



Government of India
Earth System Science Organization
Ministry of Earth Sciences
India Meteorological Department

Press Release

Date: 26th March, 2021

Time of Issue: 1400 hrs IST

Subject: Intense Wet spell over Northeast India during 29th March-01st April, 2021

- Under the influence of strong lower level southwesterlies winds from the Bay of Bengal, fairly widespread to widespread rainfall with thunderstorm/lightning at isolated places are very likely over Northeast India during 29th March-02nd April with maximum activity on 30th & 31st March, 2021.
- **Isolated heavy falls** on 29th March & 01st April **and isolated heavy to very heavy falls** on 30th & 31st March are very likely over **south Assam, Meghalaya, Tripura and Mizoram**. Isolated heavy falls are likely over Arunachal Pradesh on 01st April, 2021.
- It may cause landslides and inundation of low lying areas at some places over **south Assam, Meghalaya, Tripura and Mizoram** during 30th March-01st April, 2021.
- **Detailed forecast & warnings are given in next page:**

Sub-Divisions	29-Mar-21	30-Mar-21	31-Mar-21	01-April-21	02- April-21
Assam & Meghalaya	Rainfall at many places with isolated thunderstorm, lightning & gusty winds (30-40 kmph). Isolated heavy falls over south Assam & Meghalaya	Rainfall at most places with thunderstorm, lightning & gusty winds (40-50 kmph). Isolated heavy to very heavy falls over south Assam & Meghalaya	Rainfall at most places with thunderstorm, lightning & gusty winds (40-50 kmph). Isolated heavy to very heavy falls over south Assam & Meghalaya	Rainfall at many places with isolated thunderstorm, lightning & gusty winds (30-40 kmph). Isolated heavy falls over Assam & Meghalaya	Rainfall at many places
Nagaland, Manipur, Mizoram & Tripura	Rainfall at many places with isolated thunderstorm, lightning & gusty winds (30-40 kmph). Isolated heavy falls over Mizoram & Tripura	Rainfall at most places with thunderstorm, lightning & gusty winds (40-50 kmph). Isolated heavy to very heavy falls over Mizoram & Tripura	Rainfall at most places with thunderstorm, lightning & gusty winds (40-50 kmph). Isolated heavy to very heavy falls over Mizoram & Tripura	Rainfall at many places with isolated thunderstorm, lightning & gusty winds (30-40 kmph). Isolated heavy falls over Manipur, Mizoram & Tripura	Rainfall at a few places

Arunachal Pradesh	Rainfall at a few places with isolated thunderstorm & lightning	Rainfall at many places with isolated thunderstorm & lightning	Rainfall at many places with isolated thunderstorm & lightning	Rainfall at many places with isolated heavy falls	Rainfall at many places
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Impact expected and action suggested due to Thunderstorm, Lightning & Gusty winds (speed reaching 40-50 kmph) over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 29th March-01st April, 2021.

Impact expected:

- Strong winds may damage plantation, horticulture and standing crops.
- Strong winds may injure people and cattle at open places.

Action suggested:

- Stay indoors, close windows & doors and avoid travel if possible.
- Take safe shelters; do not take shelter under trees.
- Do not lie on concrete floors and do not lean against concrete walls.
- Unplug electrical/ electronic appliances.
- Immediately get out of water bodies.
- Keep away from all the objects that conduct electricity.
- Farming operations may be suspended during the event.

Impact expected & action suggested due to heavy rainfall over south Assam, Meghalaya, Mizoram and Tripura during 29th March-01st April, 2021.

- 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/snowfall.
- Disruption of traffic 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.

Action Suggested

- Check for traffic congestion on your route before starting your journey.
- Follow any traffic advisories that are issued in this regard.
- Avoid going to areas that face water logging problem often.
- Avoid staying in vulnerable structure.

