



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release.

Date: 31st May, 2024

Time of Issue: 1415 hours IST

Subject:

- i. **Prevailing Heat wave conditions over Northwest, Central & East India are likely to abate gradually during next 2-3 days.**
- ii. **Isolated heavy to very heavy rainfall likely to continue over Northeast India during next 4-5 days.**

Realised weather during past 24 hours till 0830 hours IST of today: (details in Annexure I)

- ❖ **Heat wave to severe heat wave conditions** prevailed over many parts of Rajasthan, Punjab, Haryana, Chandigarh-Delhi, Uttar Pradesh; in some parts of Bihar, East Madhya Pradesh; in isolated pockets of Odisha, Jharkhand. **Heat wave conditions** prevailed in some parts of Himachal Pradesh, Uttarakhand, Vidarbha, West Madhya Pradesh and Chhattisgarh. **Heat wave conditions** have been prevailing over Haryana, Chandigarh & Delhi, Rajasthan since 17th and over Madhya Pradesh & Uttar Pradesh since 18th May, 2024.
- ❖ **Warm night conditions** observed in isolated pockets of Rajasthan, Uttar Pradesh, Bihar, Jharkhand, Odisha and Madhya Pradesh.
- ❖ Yesterday, the **highest maximum temperature of 48.3°C** was reported at **Sri Ganganagar (West Rajasthan)** over the country.
- ❖ **Heavy to very heavy rainfall with extremely heavy falls** observed at isolated places over Meghalaya; **Heavy to very heavy rainfall** at isolated places over Sub-Himalayan West Bengal & Sikkim, Assam and **heavy rainfall** at isolated places over Bihar, Gangetic West Bengal, Kerala and Arunachal Pradesh.
- ❖ **Hailstorm** reported at isolated places over Jammu-Kashmir and Uttarakhand.
- ❖ **Gusty winds/squally winds** data reported over the country is attached in **Annexure II**.

Weather Systems and Forecast & Warnings: (Annexure III)

Advance of Southwest Monsoon:

- ❖ The Southwest Monsoon has advanced into remaining parts of northeast Bay of Bengal and some parts of northwest Bay of Bengal, remaining parts of Tripura, Meghalaya and Assam and most parts of Sub-Himalayan West Bengal & Sikkim.
- ❖ The Northern Limit of Monsoon passes through 13°N/60°E, 12°N/65°E, 11°N/70°E, Amini, Kannur, Coimbatore, Kanyakumari, 8.5°N/80°E, 13°N/84°E, 16°N/87°E, 18.5°N/89°E, 21°N/90°E, 23°N/89.5°E and Islampur. **(Annexure IV)**
- ❖ Conditions are favourable for further advance of Southwest Monsoon into some more parts of central Arabian Sea, remaining parts of south Arabian Sea, Lakshadweep area and Kerala, some parts of Karnataka, Some more parts of Tamil Nadu and Southwest Bay of Bengal during next 2-3 days.

- ❖ A cyclonic circulation lies over northeast Assam & neighbourhood in lower tropospheric levels. Strong southwesterly/southerly winds are prevailing from Bay of Bengal to northeastern States in lower tropospheric levels. Under its influence:
 - ✓ Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** likely over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Sub-Himalayan West Bengal & Sikkim during next 7 days.
 - ✓ Isolated **heavy/very heavy rainfall** very likely over Arunachal Pradesh, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim during next 5 days and isolated **heavy rainfall** over Nagaland, Manipur, Mizoram & Tripura on 31st May, 2024.
 - ✓ Isolated extremely **heavy rainfall** also very likely over Meghalaya today, the 31st May, 2024.

- ❖ A trough runs from north west Uttar Pradesh to west Bangladesh in lower tropospheric levels. Under its influence:
 - ✓ Isolated to scattered light/moderate rainfall with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Bihar, Jharkhand, Gangetic West Bengal, Odisha, Chhattisgarh during next 5 days and over Madhya Pradesh, Vidarbha, Madhya Maharashtra, Marathwada during 02nd-04th June.
 - ✓ Isolated **heavy rainfall** very likely over Gangetic West Bengal on 31st May & 01st June.

