

National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

> Friday, October 13, 2023 Time of Issue: 1945 hours IST (NIGHT)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

Withdrawal of Southwest Monsoon:

- Southwest Monsoon has further withdrawn from most parts of Bihar; remaining parts of Jharkhand; some parts of Sub-Himalayan West Bengal; entire Gangetic West Bengal and Odisha; remaining parts of Chhattisgarh; some parts of Coastal Andhra Pradesh; most parts of Telangana; some more parts of North Interior Karnataka today, the 13th October, 2023.
- The line of withdrawal of Southwest Monsoon passes through Forbesganj, Malda, 24.0°N/89.0°E, 20.0°N/89.0°E, Vishakhapatnam, Nalgonda, Raichur, Vengurla & 16.0°N/70.0°E.

Significant Weather features:

- ✤ A cyclonic circulation lies over south Tamil Nadu & neighbourhood in lower tropospheric levels.
- The Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 63°E to the north of Lat. 32°N. Under its influence, an induced cyclonic circulation is likely to form over central Pakistan & neighbourhood during next 24 hours.

Weather warnings for next 5 days:

South India: Light to moderate rainfall at some to many places with isolated **heavy rainfall** accompanied with thunderstorm & lightning very likely over Kerala & Mahe during 13th-17th; Tamil Nadu on 13th, 16th & 17th and South Interior Karnataka on 16th & 17th October, 2023.

Northwest India: Light to moderate rainfall at some to many places accompanied with isolated thunderstorm & lightning very likely over Jammu-Kashmir-Gilgit-Baltistan-Muzaffarabad during 14th-16th; Himachal Pradesh, Uttarakhand, Punjab, Haryana, Uttar Pradesh and Rajasthan on 15th & 16th October, 2023. Isolated **heavy rainfall** also likely over Kashmir-Gilgit Region and Himachal Pradesh on 16th October, 2023.

No significant weather over rest parts of the country during next 5 days.



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Main Weather Observations:

- Rainfall distribution (from 0830 hours IST to 1730 hours IST of today): at many places over Kerala & Mahe; at a few places over Coastal Karnataka; at isolated places over Bihar, Jharkhand, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Gujarat Region, North Interior Karnataka, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal.
- Significant rainfall recorded (from 0830 hours IST to 1730 hours IST of today) (in cm): Kerala & Mahe: Kunnamthannam-6, Kottarakkara-5, Thiruvalla-4, Neeleswaram-4, Choondi-4, Palakkad-3, Thirussar-3, Chavara-3, Thiruvanathapuram-3, Cheruthoni-3, Punalur-2, Odakkali-2, Venkurinji-1, Idukki-1; Konkan & Goa: Mormugoa-2, Valpoi-1; Gangetic West Bengal: Purulia-1; Assam & Meghalaya: Bakulia-1; Odisha: Keonjhar-1.
- Minimum Temperature Departures (as on 13-10-2023): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at isolated places over Uttarakhand, Punjab and Rajasthan; above normal (1.6°C to 3.0°C) at most places over Gujarat state; at a few places over Himachal Pradesh, Chhattisgarh, Odisha and Konkan & Goa; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Haryana-Chandigarh-Delhi, East Madhya Pradesh, Madhya Maharashtra, Assam & Meghalaya and West Bengal & Sikkim and near normal over rest parts of the country. Today, the lowest minimum temperature of 17.0°C reported at Meerut (West Uttar Pradesh) over the plains of the country.
- Maximum Temperature Departures (as on 13-10-2023): Maximum temperatures are appreciably above normal (3.1°C to 5.0°C) at isolated places over Chhattisgarh and Vidarbha; above normal (1.6°C to 3.0°C) at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad. Himachal Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, Punjab, Bihar, Rajasthan, Madhya Pradesh, Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Gujarat state, Konkan & Goa, Madhya Maharashtra, Marathwada, Odisha, Jharkhand, Gangetic West Bengal, North Interior Karnataka, Coastal Karnataka; at many places over Uttar Pradesh, Telangana, Coastal Andhra Pradesh & Yanam; at a few places over Assam & Meghalaya, South Interior Karnataka and Kerala & Mahe and near normal over rest parts of the country. Today, the highest maximum temperature of 38.3°C is reported at Churu (West Rajasthan).



