

> Sunday, September 24, 2023 Time of Issue: 2000 hours IST (NIGHT)

# ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

# **Significant Weather Features**

## **Significant Weather features:**

# \* Withdrawal of Southwest Monsoon:

- Due to anti-cyclonic flow developing over northwest India at lower tropospheric levels and dry weather prevailing over parts of southwest Rajasthan, conditions are becoming favorable for withdrawal of Southwest Monsoon from parts of West Rajasthan during next 24 hours.
- A cyclonic circulation lies over Southeast Uttar Pradesh & neighbourhood in lower levels and another cyclonic circulation lies over north interior Odisha & neighbourhood and a trough also runs from Gangetic West Bengal to Telangana cross Odisha and south Chhattisgarh in middle & upper tropospheric levels.
- Another cyclonic circulation lies over south Gujarat region in middle tropospheric levels.
- A cyclonic circulation is likely to form over north Andaman Sea & neighbourhood on 29<sup>th</sup> September. Under its influence a Low Pressure Area is likely to form over north Andaman Sea & adjoining Eastcentral Bay of Bengal during subsequent 24 hours. Thereafter, it is likely to move west-northwestwards with possibility of gradual intensification.

# Weather Forecast and Warnings:

**East India**: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Bihar on 24<sup>th</sup> & 25<sup>th</sup>; over Sub-Himalayan West Bengal & Sikkim on 24<sup>th</sup>; Andaman & Nicobar Islands during 24<sup>th</sup> -28<sup>th</sup> September.

Isolated very heavy rainfall very likely over Sub-Himalayan West Bengal & Sikkim and Bihar on 24<sup>th</sup>; over Andaman & Nicobar during 26<sup>th</sup>- 28<sup>th</sup> September.

# Isolated extremely heavy rainfall very likely over Sub-Himalayan West Bengal & Sikkim and Bihar today, the 24<sup>th</sup> September, 2023.

**Northeast India:** Light/moderate fairly widespread rainfall/thunderstorm with isolated **heavy rainfall** activity very likely over Arunachal Pradesh, Assam & Meghalaya on 24<sup>th</sup> September.

# Isolated very heavy rainfall very likely over west Assam & Meghalaya on 24<sup>th</sup> September

**Central India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over East Madhya Pradesh and south Chhattisgarh on 24<sup>th</sup> September.

**South India:** Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** very likely over Coastal Andhra Pradesh, Rayalaseema, Telangana, South Interior Karnataka, Tamil Nadu on 24<sup>th</sup>; Coastal Karnataka and Kerala on 24<sup>th</sup>, 27<sup>th</sup> & 28<sup>th</sup>; North Interior Karnataka on 24<sup>th</sup>, 25<sup>th</sup>, 27<sup>th</sup> & 28<sup>th</sup> September.

**Northwest India:** Light/moderate scattered to fairly widespread rainfall/thunderstorm with isolated **heavy falls** very likely over Haryana and Punjab on 24<sup>th</sup> September.

**West India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Konkan & Goa on 24<sup>th</sup>, 25<sup>th</sup> & 28<sup>th</sup>; Madhya Maharashtra on 24<sup>th</sup>, 27<sup>th</sup> & 28<sup>th</sup> and Marathwada on 24<sup>th</sup> & 27<sup>th</sup>; Saurashtra & Kutch on 24<sup>th</sup>; Gujarat Region during 24<sup>th</sup> -28<sup>th</sup> September.

**Isolated very heavy rainfall very likely over Konkan & Goa and Gujarat Region on 24th September.** Isolated to scattered light/moderate rainfall likely over rest parts of the country during next 5 days.

