



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

Friday, September 20, 2024 Time of Issue: 1945 hours IST (NIGHT)

All India Weather Warning Bulletin

Weather Warnings for next 7 days is given below: (Graphics for warnings & rainfall distribution (Table 1) are given below the text:

20 September (Day 1):

- **♦ Heavy rainfall (≥7 cm)** very likely at isolated places over Andaman & Nicobar Islands, Telangana, Coastal Andhra Pradesh & Yanam.
- **Thunderstorm accompanied with lightning** very likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Telangana, Odisha and Chhattisgarh.
- Hot & humid weather very likely at isolated places over Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura.
- ❖ Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph very likely to prevail over gulf of Mannar, off Sri Lanka coast, most parts of south Bay of Bengal, few parts of west central Arabian sea and adjoining southwest Arabian sea. Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over western parts of southwest Arabian sea along and off Somalia coast. Fishermen are advised not to venture into these areas.

21 September (Day 2):

- ❖ Thunderstorm accompanied with lightning very likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Vidarbha, East Madhya Pradesh, Telangana, Chhattisgarh, Gangetic West Bengal, Odisha.
- ❖ Hot & humid weather very likely at isolated places over Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura.
- ❖ Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph very likely to prevail over gulf of Mannar, off Sri Lanka coast, many parts of south Bay of Bengal. Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over western parts of southwest Arabian sea adjoining west central Arabian sea along and off Somalia coast. Fishermen are advised not to venture into these areas.

22 September (Day 3):

- **♦ Heavy rainfall (≥7 cm)** very likely at isolated places over Odisha and Nagaland, Manipur, Mizoram & Tripura.
- Thunderstorm accompanied with lightning very likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, East Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Jharkhand.
- ♦ Hot & humid weather very likely at isolated places over Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal, Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura.
- ❖ Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph very likely to prevail over gulf of Mannar, off Sri Lanka coast, many parts of south Bay of Bengal. Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over western parts of southwest Arabian sea adjoining west central Arabian sea along and off Somalia coast. Fishermen are advised not to venture into these areas.





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23 September (Day 4):

- ❖ Heavy rainfall (≥7 cm) likely at isolated places over Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Chhattisgarh and Odisha.
- ❖ Thunderstorm accompanied with lightning likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Rayalaseema, Karnataka, Madhya Pradesh, Vidarbha, Jharkhand and Chhattisgarh.
- ❖ Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph likely to prevail gulf of Mannar, off Sri Lanka coast, many parts of south Bay of Bengal. Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over western parts of southwest Arabian sea adjoining west central Arabian sea along and off Somalia coast. Fishermen are advised not to venture into these areas.

24 September (Day 5):

- ❖ Heavy rainfall (≥7 cm) likely at isolated places over Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, North Interior Karnataka, East Madhya Pradesh, Vidarbha, Chhattisgarh and Odisha.
- * Thunderstorm accompanied with lightning likely at isolated places over Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Marathwada, Rayalaseema, Karnataka, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand.
- ❖ Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph likely to prevail over gulf of Mannar, off Sri Lanka coast, many parts of south and adjoining central Bay of Bengal. Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over western parts of southwest Arabian sea adjoining west central Arabian sea along and off Somalia coast. Fishermen are advised not to venture into these areas.

25 September (Day 6):

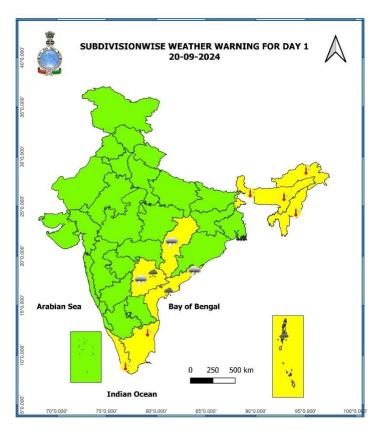
❖ Heavy rainfall (≥7 cm) likely at isolated places over Konkan & Goa, Madhya Maharashtra, Marathwada, Gujarat Region, Coastal Andhra Pradesh & Yanam, Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura.

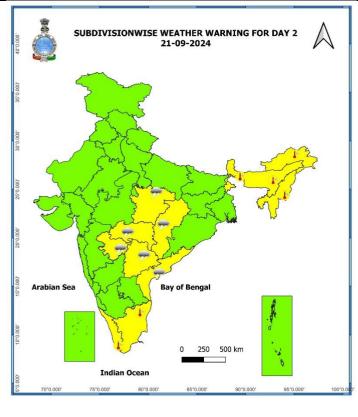
26 September (Day 7):

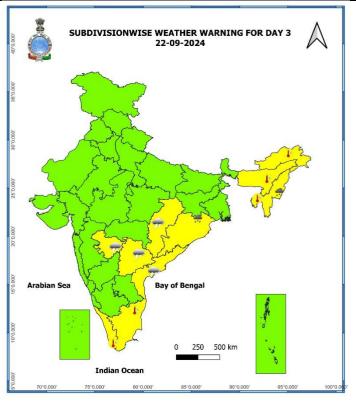
❖ Heavy rainfall (≥7 cm) likely at isolated places over Gujarat Region, Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Sub-Himalayan West Bengal & Sikkim.







