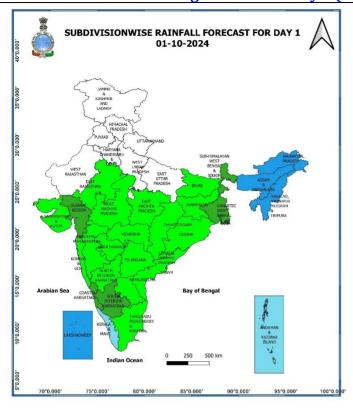
Withdrawal of Southwest Monsoon 2024

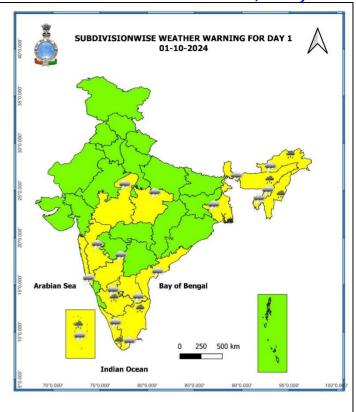






Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 08th October, 2024)



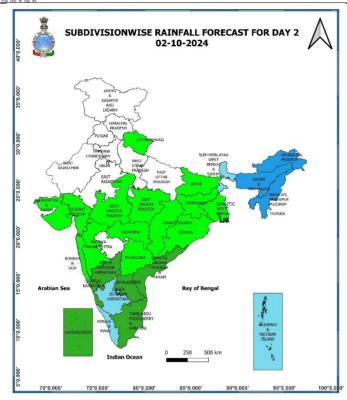


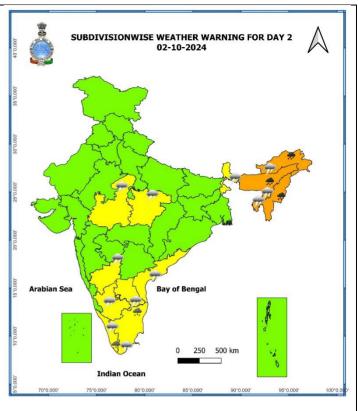
01 October (Day 1):

- ❖ Heavy rainfall (≥7 cm) very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep, South Interior Karnataka.
- ❖ Thunderstorm accompanied with lighting and gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Kerala & Mahe; with lightning very likely at isolated places over Madhya Pradesh, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal, Lakshadweep, Coastal Andhra Pradesh & Yanam, Rayalaseema Interior Karnataka.
- ❖ Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph very likely to prevail over gulf of Mannar, Comorin area, along and off Kerala coast, Lakshadweep area and adjoining Maldives area, adjoining southeast Arabian sea. Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over along and off Somalia coast. Fishermen are advised not to venture into these areas.







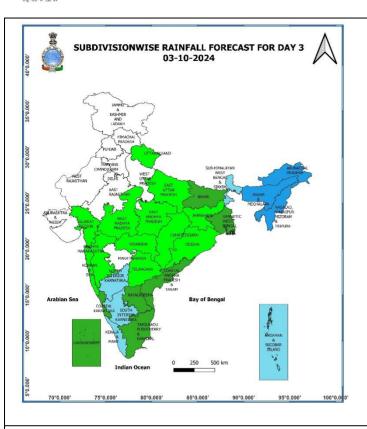


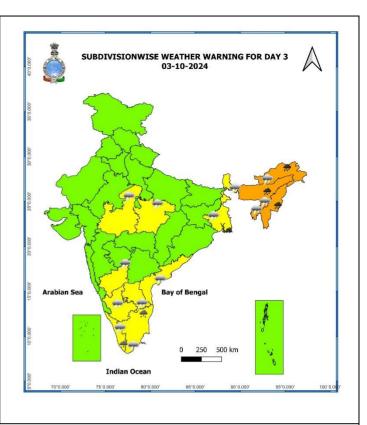
02 October (Day 2):

- **❖ Heavy to very Heavy rainfall (≥12 cm)** very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland, **Heavy rainfall (≥7 cm)** very likely at isolated places over Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe.
- ❖ Thunderstorm with lightning very likely at isolated places over Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema, Interior Karnataka.