For more details kindly refer: https://mausam.imd.gov.in/responsive/all india forcast bulletin.php



# Main Weather Observations:

- Rainfall distribution (from 0830 hours IST to 1730 hours IST of today): at many places over Jharkhand, Chhattisgarh and Punjab; at a few places over Sub-Himalayan West Bengal & Sikkim, Bihar, Odisha, Madhya Maharashtra, Vidarbha, Telangana and Kerala & Mahe and at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, East Uttar Pradesh, Madhya Pradesh, Rajasthan, Saurashtra & Kutch, Marathwada, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, North Interior Karnataka and Tamil Nadu, Puducherry & Karaikal.
- Significant rainfall recorded (from 0830 hours IST to 1730 hours IST of today): (in cm): Assam & Meghalaya: Karbi-anglong-2; Tura-1; Sub-Himalayan West Bengal & Sikkim: Ganagrampur-3; Alipurduar and Dinajpur-1 each; Gangetic West Bengal: Bardhwan-3; Parganas-1; Bihar: Jamui and Patna-1 each; Odisha: Mayarbhanj-4; Nayagarh-2; Rayaged, Balangir and Bebagarh-1each; Chhattisgarh: Jashpur-5; Gariabad, Dhamtari-2 each; Baghicha-1; East Madhya Pradesh: Shivpuri-3; Sehore, Harda and Raisen-1 each; West Madhya Pradesh: Chhindwada-2; West Rajasthan: Bikaner-3; Saurashtra & Kutch: Amreli-1; Gujarat Region: Bharuch-7; Ahmedabad-1; Madhya Maharashtra: Ahmednagar-8: Pune-3; Nanded-4; Washim-3; Hingoli and Nasik-1 each; Konkan & Goa: Goa-7; Old Goa-2; North Goa-1; Vidarbha: Nagpur-2; Telangana: Suryapet-4; Nizamabad and Adilabad-2 each; Nalgonda-1; Coastal Andhra Pradesh & Yanam: Parvathipuram-2; Kakinada-1; Kerala & Mahe: Ernakulam-1.
- Heavy rainfall observed (from 0830 hours IST to 1730 hours IST of today): at isolated places over Goa, Madhya Maharashtra and Gujarat Region.
- Minimum Temperature Departures (as on 24-09-2023): Minimum temperatures are above normal (1.6°C to 3.0°C) at most places over Saurashtra & Kutch; at many places over West Rajasthan; at a few places over Punjab, Madhya Pradesh; at isolated places over Uttar Pradesh, Himachal Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, Jharkhand, Odisha, Madhya Maharashtra, Chhattisgarh, Telangana, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, North Interior Karnataka, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura. They are below normal (-1.6°C to -3.0°C) at isolated places over Arunachal Pradesh, Kerala & Mahe, Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Today, the lowest minimum temperature of 20.4°C is reported at Khandwa (West Madhya Pradesh) over the plains of the country.

Maximum Temperature Departures (as on 24-09-2023): Maximum temperatures are appreciable above normal (3.1°C to 5.0°C) at isolated places over Assam & Meghalaya; above normal (1.6°C to 3.0°C) at many places over Nagaland, Manipur, Mizoram & Tripura; at isolated places over Arunachal Pradesh, Jharkhand, Coastal Andhra Pradesh & Yanam, Rayalaseema, West Rajasthan, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. They are markedly below normal (-5.1°C to less) at isolated places over Sub-Himalayan West Bengal & Sikkim and Bihar; below normal at many places over kg, Coastal & North Interior Karnataka; at a few places over Marathwada and Gujarat state and at isolated places over Himachal Pradesh, Uttarakhand, Madhya Maharashtra, Telangana and Chhattisgarh and near normal over rest parts of the country. Today, the highest maximum temperature of 38.8°C is reported at Jaisalmer (West Rajasthan).