- ❖ A shear zone runs roughly along Lat. 8°N over south peninsular India and a cyclonic circulation lies over southeast Arabian Sea off south Kerala in middle tropospheric levels. Strong westerly winds are prevailing along Kerala Coast. Under its influence:
 - ✓ Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** likely over Kerala & Mahe, Lakshadweep, Andaman & Nicobar Islands, Karnataka; isolated to scattered light to moderate rainfall over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh, Telangana, Rayalaseema during next 7 days.
 - ✓ ***Isolated heavy rainfall very likely over Kerala & Mahe, Andaman & Nicobar Islands during 31st May- 02nd June; Tamil Nadu and South Interior Karnataka on 01st & 02nd June; Coastal Andhra Pradesh, Telangana, Rayalaseema on 02nd June, 2024.***

- ❖ A Western Disturbance seen as a cyclonic circulation over north Afghanistan & adjoining Pakistan in lower tropospheric levels with trough aloft in middle tropospheric westerlies roughly along Long. 69°E to the north of Lat. 32°N. A cyclonic circulation lies over northeast Rajasthan in lower tropospheric levels. Under its influence;
 - ✓ Isolated to scattered light rainfall accompanied with **thunderstorm, lightning** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand during next 5 days.

- ✓ Isolated very light/light rainfall with **thunderstorm, lightning** very likely over plains of Northwest India during 31st May-03rd June.
- ✓ **Duststorm** very likely over East Rajasthan during 31st May-03rd June; Uttar Pradesh on 31st May & 01st and West Rajasthan on 01st & 02nd June.

Maximum temperature observation and forecast for next 5 days:

- ❖ **Areas having maximum temperatures ($\geq 42^{\circ}\text{C}$):** Yesterday, maximum temperatures were in the range of 45-48 $^{\circ}\text{C}$ in many parts of Rajasthan, Haryana-Chandigarh-Delhi; in isolated pockets over Uttar Pradesh, Bihar, Jharkhand, Odisha, East Madhya Pradesh, Vidarbha; in the range of 42-45 $^{\circ}\text{C}$ in many parts of West Madhya Pradesh, Chhattisgarh, Coastal Andhra Pradesh & Yanam; in isolated pockets over Gujarat, Telangana, Rayalaseema. These were above normal by 3-6 $^{\circ}\text{C}$ over many parts of Northwest India and in isolated parts of Central & East India.
- ❖ **Gradual fall in maximum temperatures by 2-3 $^{\circ}\text{C}$ very likely over Northwest & Central India during next 3 days** and no significant change thereafter.
- ❖ Gradual fall in maximum temperatures by 3-4 $^{\circ}\text{C}$ very likely over East India during next 3 days and no significant change thereafter.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country.

Heat Wave, Warm Night and Hot & Humid weather warning for next 5 days:

- ❖ **Heat wave to severe heat wave conditions** very likely in many parts over Haryana-Chandigarh-Delhi and heat wave in many parts over Punjab today, 31st May; heat wave in some parts on 01st June and in isolated pockets on 02nd June, 2024.
- ❖ **Heat wave to severe heat wave conditions** very likely in isolated pockets of West Rajasthan, East Uttar Pradesh, Odisha and Vidarbha on 31st May and isolated heat wave on 01st June.
- ❖ **Heat wave conditions** very likely in isolated pockets of Madhya Pradesh, Bihar, Jharkhand, Vidarbha, Chhattisgarh, Uttarakhand, Coastal Andhra Pradesh & Yanam on 31st May & 01st June; Himachal Pradesh, East Rajasthan, West Uttar Pradesh on 31st May, 2024.
- ❖ **Warm night conditions** in isolated pockets very likely to prevail over Odisha on 31st May & 01st June; Madhya Pradesh, East Uttar Pradesh on 31st May, 2024.
- ❖ **Hot and humid weather** very likely to prevail over isolated pockets of Konkan & Goa during 31st May-02nd June; Telangana, Rayalaseema on 31st May & 01st June; Odisha on 03rd & 04th June, 2024.