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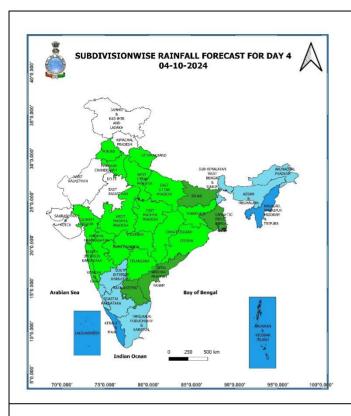


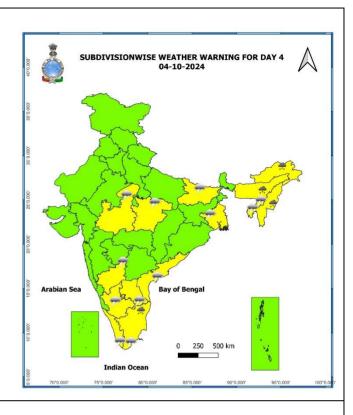
03 October (Day 3):

- ❖ Heavy to very Heavy rainfall (≥12 cm) very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Heavy rainfall (≥7 cm) very likely at isolated places over Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe.
- Thunderstorm with lightning very likely at isolated places over Madhya Pradesh, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema, Interior Karnataka.







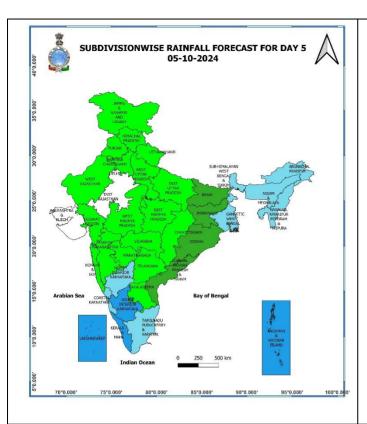


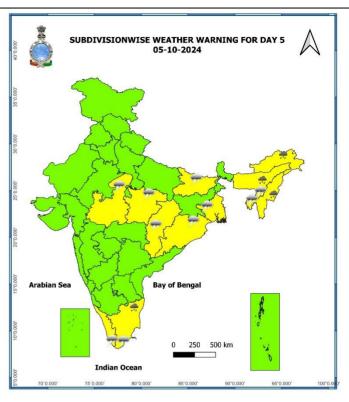
04 October (Day 4):

- ❖ Heavy rainfall (≥7 cm) likely at isolated places over Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Tamil Nadu, Puducherry & Karaikal.
- ❖ Thunderstorm with lightning likely at isolated places over Madhya Pradesh, Gangetic West Bengal, Bihar, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema, Interior Karnataka.







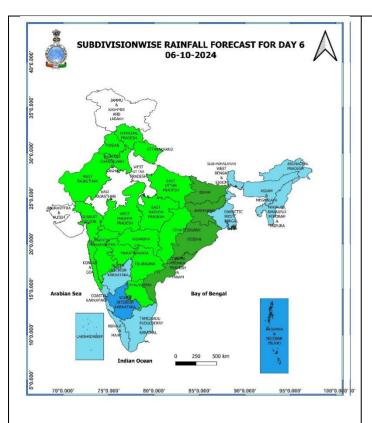


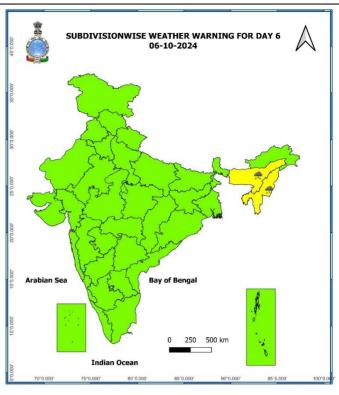
05 October (Day 5):

- ❖ Heavy rainfall (≥7 cm) likely at isolated places over Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Tamil Nadu, Puducherry & Karaikal.
- ❖ Thunderstorm with lightning likely at isolated places over Madhya Pradesh, Chhattisgarh, Gangetic West Bengal, Bihar, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe.



