

# Government of India Ministry of Earth Sciences India Meteorological Department



Press Release Date: 19<sup>th</sup> September, 2025 Time of Issue: 1330 hours IST

Subject: (i) Heavy to very heavy rainfall likely to continue over Sub-Himalayan West Bengal & Sikkim and Andaman & Nicobar Islands on 19th & 20th September, 2025.

(ii) A fresh low pressure area likely to emerge into eastcentral & adjoining northeast Bay of Bengal off Myanmar- Bangladesh coasts around 25th September, 2025

#### Realised weather during past 24 hours till 0830 hours IST of today, the 19th September, 2025:

- ★ Heavy to very heavy rainfall with Extremely heavy rainfall (≥21 cm) has been recorded at isolated places over Marathwada.
- Very heavy rainfall (12-20 cm) has been recorded at isolated places over Andaman & Nicobar Islands, Sub Himalayan West Bengal & Sikkim, Bihar, Himachal Pradesh, East Rajasthan, Konkan & Goa and Tamil Nadu, Puducherry & Karaikal.
- Heavy rainfall (7-11 cm) has been recorded at isolated places over Sub Himalayan West Bengal & Sikkim and at isolated places over Arunachal Pradesh, Assam & Meghalaya, East Uttar Pradesh, West Uttar Pradesh, West Madhya Pradesh, East Madhya Pradesh, Madhya Maharashtra, Marathwada, Chhattisgarh, Rayalaseema, North Interior Karnataka and South Interior Karnataka.

For more details of realised weather, kindly refer Annexure I.

#### Withdrawal of southwest Monsoon:

- ❖ The line of withdrawal of the southwest monsoon continues to pass through 31°N/74°E, Bhatinda, Fatehabad, Pilani, Ajmer, Deesa, Bhuj and 23°N/68°E.
- Conditions are becoming favourable for further withdrawal of southwest monsoon from some more parts of Gujarat, Rajasthan, Haryana and Punjab; some parts of Himachal Pradesh and Jammu & Kashmir during next 3-4 days. (Annexure II)

#### i. Weather Systems, Forecast and Warnings (refer to Annexure III & IV):

- ❖ The upper air cyclonic circulation over north Andaman Sea & adjoining Myanmar coast in lower tropospheric levels. It is very likely to move nearly north-northwestwards and reach north Bay of Bengal around 22<sup>nd</sup> September, 2025.
- ❖ A fresh low pressure area likely to emerge into eastcentral & adjoining northeast Bay of Bengal off Myanmar-Bangladesh coasts around 25<sup>th</sup> September, 2025
- ❖ An east-west trough runs from northwest Uttar Pradesh to east Bangladesh in lower tropospheric levels.
- An upper air cyclonic circulation lies over northwest Uttar Pradesh and another over south Marathwada & neighbourhood in lower tropospheric levels.
- The north-south trough now runs from central parts of South Uttar Pradesh to Marathwada in lower tropospheric levels
- A trough runs from above upper air cyclonic circulation over north Andaman Sea & adjoining Myanmar coast to south Maharashtra coast in lower tropospheric levels.
- A Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 70°E and north of

Under the influence of these systems, the following weather is likely:

#### **East & Central India:**

- ❖ Light to moderate rain/thunderstorm at most/many places with isolated heavy rainfall likely over West Madhya Pradesh on 19th & 20th, East Madhya Pradesh on 19th, Vidarbha on 24th & 25th, Chhattisgarh during 23rd 25th; Bihar on 19th & 20th, 23rd & 24th September; Odisha during 23rd -25th; Andaman & Nicobar Islands and Sub-Himalayan West Bengal & Sikkim on 20th with isolated very heavy rainfalls over Andaman & Nicobar Islands and Sub-Himalayan West Bengal & Sikkim on 19th September.
- Thunderstorm & gusty winds (speed reaching 30-40 kmph) very likely over East India during next 4-5 days.

#### **Northeast India:**

❖ Light/moderate rain/thunderstorm at many/some places with isolated **heavy rainfall** likely over Arunachal Pradesh on 19<sup>th</sup>-20<sup>th</sup>; Assam & Meghalaya during 19<sup>th</sup>-23<sup>rd</sup> and Nagaland, Manipur, Mizoram & Tripura during 20<sup>th</sup>-23<sup>rd</sup> September.

