

Friday, November 17, 2023 Time of Issue: 1315 hours IST (MID-DAY)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

Weather Systems:

- ❖ The cyclonic storm "Midhili" (pronounced as "Midhili") over Northwest Bay of Bengal moved north-northeastwards with a speed of 26 kmph during past 6 hours and lay centered at 0830 hours IST of today, the 17th November over Northwest and adjoining Northeast Bay of Bengal near latitude 20.8°N and longitude 89.0°E, about 250 km east-northeast of Paradip (Odisha), 180 km east-southeast of Digha (West Bengal) and 180 km southwest of Khepupara (Bangladesh). It is likely to continue to move north-northeastwards and cross Bangladesh coast close to Khepupara with wind speed of 60-70 kmph gusting to 80 kmph during night of 17th November, 2023.
- ❖ An upper air **Cyclonic Circulation** lies over Southwest Bay of Bengal & adjoining Sri Lanka and a **trough** runs from this cyclonic circulation to the cyclonic circulation associated with the **Cyclonic Storm** over Northwest & adjoining Northeast Bay of Bengal in the lower tropospheric levels.
- ❖ A **Cyclonic Circulation** lies over south Andaman Sea in lower & middle tropospheric levels.

Forecast & Warnings associated with Cyclonic Storm

(i) Rainfall Warning:

- Light to moderate rainfall at many places with **isolated heavy rainfall** is likely over coastal districts of West Bengal (North 24 Parganas) till evening of 17th November.
- Light to moderate rainfall at most places with **isolated heavy to very heavy rainfall** is likely over Nagaland, Manipur, Mizoram & Tripura on 17th & 18th November with **extremely heavy fall** at isolated places over Mizoram & Tripura on 17th November.
- Light to moderate rainfall at many places with **isolated heavy rainfall** is likely over south Assam and east Meghalaya on 17th & 18th November.

(ii) Fishermen Warning:

Fishermen are advised not to venture into

- North Bay of Bengal and along & off Bangladesh coast till 18th November afternoon
- Along & off West Bengal coast till 18th November morning.

Forecast & Warnings associated with Easterly Wave:

Light to moderate rainfall at some places with **isolated heavy rainfall** is very likely over Tamil Nadu on 17th, 19th & 20th and Kerala on 19th & 20th November, 2023.

No significant weather likely over rest parts of the country.



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, Gangetic West Bengal; at a few places over Kerala & Mahe, Assam & Meghalaya and at isolated places over Arunachal Pradesh, Odisha, Jharkhand and Tamil Nadu, Puducherry & Karaikal.
- ❖ Heavy rainfall recorded (from 0830 hours IST of yesterday to 0830 hours IST of today) over Kerala and Tamil Nadu.
- ❖ Significant rainfall recorded (from 0830 hours IST of vesterday to 0830 hours IST of today) (in cm): Kerala: Enadimangalam Aws (dist Pathanamthitta) 10, Konni (dist Pathanamthitta) 9; Tamil Nadu: Nalumukku (dist Tirunelveli) 10, Oothu (dist Tirunelveli), Kannadaian Anicut (dist Tirunelveli) 9 each, Kakkachi (dist Tirunelveli) 8, Manjolai (dist Tirunelveli) 7.
- ❖ Minimum Temperature Departures (as on 17-11-2023): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at most places over Gangetic West Bengal; at many places over Nagaland, Manipur, Mizoram & Tripura; at isolated places over Assam & Meghalaya, Bihar, Gujarat state and Sub-Himalayan West Bengal & Sikkim; above normal (1.6°C to 3.0°C) at most places over Arunachal Pradesh; at many places over Coastal Andhra Pradesh & Yanam, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal; at a few places over Uttarakhand, Himachal Pradesh, East Uttar Pradesh, Punjab, Haryana-Chandigarh-Delhi, South Interior Karnataka and Andaman & Nicobar Islands; at isolated places over West Rajasthan and North Interior Karnataka. They are below normal (-1.6°C to -3.0°C) at isolated places over East Rajasthan, Madhya Pradesh, Chhattisgarh, Vidarbha, Madhya Maharashtra and **near normal** over rest parts of the country. Today, **the lowest minimum temperature** of **9.2°C** is reported at **Sikar** (East Rajasthan) over the plains of the country.
- ❖ Maximum Temperature Departures (as on 16-11-2023): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Assam & Meghalaya, Gangetic West Bengal, Uttarakhand, West Madhya Pradesh, Coastal Andhra Pradesh & Yanam and Chhattisgarh; above normal (1.6°C to 3.0°C) at a few places over Himachal Pradesh and Sub-Himalayan West Bengal & Sikkim and at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Rayalaseema. They were **below normal (-1.6°C to -3.0°C)** at many places over Gangetic West Bengal; at a few places over Nagaland, Manipur, Mizoram & Tripura and Rajasthan and at isolated places over Odisha, Uttar Pradesh and Haryana-Chandigarh-Delhi and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 36.8°C was reported at Bulsar (Gujarat Region).