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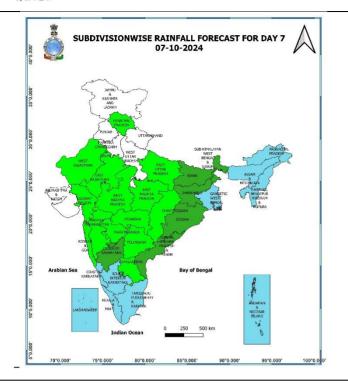


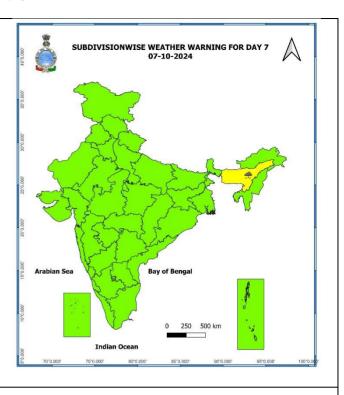
06 October (Day 6):

❖ Heavy rainfall (≥7cm) likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.



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07 October (Day 7):

❖ Heavy rainfall (≥7cm) likely at isolated places over Assam & Meghalaya.

Weather Outlook for subsequent 3 days (During 08th October- 10th October, 2024)

- ❖ Fairly widespread to widespread rainfall likely over Andhra Pradesh, Eastern and North Eastern India and Islands.
- ❖ Isolated to Scattered rainfall likely over remaining Peninsular and West coast of India.
- ❖ Mainly dry weather will prevail over rest parts of country.
- 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.



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Impact due to

- ✓ **Isolated heavy to very heavy rainfall** very likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland on 2nd & 03rd October.
- ✓ **Low to moderate flash flood risk** likely over few watersheds & neighbourhoods of Assam & Meghalaya on 01st & 2nd October. **(Annexure I)**

Impact Expected

- ✓ Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- ✓ Occasional reduction in visibility due to heavy rainfall.
- ✓ Disruption of traffic in major cities and roadways due to water logging in roads leading to increased travel time.
- ✓ Minor damage to kutcha roads.
- ✓ Possibilities of damage to vulnerable structure.
- ✓ Localized Landslides/Mudslides/landslips/mud slips/land sinks/mud sinks.
- ✓ Damage to horticulture and standing crops in some areas due to inundation and wind.
- ✓ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

Action Suggested

- ✓ Judicious regulation of surface transports including railways and roadways.
- ✓ Check for traffic congestion on your route before leaving for your destination.
- ✓ Follow any traffic advisories that are issued in this regard.
- ✓ Avoid going to areas that face the water logging problems often.
- ✓ Avoid staying in vulnerable structure

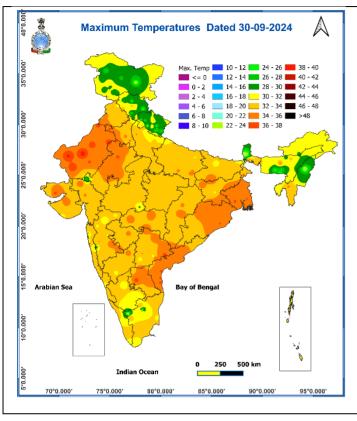
Agromet advisories for Heavy Rainfall likely over various parts of the country

- ✓ Drain out excess water from standing crop fields and fruit orchards to avoid water stagnation in Assam & Meghalaya and Sub-Himalayan West Bengal.
- ✓ Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Tamil Nadu, Kerala, Telangana, Arunachal Pradesh and NMMT.
- ✓ Keep the harvested produce at safer places.
- ✓ Provide mechanical support to horticultural crops & staking to vegetables.