#### **Northwest India:**

- ❖ Light to moderate rain/thunderstorm at some/isolated places with **isolated heavy rainfall** likely over Uttarakhand, East Uttar Pradesh and East Rajasthan on 19th September.
- Strong surface winds (speed reaching 30-40 kmph) very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 19th September.

#### **South Peninsular India:**

- Light to moderate rain/thunderstorm at many/some places with isolated **heavy rainfall** likely over Tamil Nadu, Rayalaseema, Telangana on 19<sup>th</sup>; Coastal Andhra Pradesh & Yanam on 19<sup>th</sup> and during 23<sup>rd</sup> 25<sup>th</sup>; Interior Karnataka on 19<sup>th</sup> & 20<sup>th</sup> September.
- Strong surface winds (speed reaching 30-40 kmph) very likely over Tamil Nadu, Coastal Andhra Pradesh & Yanam and Rayalaseema during next 5 days.

#### West India:

- ❖ Light to moderate rain/thunderstorm at many/some places likely over the region during next 5 days with isolated heavy rainfall likely over Madhya Maharashtra and Marathawada on 19<sup>th</sup> September.
- Thunderstorm & gusty winds (speed reaching 30-40 kmph) very likely over West India during next 4-5 days.

#### Fishermen warning:

Fishermen are advised not to venture into the following areas during 19th to 24th September:

#### **Arabian Sea:**

Some parts of westcentral, southwest Arabian Sea, along and off Somalia coast during 19th to 24th September.

#### Bay of Bengal:

- Along and off south Sri Lanka coast and adjoining some parts of southwest Bay of Bengal during 19th September & along and off Sri Lanka coast, adjoining southwest Bay of Bengal during 20th to 24th September; most parts of south Bay of Bengal during 19th to 24th September; southern parts of central Bay of Bengal during 22nd & 23rd September.
- ➤ Gulf of Mannar & adjoining Comorin area during 19th to 24th September.
- Over Andaman Sea during 19th to 24th September.

## ii. Weather conditions and forecast over Delhi/NCR during 19<sup>th</sup> September to 22<sup>nd</sup> September, 2025 (Annexure V)

For more details, kindly refer National Weather Bulletin:

https://mausam.imd.gov.in/responsive/all india forcast bulletin.php

For District wise warnings refer: <a href="https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php">https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php</a>

For Fishermen warning refer <a href="https://rsmcnewdelhi.imd.gov.in/fishermen-warning.php">https://rsmcnewdelhi.imd.gov.in/fishermen-warning.php</a>