For more details, kindly refer: https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php

Realised Rainfall during past 24 hours till 0830 hours IST of today:

- ❖ Light to moderate rainfall accompanied with thunderstorm & lightning observed **at most places** over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Kerala & Mahe, Lakshadweep; **at many places** over Nagaland, Manipur, Mizoram & Tripura; **at a few places** over Bihar, Coastal Karnataka and **at isolated places** over Jharkhand, Odisha, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Konkan & Goa, Tamil Nadu, Puducherry & Karaikal, South Interior Karnataka, Rayalaseema and Telangana.

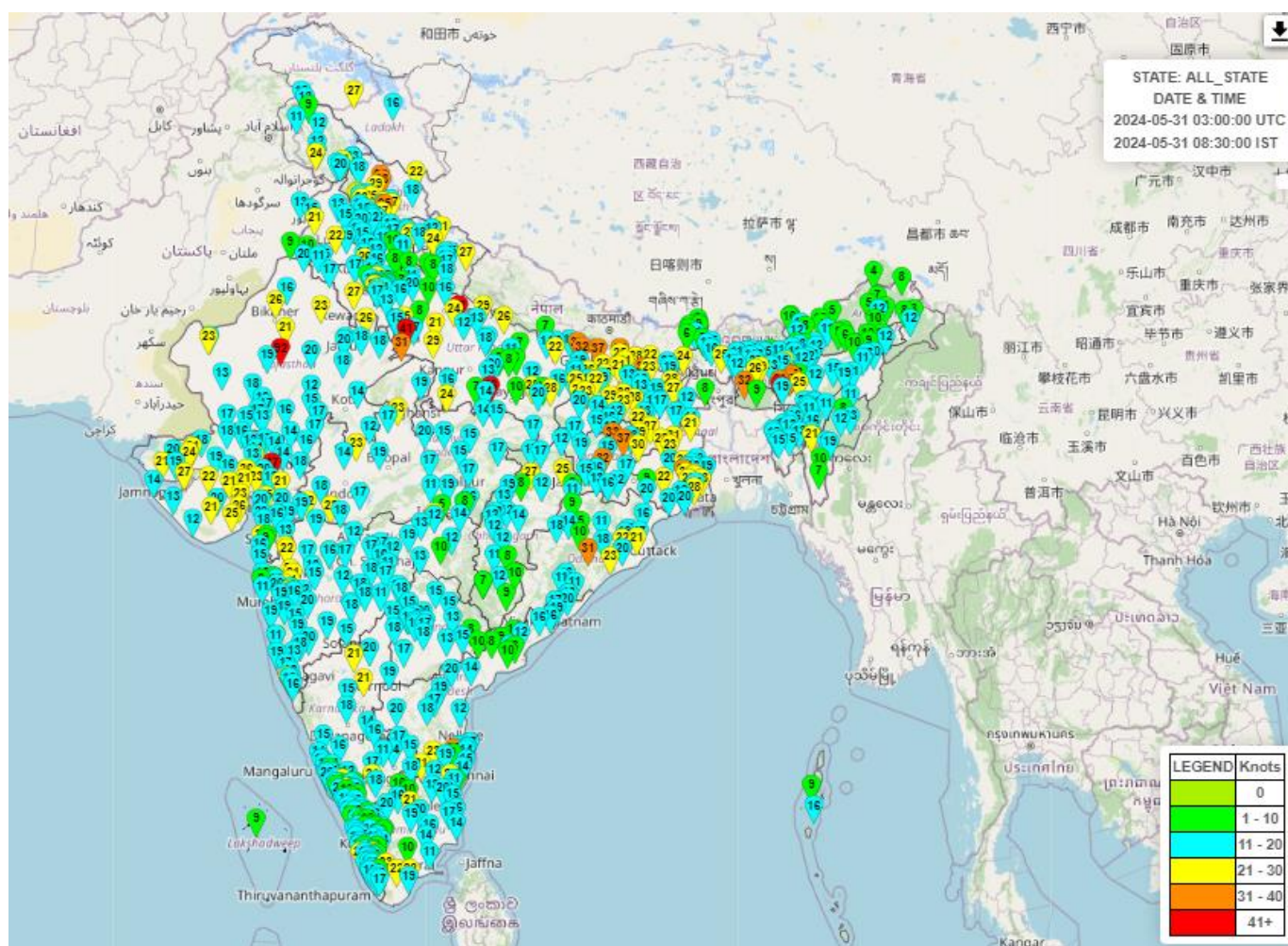
Significant amount of rainfall (in cm):