LEGENDS

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



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 *



Heat Wave

When maximum temperature of a station reaches $\geq 40^{\circ}\text{C}$ for plains and $\geq 30^{\circ}\text{C}$ 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 $\geq 6.5^{\circ}\text{C}$

(b). Based on Actual maximum temperature

Heat Wave: When actual maximum temperature $\geq 45^{\circ}\text{C}$.

Severe Heat Wave: When actual maximum temperature $\geq 47^{\circ}\text{C}$

(c). Criteria for heat wave for coastal stations

When maximum temperature departure is $>4.5^{\circ}\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^{\circ}\text{C}$



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 $>6.4^{\circ}\text{C}$.



Cold Wave

When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ 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 $\geq -6.5^{\circ}\text{C}$

(b) Based on actual Minimum Temperature (for Plains only)

Cold Wave : When Minimum Temperature is $\leq 4.0^{\circ}\text{C}$

Severe Cold Wave: When Minimum Temperature is $\leq 2.0^{\circ}\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is $\leq -4.5^{\circ}\text{C}$ or actual Minimum Temperature is $\leq 15^{\circ}\text{C}$



Cold Day

When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ 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 $\leq -6.5^{\circ}\text{C}$



Fog

Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$

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



Thunderstorm

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 $\leq 4^{\circ}\text{C}$ (over Plains)



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



Cyclone

Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)

Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)

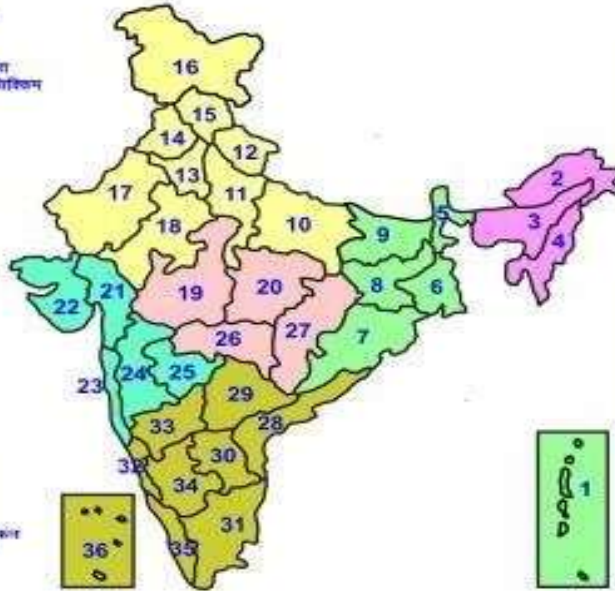
Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)

Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)

Super Cyclone Strom: Wind speed >220 kmph (>119 knots)

LEGENDS

- 1 अंडमान और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
- 5 उप-हिमालय पश्चिम बंगाल ऐंम् सिक्किम
- 6 पश्चिम बंगाल
- 7 ओडिशा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखण्ड
- 13 हरियाणा, हिंदुस्तान ऐंम् दिल्ली
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एवं कश्मीर ऐंम् लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात
- 22 सौराष्ट्र
- 23 कर्नाटक
- 24 मध्य प्रदेश
- 25 मध्य प्रदेश
- 26 बिहार
- 27 उत्तर प्रदेश
- 28 पश्चिम बंगाल ऐंम् असम
- 29 तेलंगाना
- 30 आंध्र प्रदेश
- 31 तमिलनाडु
- 32 पश्चिम बंगाल, पुदुचेरी ऐंम् कर्नाटक
- 33 उत्तर प्रदेश
- 34 उत्तर प्रदेश
- 35 केरल ऐंम् माहे
- 36 लक्षद्वीप



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. Orissa
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chd & 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. Maharashtra
26. Vidharbha
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

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

WARNING

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WATCH (BE UPDATED)
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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

Kindly download **MAUSAM** APP for location specific forecast & warning, **MEGHDOOT** APP for Agromet advisory and **DAMINI** APP for Lightning Warning & visit state MC/RMC websites for district wise warning.