Meteorological Analysis (Based on 0830 hours IST)

- The cyclonic storm "Midhili" (pronounced as "Midhili") over Northwest Bay of Bengal moved north-northeastwards with a speed of 26 kmph during past 6 hours and lay centered at 0830 hours IST of today, the 17th November over Northwest and adjoining Northeast Bay of Bengal near latitude 20.8°N and longitude 89.0°E, about 250 km east-northeast of Paradip (Odisha), 180 km east-southeast of Digha (West Bengal) and 180 km southwest of Khepupara (Bangladesh). It is likely to continue to move north-northeastwards and cross Bangladesh coast close to Khepupara with wind speed of 60-70 kmph gusting to 80 kmph during night of 17th November, 2023.
- ❖ The upper air **cyclonic circulation** over Southwest Bay of Bengal & adjoining Sri Lanka extending upto 3.1 km above mean sea level persists.
- ❖ The **trough** now runs from the cyclonic circulation over Southwest Bay of Bengal & adjoining Sri Lanka to the cyclonic circulation associated with **cyclonic storm "Midhili"** over Northwest & Northeast Bay of Bengal and extends upto 1.5 km above mean sea level.
- ❖ A **cyclonic circulation** lies over South Andaman Sea and extends upto 5.8 km above mean sea level.
- ❖ A fresh feeble Western Disturbance is likely to affect Western Himalayan Region around 19th November, 2023.

Weather Forecast for next 7 days (Upto 0830 hours IST of 24th November, 2023)

- ❖ Meteorological sub-division wise detailed 7 days rainfall forecast is given in Table-1.
- ❖ No significant change in minimum temperature over most parts of Northwest India.

Weather Outlook for subsequent 2 days

- ❖ Scattered to fairly widespread light to moderate rainfall likely over parts of south peninsular India and Islands.
- ❖ Mainly dry weather likely to prevail over rest parts of the country.