# Meteorological Analysis (Based on 1730 hours IST)

- Conditions are becoming favourable for withdrawal of Southwest Monsoon from parts of West Rajasthan during next 24 hours.
- The Monsoon Trough at mean sea level now pass through Bikaner, Kanpur, Daltonganj, Bagatti and thence eastwards to Manipur.
- The cyclonic circulation over southeast Uttar Pradesh & neighbourhood persists and extends upto 1.5 km above mean sea level.
- The trough from central parts of north Uttar Pradesh to north Bangladesh now runs from southwest Uttar Pradesh to north Bangladesh across cyclonic circulation over southeast Uttar Pradesh & West Bengal and extends upto 1.5 km above mean sea level.
- ✤ A cyclonic circulation lies over north interior Odisha & neighbourhood between 3.1 & 7.6 km above mean sea level tilting southwestwards with height.
- The trough from Jharkhand to south Madhya Maharashtra now runs from Gangetic West Bengal to Telangana between 3.1 & 7.6 km above mean sea level across cyclonic circulation over north interior Odisha and south Chhattisgarh.
- The cyclonic circulation over south Madhya Maharashtra & neighbourhood persists and seen between 3.1 km above mean sea level persists.
- The cyclonic circulation over south Gujarat region & neighbourhood persists and seen between 3.1 & 4.5 km above mean sea level.
- The cyclonic circulation over southeast Arabian sea & adjoining Lakshadweep area at 5.8 km above mean sea level persists.
- The Western Disturbance as a trough in westerlies in mid tropospheric levels with its axis at 5.8 km above mean sea level now runs roughly along Long. 66° E to the north of Lat. 30° N.
- The cyclonic circulation over north Pakistan & neighbourhood now lies over north Pakistan and adjoining Jammu & Kashmir at 0.9 km above mean sea level.
- A cyclonic circulation is likely to form over north Andaman Sea & neighbourhood on 29th September. Under its influence a Low Pressure Area is likely to form over north Andaman Sea & adjoining Eastcentral Bay of Bengal during subsequent 24 hours. Thereafter, it is likely to move west-northwestwards with possibility of gradual intensification.

<u>Weather Forecast for next 5 days</u> (Upto 0830 hours IST of 29th September, 2023)

- Meteorological sub-division wise detailed 5 days rainfall forecast is given in Table-1.
- No significant change in maximum temperatures likely over most parts of country during next 5 days.

# Weather Outlook for subsequent 2 days

- Scattered to fairly widespread light/moderate rainfall likely over parts of east, northeast & central India, Uttarakhand, Uttar Pradesh, Karnataka, Telangana, along the west coasts and islands.
- Isolated to scattered rainfall likely over rest parts of the country.



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

Legend	Category	% Stations
WS	Widespread/Most Places	76-100
FWS	Fairly Widespread/Many places	51-75
SCT	Scattered/ A Few Places	26-50
ISOL	Isolated Places	1-25
DRY	No Rain	0

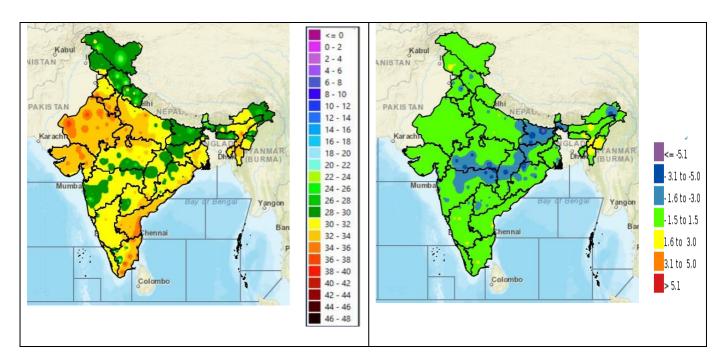
\* Red color warning does not mean "Red Alert" Red color warning means "Take Action". Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day For more details kindly visit https://mausam.imd.gov.in or contact : 011-2434-4599 (Service to the Nation since 1875) राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विज्ञान विभाग पृथ्वी विज्ञान मंत्रालय



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

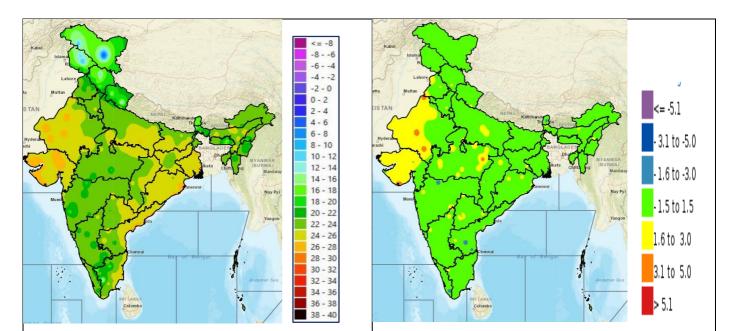
#### Fig. 1: Maximum Temperatures Dated 24.09.2023