- ❖ **Assam & Meghalaya:** Cherrapunji(rkm) (dist East Khasi Hills) 22, Cherrapunji (dist East Khasi Hills) 19, Mawsynram (dist East Khasi Hills) 18, Williamnagar (dist East Garo Hills) 15, Goalpara_pto (dist Goalpara) 13, Goalpara_aws (dist Goalpara) 12, Bilasipara Arg (dist Dhubri) 12, Jorhat (dist Jorhat) 11, Mawkyrwat_arg (dist South West Khasi Hills) 9, Jorhat_aws (dist Jorhat) 9, Dudhnoi Arg (dist Goalpara) 9, Majuli (dist Jorhat) 9, Srijangram Arg (dist Bongaigaon) 8, Resubelpara (dist North Garo Hills) 8, Mawkyrwat (dist South West Khasi Hills) 8, Tikrikilla (dist West Garo Hills) 8, Khliehriat (dist East Jaintia Hills) 7, Sonari_arg (dist Sibsagar) 7, Rangia (dist Kamrup (rural)) 7, Manash Nh Xing (dist Barpeta) 7, Dhubri_imd (dist Dhubri) 7, Barpeta (dist Barpeta) 7, Tihu Arg (dist Nalbari) 7
- ❖ **Sub-Himalayan West Bengal & Sikkim:** Tadong (dist East Sikkim) 14, Gangtok (dist East Sikkim) 8, Buxaduar (dist Jalpaiguri) 7, Mathabhanga (dist Cooch Behar) 7, Sankalan (dist North Sikkim) 6, Shipgyar (dist North Sikkim) 5, Hasimara (dist Jalpaiguri) 5, Barobhisha (dist Jalpaiguri) 5, Singhik (dist North Sikkim) 5, Alipurduar (pto) (dist Jalpaiguri) 5,
- ❖ **Kerala & Mahe:** Chalakkudy AWS (dist Thrissur) 14, Chalakudi (dist Thrissur) 10, Pattembi (dist Palakkad) 10, Thritla (dist Palakkad) 9, Vellarikkundu Aws (dist Kasargod) 9, Enamakkal (dist Thrissur) 8, Ayyankunnu Aws (dist Cannur) 8, Thennala Aws (dist Malappuram) 8, Vyanthala Arg (dist Thrissur) 5,
- ❖ **Gangetic West Bengal:** Harinkhola (dist Hooghly) 10, Burdwan (pto) (dist Burdwan) 7, Alipore (dist Kolkata) 7, Gheropara (dist Birbhum) 7, Durgapur (dist Burdwan) 6, Bankura(cwc) (dist Bankura) 6, Panagarh (iaf) (dist Burdwan) 6, Uluberia (dist Howrah) 5,
- ❖ **Arunachal Pradesh:** Longding-9;
- ❖ **Bihar:** Kishanganj (dist Kishanganj) 8, Thakurganj (dist Kishanganj) 6, Samastipur (dist Samastipur) 6, Bahadurganj (dist Kishanganj) 4, Kodawanpur/c.b li (dist Begusarai) 4, Purnea (dist Purnea) 4, Morwa/tajpur (dist Samastipur) 4, Rosera (dist Samastipur) 4, Sikta (dist West Champaran) 4, Dighalbank (dist Kishanganj) 4, Dhengraghat (dist Purnea) 4,
- ❖ **Tripura:** Kailashahar Aero (dist Unakoti) 7, Kamalpur_aws (dist Dhalai) 7
- ❖ **Jharkhand:** Bokaro, Dhanbad, Dumka-5 each