Fig. 1: Maximum Temperatures





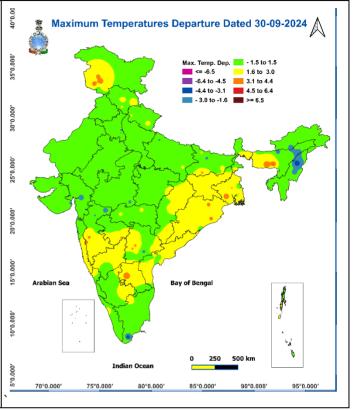
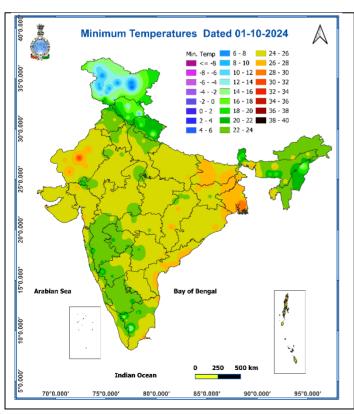


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures



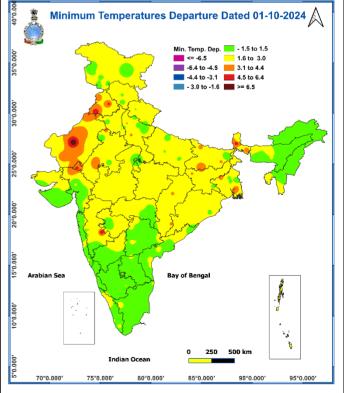
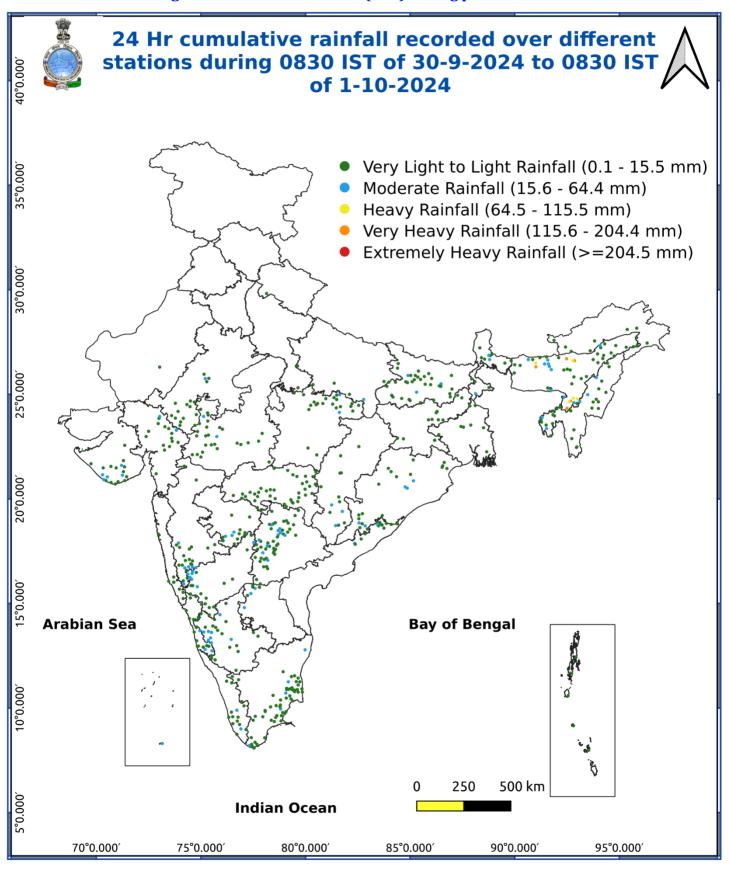






Fig. 5: Accumulated Rainfall (mm) during past 24 hours





29. तेलंगाना

30. रायलसीमा

32. तटीय कर्नाटक

35. केरल और माहे

36. लक्षद्वीप

33. आतंरिक उत्तरी कर्नाटक

Sust Raising Winds

34. आतंरिक दक्षिणी कर्नाटक

31. तमिलनाडु, पुडुचेरी और कराईकल



LEGENDS



- 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

Most Likely

SPATIAL DISTRIBUTION (% of Stations reporting)