Table-1

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

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







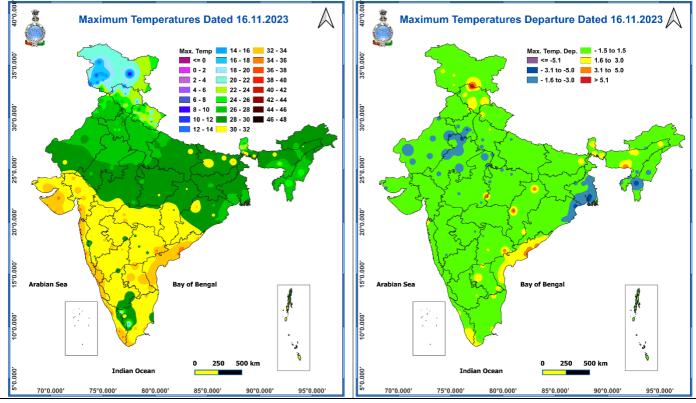




Fig. 4: Departure of Minimum Temperatures

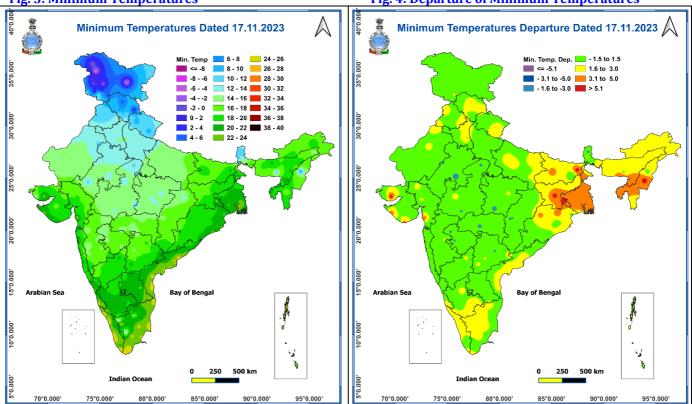
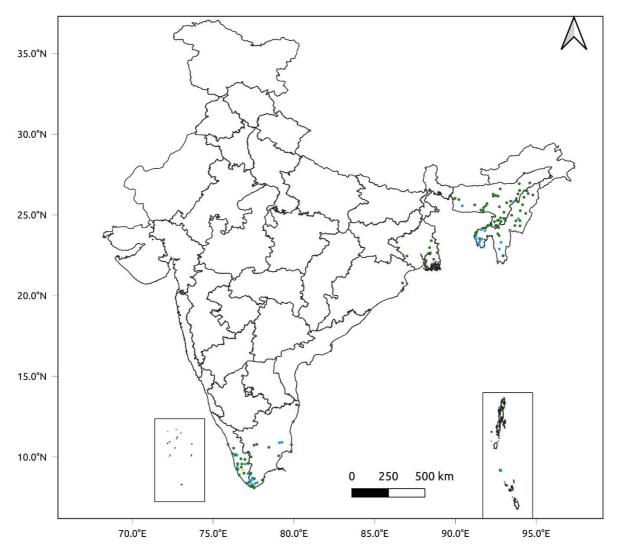




Fig. 5: Accumulated Rainfall (mm) during past 24 hours



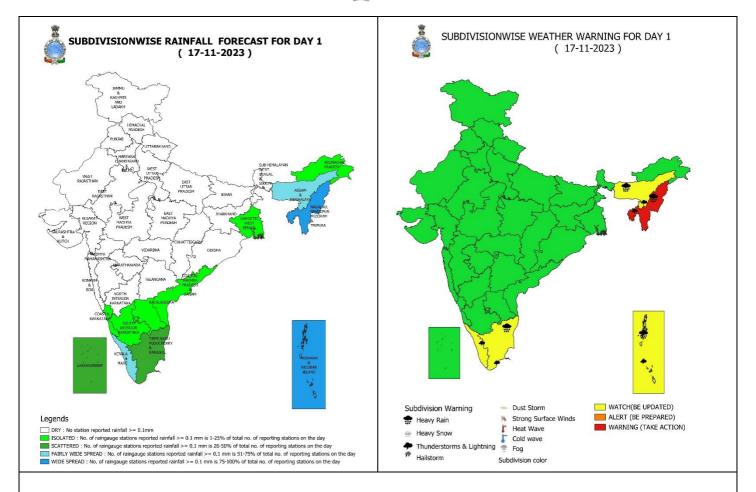
24 Hr cumulative rainfall recorded over different stations during 0830 IST of 16-11-2023 to 0830 IST of 17-11-2023



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)