Fig. 2: Departure of Maximum Temp. Dated 24.09.2023



#### Fig. 3: Minimum Temperatures Dated 24.09.2023

#### Fig. 4: Departure of Minimum Temp. Dated 24.09.2023

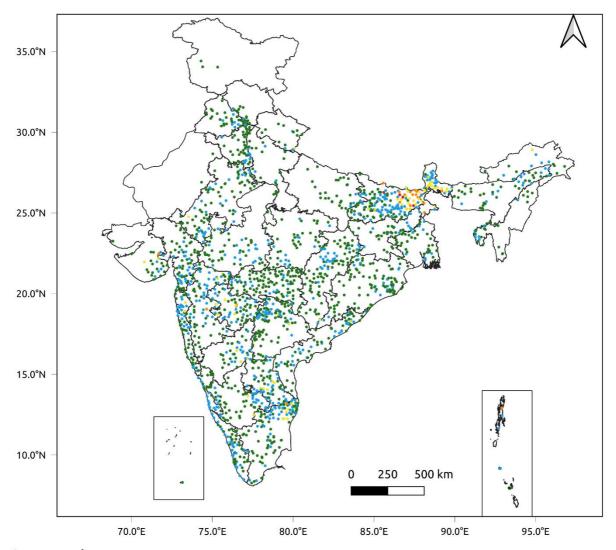


राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विज्ञान विभाग पृथ्वी विज्ञान मंत्रालय



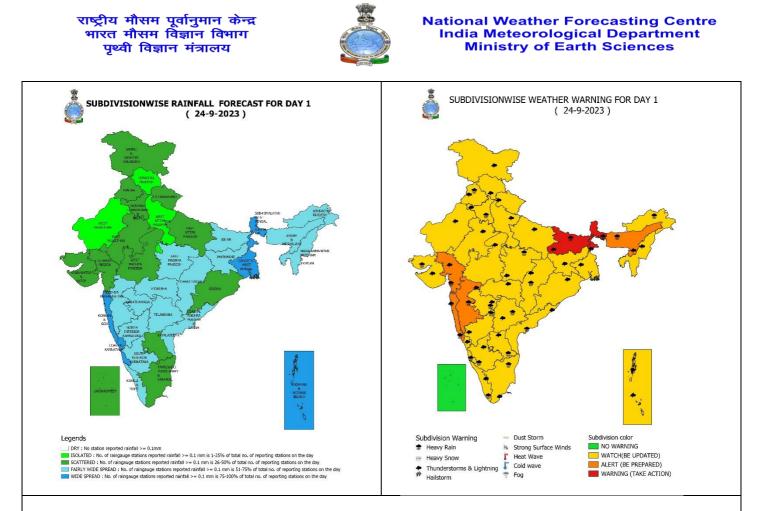
### Fig. 5: Accumulated Rainfall (mm) during past 24 hours