% Stations		Category	% Stations	Cate	gory	
76-100	Widespre	ad (WS/Most Places)	26-50	Scattered (SC	/A Few Places)	
51-75	Fairly Wides	oread (FWS/Many Places)	1-25	Isolate	ed (ISOL)	
≡ Fog		Heavy Snow	_ Cold Wa	ve COLOUR C	ODED WARNING	
<u> </u>			·	No Warn	No Warning (No Action)	
Heavy Rain		Dust Storm — Cold Day		y Watch (I	Watch (Be Aware)	
PVery Heavy Rain		+ Heat Wave	Ground	Frost Alert (Be	Alert (Be Prepared To Take Action)	
Extremely Heavy Rain		+ Warm Night		Warning	(Take Action)	
-		+ Hot Day		Proba	bilistic Forecast	
Thunder & Lightning		T Hot bay		Terms Unlikely	Probability of Occurrence (%) < 25	
# Hailstorm		lot & Humid		Likely Very Likely	25 - 50 50 - 75	

Strong Surface Winds





	DEFINITION/CRITERIA				
	Heavy: 64.5 to 115.5 mm/cm *				
Rain/ Snow *	Very Heavy: 115.6 to 204.4 mm/cm*				
	Extremely Heavy: > 204.4 mm/cm *				
	When maximum temperature of a station reaches ≥40° C for plains and ≥30° C for hilly regions (a) Based on Departure from normal				
Heat Wave	Heat Wave: Maximum Temperature Departure from normal 4.5° C to 6.4° C.				
	Severe Heat Wave: Maximum Temperature Departure from normal ≥6.5° C				
	(b). Based on Actual maximum temperature				
	Heat Wave: When actual maximum temperature ≥45°C.				
	Severe Heat Wave: When actual maximum temperature ≥47°C				
	(c). Criteria for heat wave for coastal stations When maximum temperature departure is >4.5°C from normal. Heat Wave may be described provided maximum				
	temperature ≥37°C				
	When maximum temperature remains 40°C				
Varm Night	Warm Night: When minimum temperature departure 4.5 °C to 6.4 °C.				
	Severe Warm Night: When minimum temperature departure >6.4 °C.				
	When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions. (a). Based on departure				
Cold Wave	Cold Wave: Minimum Temperature Departure from normal -4.5 °C to -6.4 °C.				
	Severe Cold Wave: Minimum Temperature Departure from normal ≤ -6.5 °C				
	(b) Based on actual Minimum Temperature (for Plains only)				
	Cold Wave : When Minimum Temperature is ≤ 4.0 °C				
	Severe Cold Wave: When Minimum Temperature is ≤ 2.0 °C				
	(c) For Coastal Stations When Minimum Temperature departure is ≤-4.5 °C & actual Minimum Temperature is ≤ 15 °C				
	When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions Based on departure				
Cold Day	Cold Day: Maximum Temperature Departure from normal -4.5 °C to -6.4 °C.				
	Severe Cold Day: Maximum Temperature Departure from normal ≤ -6.5 °C				
	Dhannan of and the plate are and disciplined the basic and the basic and the basic and the second of				
	Phenomenon of small droplets suspended in air and the horizontal visibility < 1km Moderate Fog: When the visibility between 500-200 metres				
Fog	Dense Fog: when the visibility between 50- 200 metres				
	Very Dense Fog: when the visibility < 50 metres				
hunderstorm	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 ≤4°C (over Plains)				
	A strong wind that rises suddenly, lasts for atleast 1 minute				
	A strong wind that rises suddenly, lasts for atleast 1 minute. Moderate: Wind speed 52-61 kmph				
Squall	Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph				
Squall	Moderate: Wind speed 52-61 kmph				
Squall	Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph				
	Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph Very Severe: Wind speed >87 kmph 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				
Squall Sea State	Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph Very Severe: Wind speed >87 kmph 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				
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Sea State	Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph Very Severe: Wind speed >87 kmph 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 Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots) Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)				
	Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph Very Severe: Wind speed >87 kmph 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 Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)				