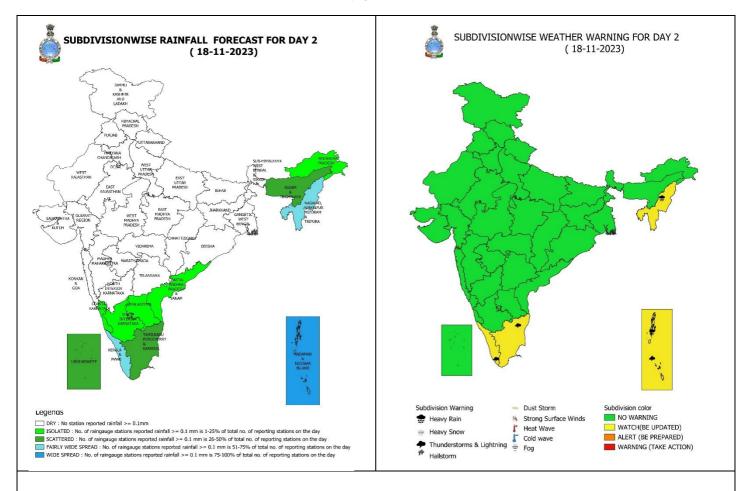




17 November (Day 1):

- ❖ Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Mizoram & Tripura and heavy rainfall at isolated places over Andaman & Nicobar Islands, Assam & Meghalaya, Manipur and Tamil Nadu, Puducherry & Karaikal.
- ❖ Thunderstorm accompanied with lightning very likely at isolated places over Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- ❖ Squally wind speed reaching 60-70 kmph gusting to 80 kmph is prevailing over Northwest & adjoining Northeast Bay of Bengal, along and off West Bengal and Bangladesh Coasts; wind speed reaching 40-45 kmph gusting to 55 kmph over North & adjoining central Bay of Bengal along & off Odisha Coast. Fishermen are advised not to venture into these areas.

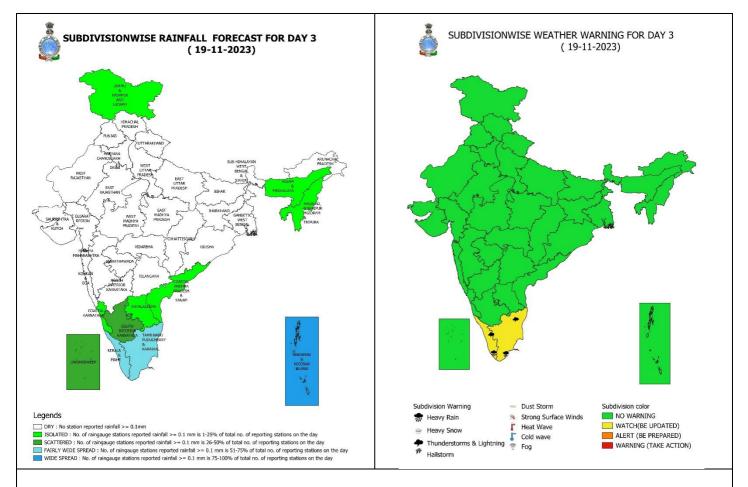




18 November (Day 2):

- **Heavy rainfall** likely at isolated places over Andaman & Nicobar Islands and Mizoram & Tripura.
- **Thunderstorm accompanied with lightning** likely at isolated places over Andaman & Nicobar Islands, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- **❖ Strong wind** speed reaching **30-40 kmph gusting to 50 kmph** is likely over Tripura, Mizoram, Manipur and south Assam on 18th November.
- Squally wind speed reaching 50-60 kmph gusting to 70 kmph very likely over Northeast & adjoining Northwest Bay of Bengal, along and off West Bengal and Bangladesh Coasts; wind speed reaching 40-45 kmph gusting to 55 kmph over North & adjoining central Bay of Bengal along & off north Odisha Coast. Fishermen are advised not to venture into these areas.