24 Hr cumulative rainfall recorded over different stations during 0830 IST of 23-9-2023 to 0830 IST of 24-9-2023



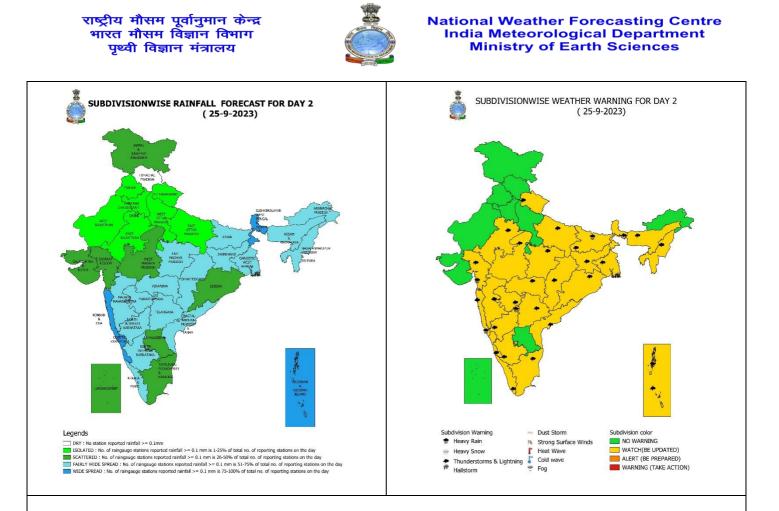
# Legends

- Very Light to Light Rainfall (0.1 15.5 mm)
- Moderate Rainfall (15.6 64.4 mm)
- Heavy Rainfall (64.5 115.5 mm)
- Very Heavy Rainfall (115.6 204.4 mm)
- Extremely Heavy Rainfall (>=204.5 mm)



# 24 September (Day 1): -

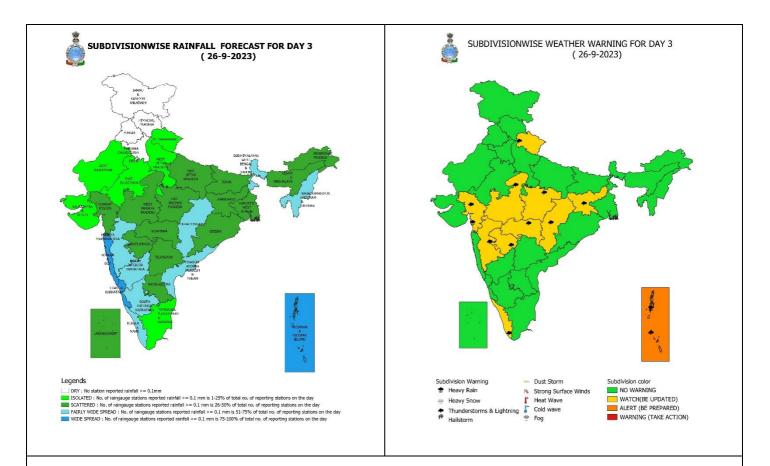
- Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Bihar, Sub-Himalaya West Bengal & Sikkim; heavy to very heavy rainfall at isolated places over Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra, Gujarat Region; heavy rainfall very likely at isolated places over Punjab, Haryana, East Madhya Pradesh, south Chhattisgarh, Andaman & Nicobar Islands, Arunachal Pradesh, Marathwada, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Karnataka, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe.
- Thunderstorm with lightning & gusty winds (speed 30-40 kmph) very likely at isolated places over Punjab, Haryana-Chandigarh-Delhi, Kerala & Mahe and with lightning at isolated places Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, West Bengal & Sikkim, Bihar, Jharkhand, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Marathwada, Saurashtra & Kutch, Gujarat Region, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Karnataka, Tamil Nadu, Puducherry & Karaikal.
- ✤ Squally wind speed of 45-55 kmph gusting to 65 kmph likely over Southwest and adjoining Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.



## 25 September (Day 2): -

- Heavy rainfall likely at isolated places over Bihar, Andaman & Nicobar Islands, Goa, Gujarat Region, North Interior Karnataka.
- Thunderstorm with lightning likely at isolated places over Uttarakhand, East Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, West Bengal & Sikkim, Bihar, Jharkhand, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Marathwada, Gujarat Region, Coastal Andhra Pradesh & Yanam, Telangana, Karnataka, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe.
- ✤ Squally wind speed of 45-55 kmph gusting to 65 kmph likely over Southwest and adjoining Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.

