

Government of India Ministry of Earth Sciences India Meteorological Department



Press Release Date: 16th July, 2025 Time of Issue: 1330 hours IST

Subject: i) Two well marked low pressure areas, one over northwest Rajasthan & neighbourhood and another over southwest Bihar & adjoining east Uttar Pradesh.
ii) Heavy to very heavy rainfall likely to continue over East & adjoining Central India during next 2 days and over Kerala, Karnataka, Tamil Nadu during next 6-7 days.

Realised weather during past 24 hours till 0830 hours IST of today, the 16th July, 2025:

- ♦ Heavy to extremely heavy falls (≥21 cm) has been recorded at isolated places over Uttarakhand, Konkan and ghat areas of Madhya Maharashtra.
- Heavy to very heavy rainfall (7-20 cm) has been recorded at isolated places over Jharkhand, Bihar, Chhattisgarh, Meghalaya; Heavy rainfall (7-11 cm) at isolated places over Sub-Himalayan West Bengal, Odisha, East Madhya Pradesh, Gujarat Region, West Rajasthan, Arunachal Pradesh, Mizoram, Kerala, Coastal & South Interior Karnataka and Coastal Andhra Pradesh.

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

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

- The **Monsoon trough** is active and runs near its normal position at mean sea level.
- Yesterday's depression over central parts of North Rajasthan moved slowly north-northwestwards and weakened into a well-marked low-pressure area over Northwest Rajasthan at 0530 hrs IST, and persisted over the same region at 0830 hrs IST of today, the 16th July, 2025. It is likely to move slowly north-northwestwards and weaken into a low-pressure area during next 12 hours.
- Yesterday's well marked low pressure area over north Jharkhand and adjoining south Bihar moved westnorthwestwards and lay over southwest Bihar and adjoining east Uttar Pradesh at 0530 hrs IST and persisted over the same region at 0830 hrs IST of today, the 16th July 2025. It is likely to move west-northwestwards across southwest Bihar and east Uttar Pradesh during next 24 hours. However, the system is under continuous monitoring for possible re-intensification.
- A Western Disturbance as a trough in middle tropospheric levels runs roughly along Long. 68°E to the north of Lat. 28°N and is interacting with the above well marked low pressure area over Northwest India.

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

Northwest India:

- ✓ Isolated heavy rainfall likely over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Uttar Pradesh during 16th-22nd; Punjab, Haryana on 16th, 17th, 21st & 22nd; West Rajasthan on 16th; East Rajasthan on 16th& 17th July with very heavy rainfall over Jammu & Kashmir, north Punjab on 16th; Uttarakhand on 16th, 17th and during 20th-22nd; West Uttar Pradesh on 17th; East Uttar Pradesh on 16th & 17th and Himachal Pradesh on 21st & 22nd July.
- ✓ Light/moderate rainfall at most/many places accompanied with thunderstorm, lightning likely over western Himalayan region and some/many places over the plains during next 7 days.

East & Central India:

Isolated heavy rainfall very likely to continue over West Madhya Pradesh during 16th-18th, East Madhya Pradesh, Chhattisgarh during 16th-18th; 21st & 22nd; Bihar on 16th, 17th, 20th & 21st; Andaman & Nicobar Islands on 17th; Odisha on 21st & 22nd; Sub-Himalayan West Bengal & Sikkim on 16th and during 19th-22nd July with very heavy rainfall over Chhattisgarh, Bihar and Jharkhand on 16th July.

✓ Light/moderate rainfall at most/many places accompanied with accompanied with thunderstorm & lightning likely over the region during next 7 days.

West India:

- Heavy rainfall likely at isolated places over Konkan & Goa during 20th-22nd; Ghat areas of Madhya Maharashtra on 16th; Goa on 16th July.
- ✓ Light/moderate rainfall at many/some places very likely over the region during next 5 days.

Northeast India:

- ✓ Light/moderate rainfall at many places accompanied with thunderstorm, lightning likely to continue over Northeast India during next 7 days.
- ✓ Isolated heavy rainfall very likely over Arunachal Pradesh on 16th and during 19th-22nd; Assam & Meghalaya during 19th-22nd and Mizoram & Tripura on 19th & 20th July with very heavy rainfall over Arunachal Pradesh on 21st & 22nd July.