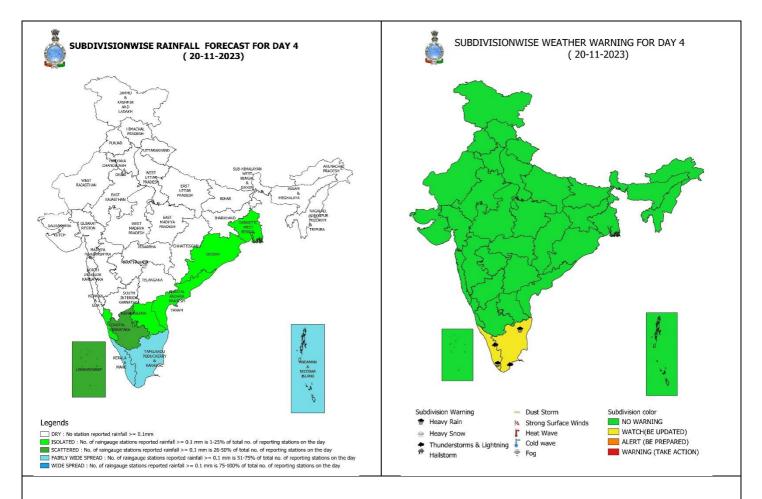




19 November (Day 3):

- **Heavy rainfall** very likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- Thunderstorm accompanied with lightning very likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.

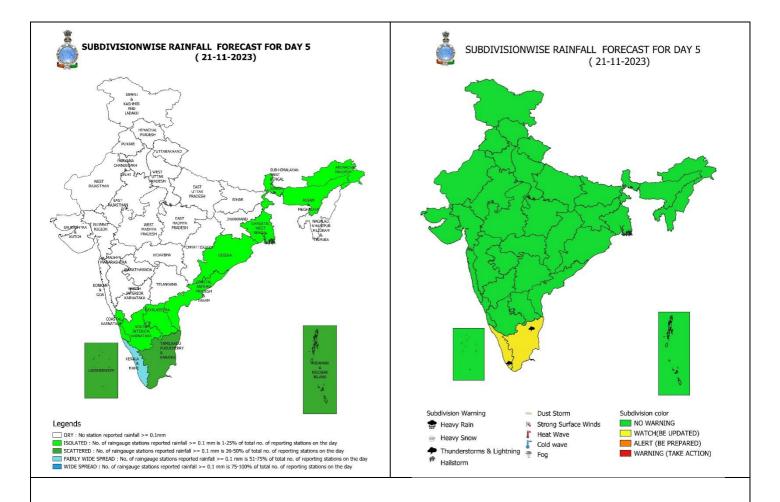




20 November (Day 4):

- ❖ **Heavy rainfall** likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- ❖ Thunderstorm accompanied with lightning likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.



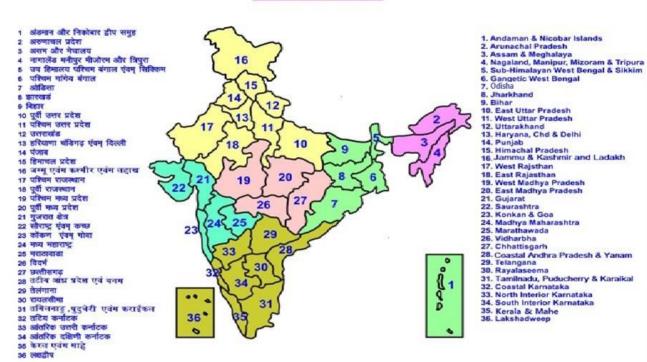


21 November (Day 5):

❖ Thunderstorm accompanied with lightning likely at isolated places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.







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 Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)

WARNING

WARNING (TAKE ACTION)

ALERT (BE PREPARED)

WATCH (BE UPDATED)

NO WARNING (NO ACTION)

Probabilistic Forecast

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



Heavy Rain



Heavy Snow



Thunderstorm



Dust Storm



Strong Winds



Visibility



Cyclone



Squall/ Hail



Frost



Cold Wave



Heat Wave



Sea State