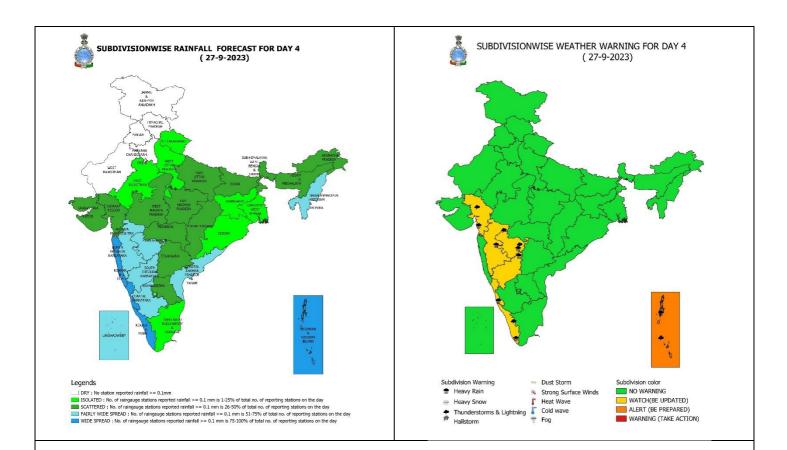




# 26 September (Day 3): -

- Heavy to very heavy rainfall likely at isolated places over Andaman & Nicobar Islands; Heavy rainfall likely at isolated places over Gujarat Region.
- Thunderstorm with lightning & gusty winds (speed 30-40 kmph) very likely at isolated places over Andaman & Nicobar Islands; with lightning likely at isolated places over Uttarakhand, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Madhya Maharashtra, Marathwada, Gujarat Region, Kerala & Mahe.
- ✤ Squally wind speed of 45-55 kmph gusting to 65 kmph likely over Southwest and adjoining Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.

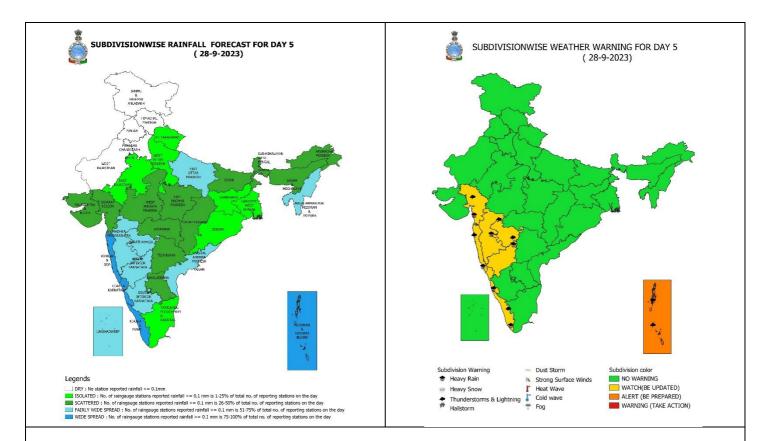




# 27 September (Day 4): -

- Heavy to very heavy rainfall likely at isolated places over Andaman & Nicobar Islands; Heavy rainfall likely at isolated places over Gujarat Region, Madhya Maharashtra, Marathwada, Coastal & North Interior Karnataka, Kerala & Mahe.
- Thunderstorm with lightning & gusty winds (speed 40-50 kmph) very likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty winds (speed 30-40 kmph) at isolated places over Kerala & Mahe; with lightning likely at isolated places over Madhya Maharashtra, Marathwada, Gujarat Region.
- Squally wind speed of 45-55 kmph gusting to 65 kmph likely over Southwest and adjoining Westcentral Arabian Sea and Squally wind speed of 40-45 kmph gusting to 55 kmph Likely over southwest Bay of Bengal, Lakshadweep area & Comorin area and North Andaman Sea. Fishermen are advised not to venture into these areas.