#### Rainfall recorded (in cm) during past 24 hours till 0830 hours IST of today, the 19<sup>th</sup> September (≥ 7cm):

- Marathwada: Washi (dist Dharashiv) 22; Aundha Nagnath (dist Hingoli) 8;
- Tamil Nadu, Puducherry & Karaikal: Vilupuram (dist Villupuram) 19; Tirupathur PTO (dist Tirupattur) 17; Tirupattur AWS (dist Tirupattur), Vadapudupattu (dist Tirupattur), Rscl-2 Kedar (dist Villupuram) 16 Each; Vaniyambadi (dist Tirupattur) 15; Tirupattur (dist Tirupattur) 14; Panruti (dist Cuddalore), Vanamadevi (dist Cuddalore), Jamunamarathur (dist Tiruvannamalai) 13 Each; Rscl-2 Valavanur (dist Villupuram) 12; Natrampalli (dist Tirupattur), Basl Manalurpet (dist Kallakurichi), Basl Manampoondi (dist Villupuram), Basl Mugaiyur (dist Villupuram), Rscl-2 Soorapattu (dist Villupuram) 11 Each; Ambur (dist Tirupattur), Tcs Mill Kethandapatti (dist Tirupattur), Rscl-2 Koliyanur (dist Villupuram), Panapakkam (dist Ranipet) 10 Each; Kumbakonam (dist Thanjavur), Chengam (dist Tiruvannamalai), Alangayam (dist Tirupattur), Virinjipuram AWS (dist Vellore), Thandarampettai (dist Tiruvannamalai), Arcot (dist Ranipet), Ponnai Dam (dist Vellore), Ammundi (dist Vellore), Sholinganallur (dist Chennai), Src Kudithangi (dist Cuddalore), Kcs Mill-1 Moongilthura (dist Kallakurichi), Dscl Thirupalapandal (dist Kallakurichi), Taluk Office Pandalur (dist Nilgiris), Kalasapakkam (dist Tiruvannamalai), Rscl-3 Valathy (dist Villupuram) 9 Each; Penucondapuram (dist Krishnagiri), Thiruvidaimaruthur (dist Thanjavur), Polur (dist Tiruvannamalai), Gudiyatham (dist Vellore), Melalathur (dist Vellore), Dscl Madampoondi (dist Kallakurichi), Kelavarapalli Dam (dist Krishnagiri) 8 Each; Kancheepuram (dist Kancheepuram), Krishnagiri (dist Krishnagiri), Mayiladuthurai (dist Mayiladuthurai), Tarangambadi (dist Mayiladuthurai), Thiruvalangadu (dist Tiruvallur), Valangaiman (dist Tiruvarur), Wallajah (dist Ranipet), Kalavai AWS (dist Ranipet), Nedungal (dist Krishnagiri), Kalavai PWD (dist Ranipet), Lower Anaicut (dist Thanjavur), Rscl-3 Avalurpettai (dist Villupuram), Suthamalli Dam (dist Ariyalur), Sandhiyur Kvk AWS (dist Salem) 7 Each;
- **Sub Himalayan West Bengal & Sikkim**: Chengmari/Diana (dist Jalpaiguri) 17; Chel (dist Jalpaiguri), Saraswatipur Tea Estate (dist Jalpaiguri) 15 Each; Chalouni Tea Estate (dist Jalpaiguri), Ghish (dist Jalpaiguri), Washabari Tea Estate (dist Jalpaiguri), Jaybirpara Tea Estate (dist Alipurduar) 14 Each; Gajoldoba (dist Jalpaiguri), Bhagatpur Tea Estate (dist Jalpaiguri), Denguajhar Tea Garden (dist Jalpaiguri), Leesh River Tea Garden (dist Jalpaiguri), Maynaguri College (dist Jalpaiguri) 13 Each; Sevoke (dist Darjeeling), Jalpaiguri (dist Jalpaiguri), Kumlai T.e. (dist Jalpaiguri), Noweranuddi Tea Garden (dist Jalpaiguri), Dalgaon Tea Estate (dist Alipurduar) 12 Each; Damdim Tea Estate (dist Jalpaiguri), Good Hope Tea Estate (dist Jalpaiguri), Gurjongjhora Tea Estate (dist Jalpaiguri), Kurti T.e. (dist Jalpaiguri), Tra Nagrakata (dist Jalpaiguri) 11 Each; Nh31 Bridge (dist Jalpaiguri), Zurrantee T.e (dist Jalpaiguri), Nagarkata (dist Jalpaiguri) 10 Each; Neora (dist Jalpaiguri), Suryasen Mahavidyalaya (dist Darjeeling), Diana Tea Estate (dist Jalpaiguri), Oodlabari Tea Estate (dist Jalpaiguri), Palashbari Tea Estate (dist Jalpaiguri), Gopalpur Tea Estate (dist Alipurduar) 9 Each; Alipurduar PTO (dist Alipurduar), Banarhat High School (dist Jalpaiguri), Gairkata Tea Estate (dist Jalpaiguri), Gandrapara Tea Garden (dist Jalpaiguri), Ghatia T.e. (dist Jalpaiguri), Majherdabri Tea Garden (dist Alipurduar) 8 Each; Domohani (dist Jalpaiguri), Barobhisha (dist Alipurduar), Mekhliganj (dist Cooch Behar), Indong T.e. (dist Jalpaiguri), Jiti T.e. (dist Jalpaiguri), Kailashpur Tea Estate (dist Jalpaiguri), Moraghat Tea Estate (dist Jalpaiguri) 7 Each;
- Himachal Pradesh: Naina Davi (dist Bilaspur) 16;
- Bihar: Taibpur (dist Kishanganj) 15; Thakurganj (dist Kishanganj), Pothia (dist Kishanganj) 10 Each;
- **❖ Konkan & Goa**: Savarde-arg (dist Ratnagiri) 15; Chiplun (dist Ratnagiri) 9;
- Andaman & Nicobar Islands: Port Blair (dist South Andaman) 12; Long Island (dist North & Middle Andaman) 7;
- ❖ East Rajasthan: Mavli (dist Udaipur) 12; Bhopalsagar SR (dist Chittorgarh) 11; Pratapgarh (dist Pratapgarh) 8;
- Assam & Meghalaya: Dhubri CWC (dist Dhubri) 10; Williamnagar AWS (dist East Garo Hills), Dhubri IMD (dist Dhubri) 7 Each;
- Madhya Maharashtra: Pune (dist Pune) 10;
- ❖ North Interior Karnataka: Talikote (dist Vijayapura) 10;
- **East Uttar Pradesh**: Balrampur (dist Balrampur) 10;
- ❖ West Uttar Pradesh: Nagina (dist Bijnor) 10;
- East Madhya Pradesh: Niwari (dist Niwari) 9;
- Chhattisgarh: Sonhat (dist Koriya) 9;