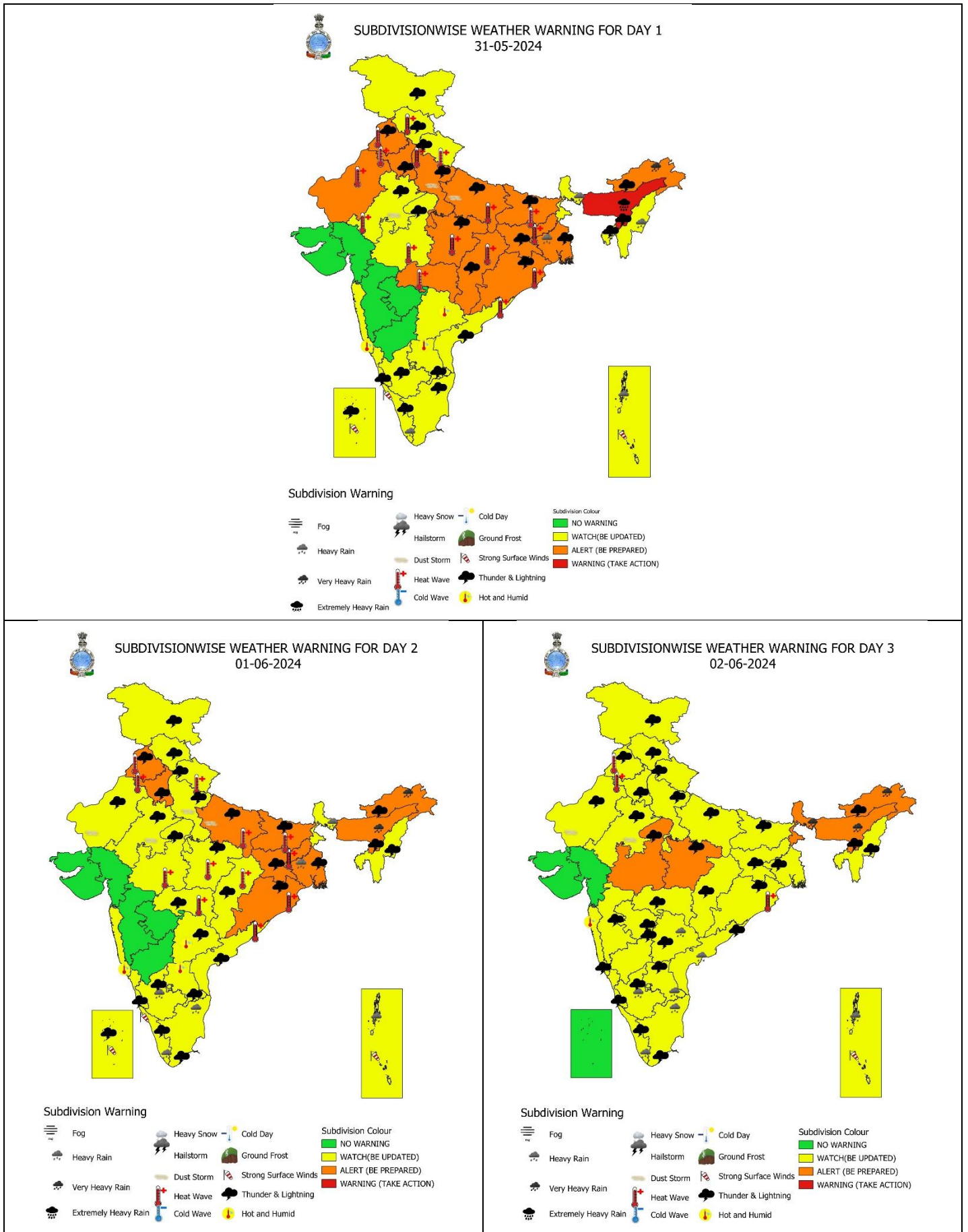
Reported maximum wind speed (kmph) during past 24 hours till 0830 hours IST of today:

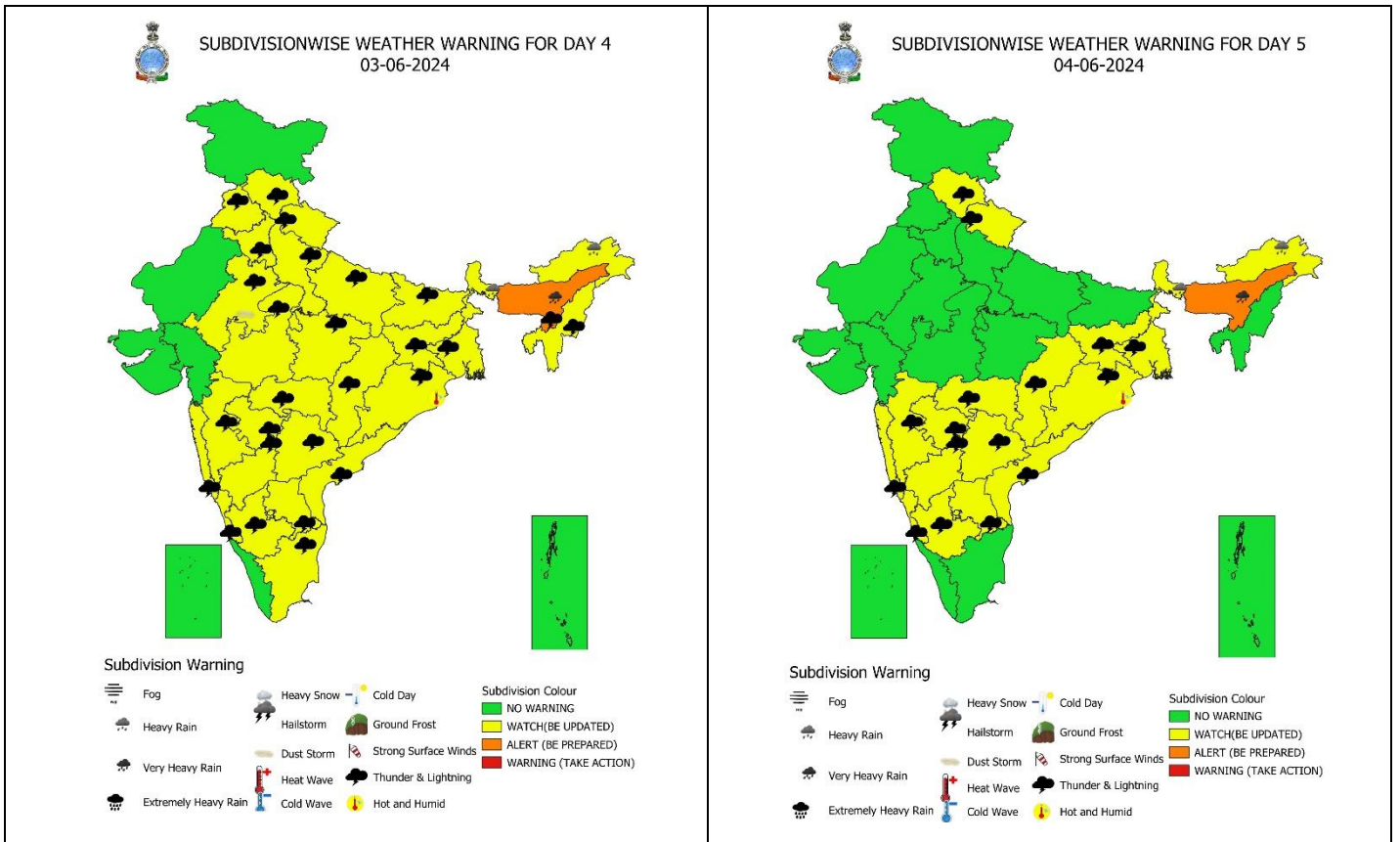
- ❖ **Madhya Pradesh:** Gwalior – 72, Bhind – 58, Chhatarpur – 45, Datia – 36, Sagar – 37, Seoni – 36, Chhindwara – 32, Rewa/ Damoh - 28
- ❖ **Gujarat State:** Panchmahal 87, Jamnagar 50, Ahmedabad 48, Bharuch, Bhavnagar 46 each;
- ❖ **Uttar Pradesh:** Chitrakoot 79, Shahjahanpur 78, Agra 76, Etawah 54, Chandauli 52, Hathras 46;
- ❖ **Bihar:** Kushinagar 70, East_Champaran 68, EastSitamarhi 65, Saharsa 61;
- ❖ **Jharkhand:** Bokaro 68, Ramgarh 61, Khunti 59;
- ❖ **Himachal Pradesh:** Shimla 65, Kullu 61, Mandi 54, Solan 50;
- ❖ **Tamil Nadu:** Ranipet 61, Tenkasi 42, Tirunelveli, Thoothukudi 40 each;
- ❖ **Gangetic West Bengal:** Howrah 59;
- ❖ **Odisha:** Ganjam 57, Puri 42;
- ❖ **Rajasthan:** Dholpur 57, Alwar, Bikaner 48 each, Sikar 42;
- ❖ **Uttarakhand:** Pithoragarh, Dehradun 50 each, Chamoli 39;
- ❖ **Haryana:** Mahendragarh 50, Karnal 48;
- ❖ **Chhattisgarh:** Korba 50, Jashpur 46;
- ❖ **Maharashtra:** Pune 50, Nashik 44, Nandurbar, Jalgaon 40 each;
- ❖ **Kerala:** Alappuzha -46, Kannur, Pathanamthitta, Trivandrum -39 each, Kasarago, Kozhikode, Wayanad, Malappuram, Kottayam -37 each;