Meteorological Analysis (Based on 1730 hours IST)

- Southwest Monsoon has further withdrawn from most parts of Bihar; remaining parts of Jharkhand; some parts of Sub-Himalayan West Bengal; entire Gangetic West Bengal and Odisha; remaining parts of Chhattisgarh; some parts of Coastal Andhra Pradesh; most parts of Telangana; some more parts of North Interior Karnataka today, the 13th October, 2023.
- The line of withdrawal of Southwest Monsoon continue to pass through Forbesganj, Malda, 24.0°N/89.0°E, 20.0°N/89.0°E, Vishakhapatnam, Nalgonda, Raichur, Vengurla & 16.0°N/70.0°E.
- The cyclonic over Northeast Bangladesh & adjoining Meghalaya at 3.1 km above mean sea level persists.
- The cyclonic circulation over south Tamil Nadu & neighbourhood at 0.9 km above mean sea level persists.
- The Western Disturbance as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 63°E to the north of Lat. 32°N persists. Under its influence, an induced cyclonic circulation is likely to form over central Pakistan & neighbourhood during next 24 hours.

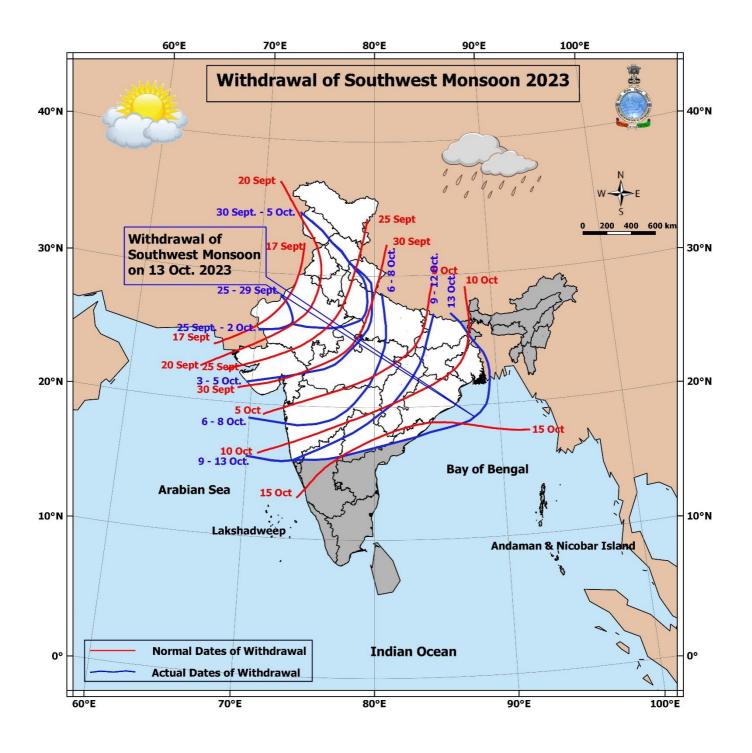
Weather Forecast for next 5 days (Upto 0830 hours IST of 18th October, 2023)

- 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 northeast Rajasthan, Haryana, West Uttar Pradesh, Kerala, South Interior Karnataka, Tamil Nadu and Islands.
- Isolated to scattered rainfall likely over rest parts of Northeast India, West Madhya Pradesh, Chhattisgarh and Coastal Andhra Pradesh & Yanam. Dry weather likely to prevail over rest parts of the country.







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

Legend	Category	%
Legenu	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)



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Fig. 1: Maximum Temperatures Dated 13.10.2023

Fig. 2: Departure of Maximum Temp. Dated 13.10.2023

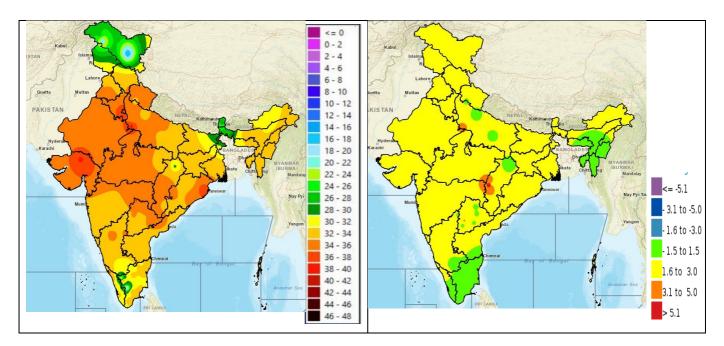
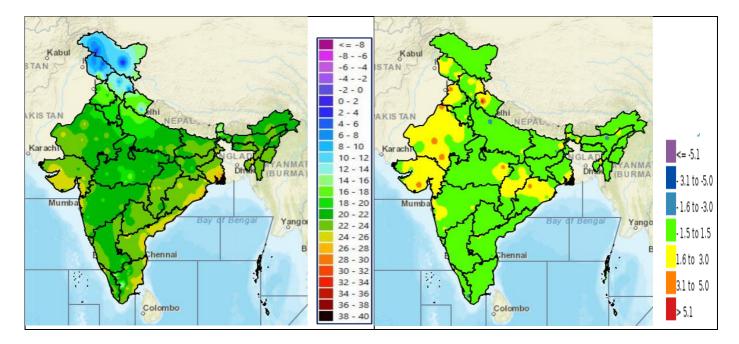