- \* Rayalaseema: Venkatagiri Kota (dist Chittoor) 9;
- **❖ West Madhya Pradesh**: Niwali (dist Barwani) 7;
- South Interior Karnataka: Bengaluru City (dist Bengaluru Urban) 7;
- ❖ Arunachal Pradesh: Bomdila AWS (dist West Kameng) 7.

#### **Annexure II**

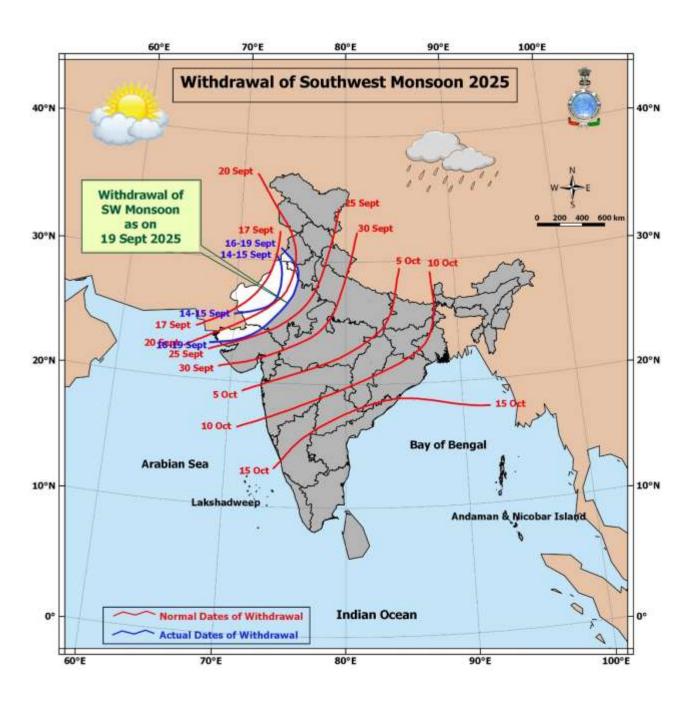
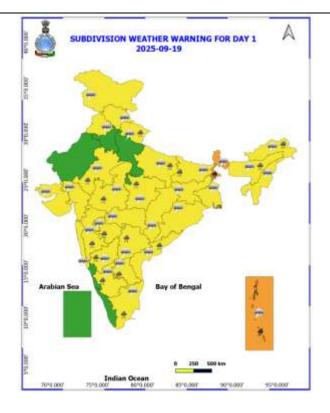
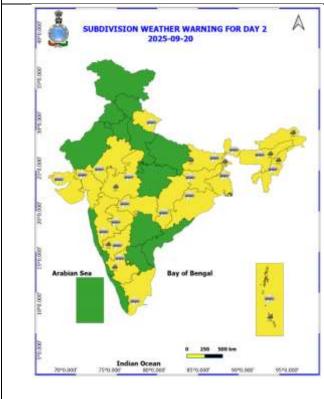
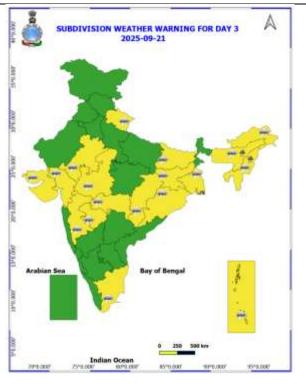