South Peninsular India:

- ✓ Isolated heavy to very heavy rainfall likely over Kerala & Mahe, Tamil Nadu, Coastal & South Interior Karnataka during 16th-22nd; isolated heavy rainfall over Lakshadweep on 16th, 19th & 20th; Coastal Andhra Pradesh & Yanam during 18th-20th; Rayalaseema on 18th & 19th and Telangana during 17th-19th July.
- ✓ **Strong surface winds** (speed reaching 40-50 kmph) very likely over South Peninsular India during next 5 days.
- ✓ Light/moderate rainfall at many/some places over Kerala & Mahe, Lakshadweep, Karnataka, Rayalaseema; isolated to scattered rainfall over Coastal Andhra Pradesh & Yanam, Telangana during next 7 days.

Hot & Humid weather Warnings:

Hot & Humid weather conditions very likely in isolated pockets of Coastal Andhra Pradesh & Yanam and Tamil Nadu on 16th July.

Fishermen Warnings:

Fishermen are advised to avoid venturing into the following from 16^{th} July to 21^{st} July 2025 to the following Areas:

Arabian Sea:

Along and off the Kerala, Karnataka coasts, over Lakshadweep, Comorin areas; Along and off the Somalia coast and adjoining sea areas, Oman and adjoining Yemen coast & adjoining sea areas; most parts of central Arabian Sea and adjoining south and north Arabian Sea, northern parts of south Arabian Sea for 16th to 21st July.

Bay of Bengal:

Few parts of westcentral Bay of Bengal for 16th July; some parts of southwest Bay of Bengal many parts of southwest Bay of Bengal for 16th to 19th July, most parts of southwest Bay of Bengal on 20th July; over Gulf of Mannar for 16th to 21st; over Andaman Sea for 18th to 21st July.

Total suspension of fishing operations is suggested over above mentioned areas and dates.

ii. Weather conditions and forecast over Delhi/NCR during 16th to 19th July, 2025 (Annexure IV)

For more details, kindly refer National Weather Bulletin:

https://mausam.imd.gov.in/responsive/all_india_forcast_bulletin.php

For District wise warnings refer: <u>https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php</u>

Rainfall recorded (in cm) during past 24 hours till 0830 hours IST of today, the 16th July:

- Uttarakhand: Haripur (dist Dehradun) 22; Mussoorie (dist Dehradun) 8;
- Konkan & Goa: Roha (dist Raigad) 21; Sudhagad Pali (dist Raigad) 20; Mhasla (dist Raigad) 17; Tala (dist Raigad) 15; Mangaon (dist Raigad) 14; Poladpur (dist Raigad) 12; Mandangad (dist Ratnagiri), Pen (dist Raigad), Quepem (dist South Goa) 11 Each; Mahad (dist Raigad) 10; Matheran (dist Raigad) 8; Panvel ARG (dist Raigad), Murbad (dist Thane), Khalapur (dist Raigad) 7 Each;
- Jharkhand: Chainpur (dist Palamu) 20; Daltonganj (dist Palamu) 16; Rajdhanwar (dist Giridih) 15; Dhurki (dist Garhwa) 11; Sikatia (dist Deoghar), Lesliganj (dist Palamu) 10 Each; Panki (dist Palamu), Barkisuriya (dist Giridih), Tuladih (dist Giridih) 9 Each; Giridih (dist Giridih), Sujani Kvk AWS (dist Deoghar), Hazaribagh Kvk AWS (dist Hazaribag), Bariyatu (dist Latehar), Nawa Bazar (dist Palamu) 8 Each; Jamtara (dist Jamtara), Topchanchi (dist Dhanbad), Papunki (dist Dhanbad), Koner (dist Hazaribag), Tilaiya (dist Koderma), Palganj (dist Giridih), Purvi Tundi (dist Dhanbad), Borio (dist Sahibganj), Naudiha Bazar (dist Palamu), Karmatand (dist Jamtara), Padma Dvc (dist Hazaribag), Tundi (dist Dhanbad) 7 Each;
- Bihar: Dobhi (dist Gaya) 19; Sherghati (dist Gaya), Fatehpur (dist Gaya) 18 Each; Kodawanpur/C.b Ii (dist Begusarai), Barachatti (dist Gaya), Mohanpur (dist Gaya) 17 Each; Cheria B.pur 1 (dist Begusarai), Bankey Bazar (dist Gaya) 16 Each; Dalsinghsarai (dist Samastipur), Khaira (dist Jamui) 14 Each; Garhi (dist Jamui), Sonbarsa (dist Saharsa), Nawkothi (dist Begusarai), Imamganj (dist Gaya), Tankuppa (dist Gaya) 13 Each; Madanpur (dist Aurangabad), Bachwara (dist Begusarai) 12 Each; Adhwara (dist Bhabua), Chakai (dist Jamui), Gidhaur (dist Jamui), Sirdala (dist Nawada) 11 Each; Barauni (dist Begusarai), Wazirganj (dist Gaya), Kutumba (dist Aurangabad), Bhagwanpur (dist Begusarai), Belaganj (dist Gaya) 10 Each; Sono (dist Jamui), Samastipur (dist Samastipur), Manihari (dist Katihar), Jamui (dist Jamui), Rajauli (dist Nawada), Salakhua (dist Saharsa), Laxmipur (dist Jamui), Beldaur (dist Khagaria), Begusarai (dist Begusarai) 9 Each; Sirmari B.pur (dist Saharsa), Jhajha (dist Jamui), Amarpur (dist Banka), Dumaria (dist Gaya), Chhaurahi (dist Begusarai), Garhpura (dist Begusarai), Chautham (dist Khagaria), Meskaur (dist Nawada), Akbarpur (dist Nawada), Bibhutipur (dist Samastipur) 8 Each; Banka (dist Banka), Kursela (dist Katihar), Suryagadha (dist Lakhisarai), Hasanpur (dist Samastipur), Gaya AP (dist Gaya), Dehri (dist Rohtas), Dharhara (dist Monghyr), Bakhari (dist Begusarai), Amas (dist Gaya), Guraru (dist Gaya), Nagar (dist Gaya), Manpur (dist Gaya), Mansi (dist Khagaria), Vidyapati Nagar (dist Samastipur), Rosera (dist Samastipur) 7 Each;
- Chhattisgarh: Ramanujganj (dist Balrampur) 12; Doura Kochali (dist Balrampur), Chalgali (dist Balrampur), Suhela (dist Baloda Bazar) 10 Each; Ramchandrapur (dist Balrampur) 9; Balrampur (dist Balrampur), Kusmi (dist Balrampur), Takhatpur (dist Bilaspur) 8 Each; Pallari/Palari (dist Baloda Bazar), Shankargarh (dist Balrampur) 7 Each;
- Coastal Karnataka: Kota (dist Udupi) 10; Bantwal (dist Dakshina Kannada), Siddapura (dist Udupi), Kadra (dist Uttara Kannada), Puttur HMS (dist Dakshina Kannada) 8 Each; Udupi (dist Udupi), Mulki (dist Dakshina Kannada), Mangaluru AP (dist Dakshina Kannada), Shakti Nagar (dist Dakshina Kannada), Mangaluru (dist Dakshina Kannada) 7 Each;
- Coastal Andhra Pradesh & Yanam: Srungavarapukota (dist Vizianagaram) 9; Seethanagaram (dist Parvathipuram Manyam) 8;
- Madhya Maharashtra: Mahabaleshwar (dist Satara) 9; Radhanagari (dist Kolhapur), Gaganbawada (dist Kolhapur), Igatpuri (dist Nashik) 7 Each;
- Assam & Meghalaya: Tezpur (dist Sonitpur) 9; Bhumuraguri (dist Sonitpur) 8;
- East Madhya Pradesh: Bilhari (dist Katni) 8;
- West Rajasthan: Srivijaynagar SR (dist Sri Ganganagar) 8;
- Odisha: Baripada (dist Mayurbhanj), Hatadihi (dist Keonjhargarh) 8 Each;
- South Interior Karnataka: Kammardi (dist Chikkamagaluru), Agumbe AWS (dist Shivamogga) 7 Each;
- Kerala & Mahe: Bayar AWS (dist Kasargod) 7;
- Arunachal Pradesh: Naharlagun AWS (dist Papumpara) 7;
- Mizoram: Mangkolemba (dist Mokokchung) 7.