Fig. 3: Minimum Temperatures Dated 13.10.2023

Fig. 4: Departure of Minimum Temp. Dated 13.10.2023



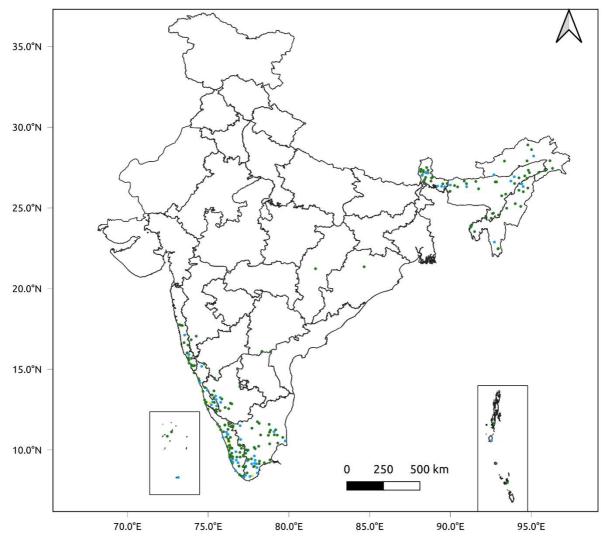


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Fig. 5: Accumulated Rainfall (mm) during past 24 hours

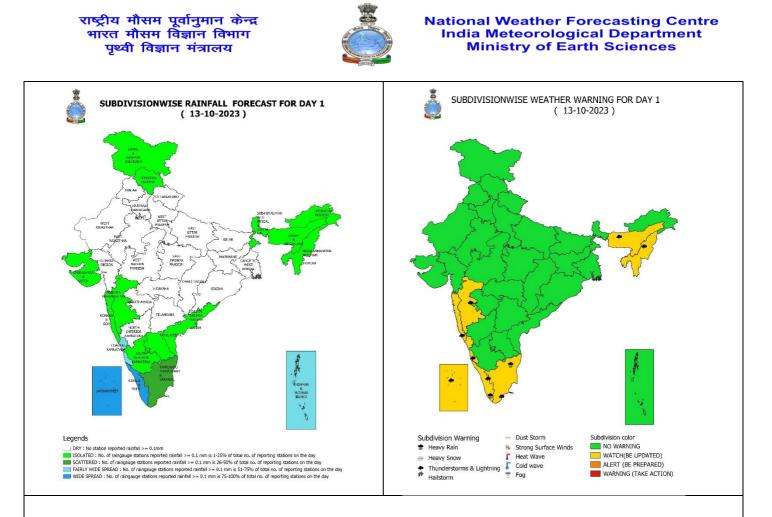


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 12-10-2023 to 0830 IST of 13-10-2023



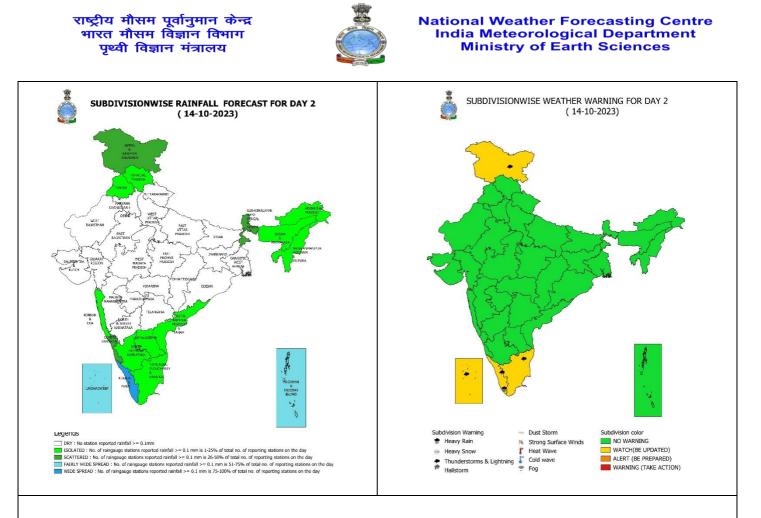
Legends

- 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)