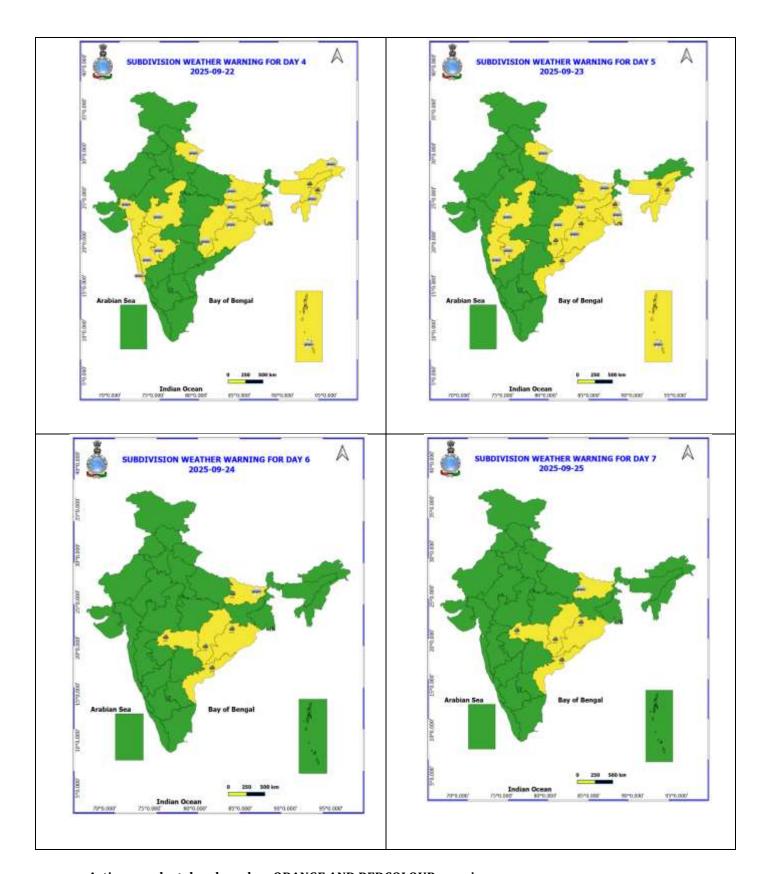
Table-1												
7 Days Rainfall Forecast												
S.No.	Subdivision	19- Sep	-		22- Sep		170					
			Day 2	A STATE OF THE PARTY OF THE PAR	THE RESERVE AND PARTY OF THE PA	The second second second	Day 6	Day 7				
1	ANDAMAN & NICOBAR ISLANDS	V/3	WE	FWS	A STREET, SQUARE, SQUA	FWS	WS	- 15				
2	ARUNACHAL PRADESH	SCT	SCT			SCT	SCT	ISO				
	ASSAM & MEHGHALAYA	FWS	FWS		A COLUMN TWO IS NOT THE OWNER.	SCT	SCT	ISO				
4	NAGALAND, MANIPUR, MIZORAM AND TRIPURA	SCT	FWS			FWS	SCT	SC				
5	SUB HIMALAYAN WEST BENGAL & SIKKIM	9/4	Wa	FWS	FWS	FWS	FWS	FW				
6	GANGETIC WEST BENGAL	SCT	SCT	SCT	FWS	WS	William	FW				
7	ODISHA	ISOL	ISOL	ISOL	ISOL	FWS	FWS	FW				
8	JHARKHAND	SCT	SCT	SCT	FWS	FWS	FWS	FW				
9	BIHAR	FWS	SCT	SCT	SCT	SCT	FWS	FW				
10	EAST UTTAR PRADESH	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISO				
11	WEST UTTAR PRADESH	ISOL	DRY	DRY	DRY	DRY	DRY	DR				
12	UTTARAKHAND	FWS	SCT	SCT	SCT	SCT	SCT	SC				
13	HARYANA, CHANDIGARH & DELHI	ISOL	DRY	DRY	DRY	DRY	DRY	DR				
14	PUNJAB	ISOL	DRY	DRY	DRY	DRY	DRY	DR				
15	HIMACHAL PRADESH	SCT	ISOL	ISOL	DRY	DRY	ISOL	ISO				
16	JAMMU AND KASHMIR AND LADAKH	SCT	DRY	DRY	DRY	DRY	DRY	DR				
17	WEST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DR				
18	EAST RAJASTHAN	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISO				
19	WEST MADHYA PRADESH	FWS	FWS		SCT	SCT	SCT	SC				
20	EAST MADHYA PRADESH	FWS				SCT	SCT	SC				
21	GUJRAT REGION	FWS	FWS			SCT	SCT	SC				
22	SAURASHTRA & KUTCH	SCT	SCT	ISOL	ISOL	ISOL	ISOL	ISO				
23	KONKAN & GOA	9/5	FWS	FWS	La Company	ws	WE	W				
24	MADHYA MAHARASHTRA	FWS	SCT	THE RESERVE OF THE PERSON NAMED IN	FWS	FWS	SCT	SC				
25	MARATHWADA	FWS	SCT		FWS	FWS	SCT	SC				
26	AND	FWS	_			FWS	FWS					
27	CHHATTISGARH	SCT	SCT	SCT	FWS	FWS	FWS	FW				
28	COASTAL ANDHRA PRADESH	SCT	SCT	SCT	FWS	FWS	FWS	ŠČ				
29	TELANGANA	SCT	SCT	FWS	The second of the last	FWS	FWS	FW				
30	RAYALASEEMA	SCT	SCT	SCT	_	SCT	SCT	SC				
31	TAMILNADU & PUDUCHERRY	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISO				
32	COSTAL KARNATAKA	918	I GOL	IOOL	FWS	FWS	FWS	FW				
33	NORTH INTERIOR KARNATAKA	FWS	FWS	WS	1 443	FWS	FWS	FW				
34	SOUTH INTERIOR KARNATAKA	WS	1 445	U/S	William Co.		FWS	FW				
35	The body of the state of the st	SCT	SCT		FWS	FWS	FWS	FW				
	KERALA AND MAHE  LAKSHADWEEP	SCT	SCT		FWS	FWS	-	FW				