Fig.: Gusty winds reported over the country (in knots, 1 Knot = 1.85 kmph) from 0830 hrs IST of 30.05.2024 to 0830 hrs IST of 31.05.2024



For more details, kindly refer: <http://aws.imd.gov.in:8091/>





IMPACT & ACTION SUGGESTED due to very heavy rainfall/extremely falls over Assam, Meghalaya during 31st May-04th June; Arunachal Pradesh during 31st May-02nd June, 2024.

Impact Expected

- 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.
- Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- Minor damage to kutchra roads.
- Possibilities of damage to vulnerable structure.
- Localized Landslides/Mudslides/landslips/mudslips/landsinks/mudsinks.
- Damage to horticulture and standing crops in some areas due to inundation.
- It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

A. Action Suggested

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

IMPACT & ACTION SUGGESTED due to Heat Wave Conditions:

Orange alert Areas:

- High temperature & increased likelihood of heat illness symptoms in people who are either exposed to sun for a prolonged period or doing heavy work.
- High health concern for vulnerable people e.g. infants, elderly, people with chronic diseases.
- Avoid heat exposure– keep cool. Avoid dehydration.
- Drink sufficient water- even if not thirsty.
- Use ORS, homemade drinks like lassi, torani (rice water), lemon water, buttermilk, etc. to keep yourself hydrated.

Yellow alert Areas:

- Moderate temperature & heat is tolerable for general public but moderate health concern likely for vulnerable people e.g. infants, elderly, people with chronic diseases.
- Avoid heat exposure.
- Wear lightweight, light colour, loose, cotton clothes.
- Cover your head, use a cloth, hat or umbrella.

Impact expected and action suggested due to thunderstorms, lightning & gusty winds over Bihar, Jharkhand, Gangetic West Bengal on 31st May & 01st June, 2024.

Impact expected:

- Strong wind/hail may damage plantation, horticulture and standing crops.
- Hail may injure people and cattle at open places.
- Partial damage to vulnerable structures due to strong winds.
- Minor damage to kutcha houses/walls and huts.
- Loose objects may fly.

Action suggested:

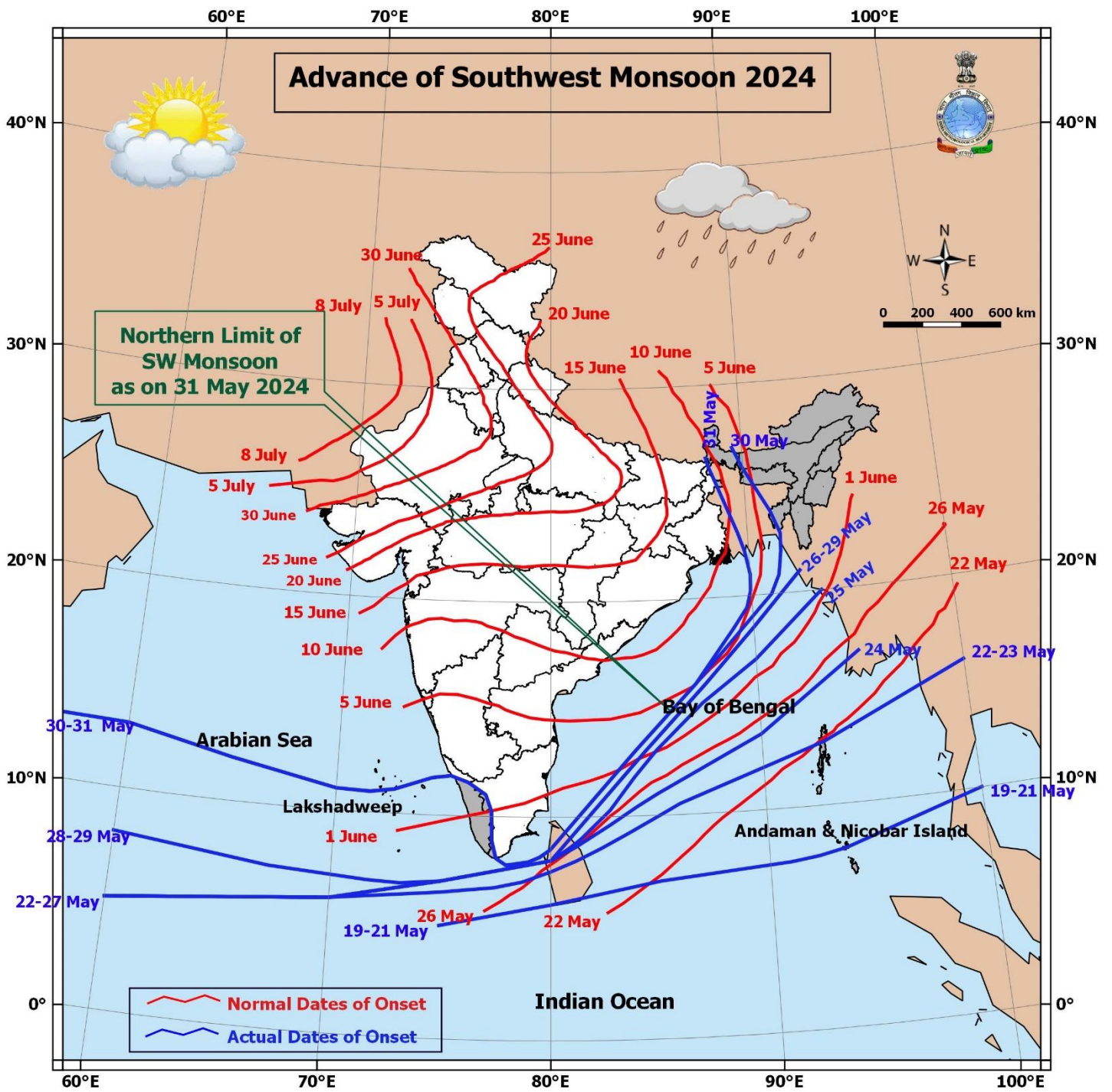
- Stay indoors, close windows & doors and avoid travel if possible.
- Take safe shelters; do not take shelter under trees.
- Do not lie on concrete floors and do not lean against concrete walls.
- Unplug electrical/ electronic appliances.
- Immediately get out of water bodies.
- Keep away from all the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

Agromet advisories for Heavy Rainfall, Gusty winds and Heat Wave likely over various parts of the country

(Based on the IBF and advisories issued by different AMFUs)

- Drain out excess water from crop fields to avoid water stagnation in Kerala, West Bengal and North-Eastern States.
- Apply light and frequent irrigation to standing crops to avoid heat stress; provide mulching to conserve soil moisture and minimise evaporation in Himachal Pradesh, Uttarakhand, Punjab, Haryana, Uttar Pradesh, West Rajasthan, Bihar, Jharkhand, Odisha, Madhya Pradesh, Vidarbha, Chhattisgarh and Coastal Andhra Pradesh.
- Provide mechanical support to horticultural crops & staking to vegetables to prevent damage from gusty winds.

Advance of Southwest Monsoon 2024



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; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation; **PTO:** Part Time Office.
- ❖ **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.

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)



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

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 $\leq -6.5^{\circ}\text{C}$	
(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 $\leq -4.5^{\circ}\text{C}$ & 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 Storm: Wind speed >220 kmph (>119 knots)	