13 October (Day 1):

- Heavy rainfall very likely at isolated places over Tamil Nadu and Kerala.
- Thunderstorm with lightning & gusty winds speed reaching 30-40 kmph very likely at isolated places over Kerala & Mahe; Thunderstorm with lightning at isolated places over Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra, Coastal Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.
- Squally weather (wind speed 40-45 kmph gusting to 55 kmph) very likely over Lakshadweep area, Gulf of Mannar and Comorin area. Fishermen are advised not to venture into these areas.

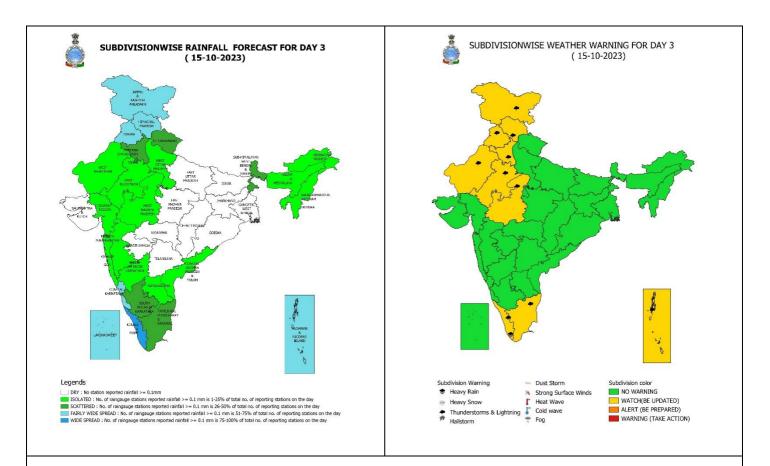


14 October (Day 2):

- Heavy rainfall very likely at isolated places over Kerala & Mahe.
- Thunderstorm with lightning & gusty winds speed reaching 30-40 kmph likely at isolated places over Kerala & Mahe and with lightning over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Tamil Nadu, Puducherry & Karaikal, Lakshadweep.
- Squally weather (wind speed 40-45 kmph gusting to 55 kmph) very likely over Lakshadweep area, Gulf of Mannar and Comorin area. Fishermen are advised not to venture into these areas.



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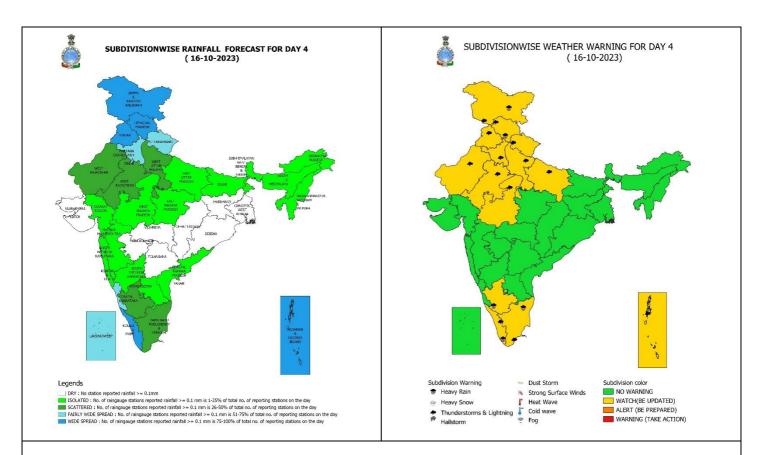


15 October (Day 3):

- Heavy rainfall very likely at isolated places over Kerala & Mahe.
- Thunderstorm with lightning accompanied with gusty winds speed reaching 30-40 kmph very likely at isolated places over Kerala & Mahe; Thunderstorm with lightning at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh, Rajasthan, West Madhya Pradesh, Tamil Nadu, Puducherry & Karaikal, Andaman & Nicobar Islands.