• As the lead period increases forecast accuracy decrease.









- Action may be taken based on ORANGE AND REDCOLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

Detailed district wise Multi Hazard weather warning for next five days available at \$\$https://mausam.imd.gov.in/responsive/district Wise Warning GIS.php

#### Weather forecast over Delhi/NCR during 19th to 22th September 2025

#### **Past Weather:**

There has been no large change in the minimum temperature and fall in maximum temperature up to  $1 - 2^{\circ}$ C over Delhi/NCR during the past 24 hours. The maximum and minimum temperatures over Delhi were around 33 to  $34^{\circ}$ C and 23 to  $25^{\circ}$ C respectively. The minimum and maximum temperatures were near normal. Partly cloudy sky conditions with predominant surface wind from the southeast/east direction with wind speeds up to 14 kmph prevailed during the past 24 hours. Very light to light rain/thundershowers at few places has been recorded in Delhi. Partly cloudy sky conditions with a wind speed of less than 14 kmph from the west direction prevailed over the region in the forenoon today.

#### Weather Forecast:

**19.09.2025**: Partly cloudy sky. A spell of very light to light rain likely at isolated places towards afternoon/evening. The maximum and minimum temperatures over Delhi are likely to be in the range of 34 to 36°C. The maximum temperature will be near normal. The predominant surface wind will likely to be from the northwest direction with a wind speed of up to 10-15 kmph during afternoon hours. The wind speed will decrease becoming less than 10 kmph from the northwest direction during the evening and night.