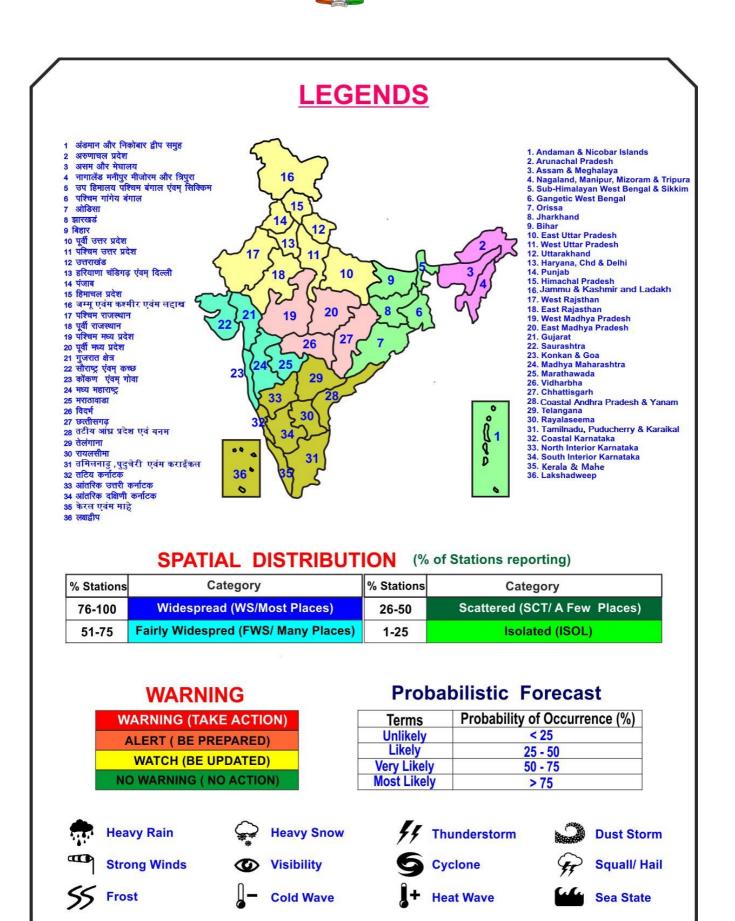


# 28 September (Day 5): -

- Heavy to very heavy rainfall likely at isolated places over Andaman & Nicobar Islands; Heavy rainfall likely at isolated places over Gujarat Region, Konkan & Goa, Madhya Maharashtra, Coastal & North Interior Karnataka, Kerala & Mahe.
- Thunderstorm with lightning & gusty winds (speed 40-50 kmph) very likely at isolated places over Andaman & Nicobar Islands; with lightning & gusty winds (speed 30-40 kmph) at isolated places over Kerala & Mahe; with lightning likely at isolated places over Konkan & Goa, Madhya Maharashtra, Marathwada, Gujarat Region.
- Squally wind speed of 45-55 kmph gusting to 65 kmph likely over Southwest and adjoining Westcentral Arabian Sea and Squally wind speed of 40-45 kmph gusting to 55 kmph Likely over south, northeast & adjoining Eastcentral Bay of Bengal, Lakshadweep area & Comorin area and North Andaman Sea. Fishermen are advised not to venture into these areas.

#### राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विज्ञान विभाग पृथ्वी विज्ञान मंत्रालय

#### National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences



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	WARNING Probabilistic Forecast	
	WARNING (TAKE ACTION) Terms Probability of Occurrence (%)   ALERT ( BE PREPARED) Unlikely < 25   WATCH (BE UPDATED) Very Likely 25 - 50   NO WARNING ( NO ACTION) 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 *	
<b>j+</b> Heat Wave	When maximum temperature of a station reaches ≥40° C for plains and ≥30° C for hilly     (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     (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 ≥57°C	
<b>j+</b> 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 °C.	
<b>〕</b> – Cold Wave	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     (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 is ≤ -4.5 °C & actual Minimum Temperature is ≤ 15 °C	
<u> </u> _ Cold Day	When minimum temperature of a station ≤10°C for plains and ≤0°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 ≤ -6.5 °C	
<b>G</b> Fog	Phenomenon of small droplets suspended in air and the horizontal visibility 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	: 1km
<b><i>F</i></b> Thunderstorm	Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumb sound (thunder)	ling
Dust/Sand Storm	An ensemble of particles of dust or sand energetically lifted to great heights by a strong turbulent wind.	and
55	Ice deposits on ground Air temperature ≤4°C ( over Plains)	
Frost Frost 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	
	Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots) Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)	-
<b>S</b> Cyclone	Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots) Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)	