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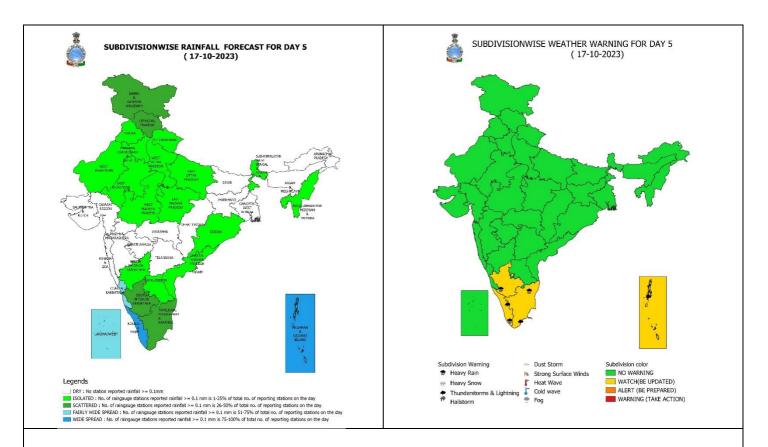


16 October (Day 4):

- Heavy rainfall likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- Thunderstorm with lightning accompanied with gusty winds speed reaching 30-40 kmph likely at isolated places over Kerala & Mahe; Thunderstorm with lightning at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, Rajasthan, West Madhya Pradesh, Andaman & Nicobar Islands, Tamil Nadu, Puducherry & Karaikal.

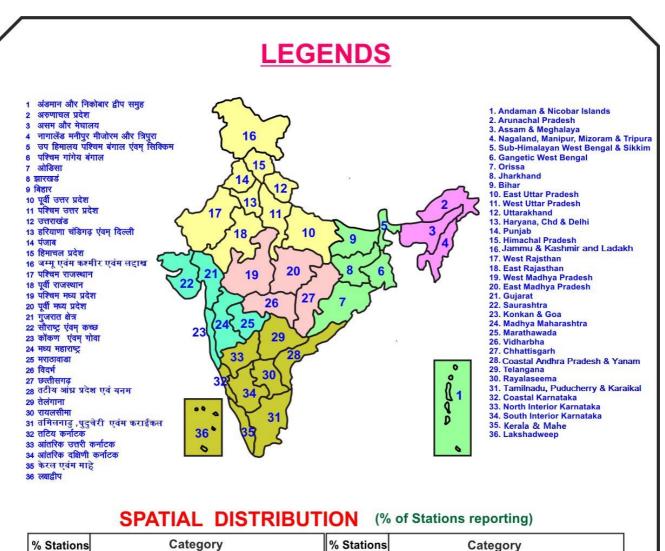


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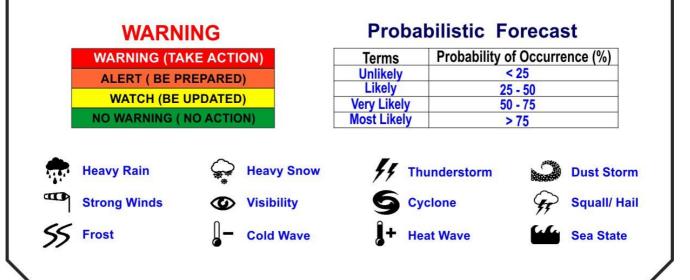


17 October (Day 5):

- Heavy rainfall likely at isolated places over South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- Thunderstorm with lightning accompanied with gusty winds speed reaching 30-40 kmph likely at isolated places over Kerala & Mahe; with lightning at isolated places over Andaman & Nicobar Islands, Tamil Nadu, Puducherry & Karaikal.



% Stations	Category	% Stations	Category
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)



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	WARNING Probabilistic Forecast					
	WARNING (TAKE ACTION) Terms Probability of Occt ALERT (BE PREPARED) Unlikely <25	urrence (%)				
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 *					
j+ Heat Wave	When maximum temperature of a station reaches ≥40° C for plains and (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 ≥4.5°C from normal. Heat Wave may be desc					
+ 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.					
<u>]</u> – Cold Wave	When minimum temperature of a station ≤10°C for plains and ≤0°C for (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					
↓ – Cold Day	When minimum temperature of a station ≤10°C for plains and ≤0°C for h 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	illy regions				
O Fog	Phenomenon of small droplets suspended in air and the horizon 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	tal visibility < 1k				
77 Thunderstorm	Sudden electrical discharges manifested by a flash of light (Lightning) and sound (thunder) An ensemble of particles of dust or sand energetically lifted to great heigh					
Dust/Sand Storm	Ice deposits on ground					
>> Frost	Air temperature ≤4°C (over Plains)					
97 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 me 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					
9	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)					