**20.09.2025:** Mainly clear sky becoming partly cloudy sky. The maximum and minimum temperatures over Delhi are likely to be in the range of 34 to 36°C and 24 to 26°C respectively. The minimum temperature will be near normal and the maximum temperature will be above normal up to 1 - 2°C. The predominant surface wind will likely to be from the northwest direction with a wind speed of up to 08-12 kmph during morning hours. The wind speed will gradually increase becoming less than 15 kmph from the northwest direction in the afternoon. The wind speed will decrease becoming less than 12 kmph from the west direction during the evening and night.

**21.09.2025**: Mainly clear sky. The maximum and minimum temperatures over Delhi are likely to be in the range of 34 to  $36^{\circ}$ C and 24 to  $26^{\circ}$ C respectively. The minimum temperature will be near normal and the maximum temperature will be above normal up to  $1 - 2^{\circ}$ C. The predominant surface wind will likely to be from the northwest direction with a wind speed of up to 10-15 kmph during morning hours. The wind speed will gradually increase becoming less than 25 kmph from the northwest direction in the afternoon. The wind speed will decrease becoming less than 10 kmph from the west direction during the evening and night.

**22.09.2025**: Mainly clear sky. The maximum and minimum temperatures over Delhi are likely to be in the range of 34 to 36°C and 24 to 26°C respectively. The minimum temperature will be near normal and the maximum temperature will be above normal up to 1 - 2°C. The predominant surface wind will likely to be from the northwest direction with a wind speed of up to 15-20 kmph during morning hours. The wind speed will gradually increase becoming less than 25 kmph from the northwest direction in the afternoon. The wind speed will decrease becoming less than 10 kmph from the northwest direction during the evening and night.

#### **Impact & Action Suggested due to**

**♦ Heavy to very heavy rainfall (12-20 cm)** at isolated places over Andaman & Nicobar Islands and Sub-Himalayan West Bengal & Sikkim on 19<sup>th</sup> September.

#### **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 kutcha 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)

#### **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.

#### Agromet advisories for likely impact of Heavy / Heavy to Very Heavy Rainfall

- In Uttarakhand, drain out excess water from the fields of green gram, black gram, soybean, barnyard millet and finger millet in Sub Humid Sub Tropic Zone; and pigeon pea and vegetable crops in Hill Zone. Ensure proper drainage from the fields of rice, maize, finger millet, pigeon pea, soybean, green gram, black gram and vegetables in Nainital district.
- In Himachal Pradesh, drain out excess water from the fields of vegetable and fruit orchards in Mid Hills Sub Humid Zone. Keep the harvested produce in safer places.
- ➤ In Sub-Himalayan West Bengal, drain out excess water from the fields of rice and vegetable in Terai Zone and ensure proper drainage from the fields of green gram, black gram, finger millet, dalley khorsani, vegetables and fruit orchards in Hill Zone.
- ➤ In Bihar, ensure proper drainage of excess rainwater from the fields of rice and vegetables in North West Alluvial Plain Zone.
- ➤ In West Madhya Pradesh, drainout excess water from the fields of rice, soybean, maize, cotton, sugarcane and vegetables.
- In Maharashtra, drain out excess water from fields of rice, vegetables and fruit orchards in Konkan and rice, sugarcane, pigeon pea, soybean, maize, vegetables and fruit orchards in Madhya Maharashtra.
- ➤ In Arunachal Pradesh, maintain proper drainage in standing crops such as rice, soybean, finger millet, vegetables and fruit orchards to avoid water stagnation. Keep the harvested produce of upland paddy, maize, chillies and banana at safer places.
- ➤ In Assam, ensure proper drainage to drain out excess water from the fields of rice and already sown black gram in Barak Valley Zone and rice, sesame and vegetables in North Bank Plain Zone. In Lower Brahmaputra Valley Zone, ensure proper drainage system in Sali rice fields and nursery bed of vegetables. Cover the nursery bed with thin polythene to avoid the damages due to heavy rainfall. In Upper Brahmaputra Valley Zone, harvest the matured vegetables and fruits and transfer it to a safer location and make arrangements to drain out excess water from the standing crop fields.
- In Meghalaya, drain out excess water from rice, vegetable nurseries and ginger. Provide support to tall and fragile crops like banana, papaya, pumpkin, etc. to prevent lodging.
- In Telangana, ensure adequate drainage facilities to drain out excess rain water in fields of rice, maize, cotton, soybean, pigeon pea, turmeric and vegetables.