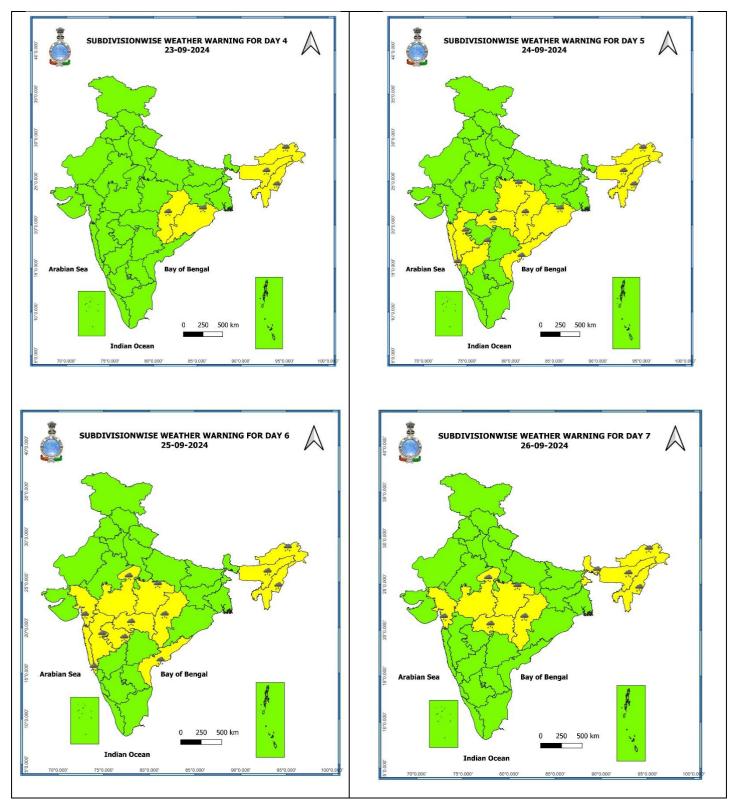








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- Action may be taken based on **ORANGE** AND **RED** COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.





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Table-1

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

As the lead period increases forecast accuracy decreases.



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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.

% Stations

76-100

State Indication States States



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LEGENDS



SPATIAL DISTRIBUTION (% of Stations reporting)

Category

Widespread (WS/Most Places)

% Stations

26-50

Category

Scattered (SCT/A Few Places)

Very Likely

Most Likely

50 - 75

	51-75	Fairly Widesp	oread (FWS/Many Places)	1-25		Isolate	d (ISOL)	
_	F og		Heavy Snow	_ Cold Wa	ve	COLOUR CO	DED WARNING	
7	_ 10g			J.		No Warni	ng (No Action)	
4	Reavy Ra	ain	Dust Storm	Cold Da	У	Watch (B	e Aware)	
4	Very Hea	vy Rain	+ Heat Wave	Ground	Frost	Alert (Be	Prepared To Take Actio	n)
Ş	Extremel	y Heavy Rain	+ Warm Night			Warning	(Take Action)	
			+ Hot Day			Proba	bilistic Forecast	
4	Thunder	& Lightning	THOC Day			Terms	Probability of Occurrence	e (%)
4	Hailstor	m	hot & Humid			Unlikely Likely	< 25 25 - 50	

Strong Surface Winds



	<u> </u>
Rain/ Snow *	Heavy: 64.5 to 115.5 mm/cm * Very Heavy: 115.6 to 204.4 mm/cm*
Rain/ Snow	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: Maximum Temperature Departure from normal 4.5° C to 6.4° C.
	Severe Heat Wave: Maximum Temperature Departure from normal ≥6.5° C
Heat Wave	(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
Warm 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: Minimum Temperature Departure from normal -4.5 °C to -6.4 °C.
	Severe Cold Wave: Minimum Temperature Departure from normal ≤ -6.5 °C
Cold Wave	(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
	Discourse of an all develops accounted in air and the harizontal visibility of the
	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.
-	Ice deposits on ground
Frost	Air temperature ≤4°C (over Plains)
	A strong wind that rises suddenly, lasts for atleast 1 minute. Moderate: Wind speed 52-61 kmph
Squall	Severe: Wind speed 52-61 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
Sea State	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)
Cyclone	Very Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots) Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)