#### Livestock / Fishery

- ➤ Keep the animals inside the shed during heavy rainfall and provide them balanced feed.
- > Store feed and fodder in a safe place to prevent spoilage.
- Construct an outlet with proper netting around the ponds to drain out excess water, thereby preventing fish from escaping in case of overflow.
- > Agromet advisories for likely impact of Thunderstorm / Gusty Winds / Squally Winds
- (Based on the IBF and advisories issued by different AMFUs)
- ➤ Provide mechanical support to horticultural crops and staking or support to vegetables and young fruit plants / fruit-bearing plants to avoid lodging due to strong winds.

#### **Legends & abbreviations:**

- **♦ Heavy Rain:**64.5-115.5mm; **Very Heavy Rain:**115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- Obsy: Observatory; Automatic Weather Station; ARG: Automatic Rain Gauge; dist: District: NH: National Highway; KVK: Krishi Vigyan Kendra; DVC: Damodar Valley Corporation; PTO: Part Time Office, Aero: Aerodrome, IAF: Indian Air Force.
- **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.



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



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

### **LEGENDS**



#### SPATIAL DISTRIBUTION (% of Stations reporting)

Stations Category		% Stations	Cate	gory			
76-100	76-100 Widespread (WS/Most Places)		26-50	Scattered (SCT/A Few Places)			
51-75	Fairly Widesp	read (FWS/Many Places)	1-25	isolated (ISOL)			
Fog		Heavy Snow	Cold Wave	COLOUR CO	DED WARNING		
			#	No Warni	No Warning (No Action)		
Heavy Ra	in	Dust Storm	Cold Day	Watch (B	Watch (Be Aware)  Alert (Be Prepared To Take Action)		
Very Heav	y Rain	+ Heat Wave	Ground Fro	Alert (Be			
Extremely	Heavy Rain	+ Warm Night		Warning (Take Action)			
Thunder & Lightning + Hot Day				-	Probabilistic Forecast		
Inunder	& Lightning	* in		Terms	Probability of Occurrence (%		
<b>▶</b> Hailstorm	1	Hot & Humid		Unlikely Likely Very Likely	< 25 25 - 50 50 - 75		
Dust Raisi	ng Winds	Strong Surface Win	ds	Most Likely	> 75		





#### DEFINITION/CRITERIA Heavy: 64.5 to 115.5 mm/cm \* Very Heavy: 115.6 to 204.4 mm/cm Rain/ Snow \* Extremely Heavy: > 204.4 mm/cm When maximum temperature of a station reaches ≥40° C for plains and ≥30° 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 ≥6.5° C **Heat Wave** (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 departure is >4.5°C from normal. Heat Wave may be described provided maximum temperature ≥37°C When maximum temperature remains 40°C nimum temperature departure 4.5 °C to 6.4 °C Warm Night: Whe Warm Night Severe Warm Night: When minimum temperature departure >6.4 °C 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 **Cold Wave** (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 departure is ≤-4.5 °C & actual Minimum Temperature is ≤ 15 °C When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions Based on departure Cold Day Cold Day: Maximum Temperature Departure from normal -4.5 °C to -5.4 °C. Severe Cold Day: Maximum Temperature Departure from normal ≤ -6.5 °C Phenomenon of small droplets suspended in air and the horizontal visibility < 1km Moderate Fog: When the visibility between 500-200 metres Dense Fog: when the visibility between 50-200 metres Fog Very Dense Fog: when the visibility < 50 metres Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder) Thunderstorm An ensemble of particles of dust or sand energetically lifted to great heights by a strong and **Dust/Sand** turbulent wind. Ice deposits on ground Frost Air temperature s4°C (over Plains) A strong wind that rises suddenly, lasts for atleast 1 minute. Moderate: Wind speed 52-61 kmph Squall Severe: Wind speed 62-87 kmph Very Severe: Wind speed >87 kmph 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 Sea State 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) Cyclone Super Cyclone Strom: Wind speed >220 kmph (>119 knots)

\* Red colour warning does not mean "Red Alert", Red colour 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)

**Hot and Humid:** When maximum temperatures remain 3°C above normal along with the above normal relative humidity.