	Table	and the second se						
7 Days Rainfall Forecast 16- Jul 17- Jul 18- Jul 19- Jul 20- Jul 21- Jul 22- Jul								
S.No.	Subdivision							
1	ANDAMAN & NICOBAR ISLANDS	Day 1	Day 2	Day 3	Day 4	Day 5	FWS	
	ARUNACHAL PRADESH	FWS	SCT	SCT	FWS	FWS		
	ASSAM & MEHGHALAYA	FWS	FWS	SCT	FWS		WE	FW
4		FWS	FWS	SCT	FWS			
	SUB HIMALAYAN WEST BENGAL & SIKKIM		FWS		and the second se	1110	WG	W
	GANGETIC WEST BENGAL	UN IS	FWS	SCT	SCT	FWS		SC
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	JHARKHAND	1110	FWS	SCT	SCT	SCT	FWS	
9		LAIT	FWS	SCT	ISOL	SCT		
10		FWS		SCT	SCT	FWS		SC
11		SCT	FWS	FWS		FWS	the second se	SC
	UTTARAKHAND	FWS	and the second	FWS		TWO	T WS	
	HARYANA, CHANDIGARH & DELHI	FWS	FWS	SCT	ISOL	ISOL		FW
	PUNJAB	FWS		SCT	ISOL	ISOL		FW
	HIMACHAL PRADESH	FWS	the second se		IDUL	FWS		
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17		SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISC
	EAST RAJASTHAN	FWS	FWS	FWS		ISOL	ISOL	SC
19		FWS	FWS	FWS			and the second se	
20		FWS	FWS					
21		FWS	SCT	SCT		SCT		
22	and a state of the	ISOL	ISOL	SCT	SCT	SCT	ISOL	ISC
	KONKAN & GOA	FWS	FWS			FWS		W
24		ISOL	ISOL	SCT	SCT	ISOL	ISOL	
25		ISOL	SCT	SCT	ISOL	ISOL		ISC
26		FWS	FWS	SCT	SCT	the second se	FWS	
27		FWS	FWS	SCT	SCT	SCT	FWS	
	COASTAL ANDHRA PRADESH	ISOL	SCT	FWS			and the second second	SC
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30	an in the second s	ISOL	SCT	FWS			A Company of the local division of the	SC
31	TAMILNADU & PUDUCHERRY	SCT	SCT	SCT	SCT	SCT	SCT	SC
32		U U U	1001	MAR	1001	0.01	MUE	VA
33		SCT	FWS	FWS	we	SCT	SCT	SC
34		FWS	TWS	PVVS	18.6	1001	ME	V
35	and a second	1 110	ULS	W/R	LL B	1210	WS	W
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• 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.

DetaileddistrictwiseMultiHazardweatherwarningfornextfivedaysavailableat https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php

Weather forecast over Delhi/NCR during 16th to 19th July 2025

Past Weather:

There has been rise in the minimum temperature up to 1 - 2°C and no significance changes in maximum temperature over Delhi/NCR during the past 24 hours. The maximum and minimum temperatures over Delhi were around 32 to 34°C and 24 to 26°C respectively. The minimum temperature was near normal and the maximum temperature was below normal up to 1 to 3°C. Generally cloudy sky conditions with predominant surface wind from the southeast direction with wind speeds up to 16 kmph with gusting to 35 kmph prevailed during the past 24 hours. Very light to light rainfall has been recorded in many places of Delhi. Generally cloudy sky conditions with a windspeed of less than 16 kmph from the southeast direction prevailed over the region in the forenoon today.

Weather Forecast:

16.07.2025: Generally cloudy sky. Light to moderate rain accompanied with thunderstorms/lightning. The maximum temperatures over Delhi are likely to be in the range of 32 to 34°C. The maximum temperature will be near normal. The predominant surface wind will likely be from the southeast direction with a wind speed of less than 15 kmph in the afternoon. The wind speed will gradually decrease becoming 10-12 kmph from the southeast direction during evening and night.

17.07.2025: Generally cloudy sky. Very light to light rain accompanied with thunderstorms/lightning. The maximum and minimum temperatures over Delhi are likely to be in the range of 32 to 34°C and 24 to 26°C respectively. The minimum temperature will be below normal up to 1 to 2°C, and the maximum temperature will be below normal up to 1 to 2°C. The predominant surface wind will likely be from the southeast direction with a wind speed of less than 12 kmph during the morning hours. The wind speed will gradually increase becoming less than16 kmph from the southeast direction in the afternoon. It will decrease becoming less than 12 kmph from the southeast direction during the evening and night.

18.07.2025: Partly cloudy sky. Very light to light rain accompanied with thunderstorms/lightning. The maximum and minimum temperatures over Delhi are likely to be in the range of 32 to 34°C and 24 to 26°C respectively. The minimum temperature will be below normal up to 1 to 2°C, and the maximum temperature will be below normal up to 1 to 2°C. The predominant surface wind will likely be from the northwest direction with a wind speed of less than 10 kmph during the morning hours. The wind speed will gradually increase becoming less than 12 kmph from the northwest direction in the afternoon. It will decrease becoming less than 10 kmph from the northwest direction during the evening and night.

19.07.2025: Partly cloudy sky. The maximum and minimum temperatures over Delhi are likely to be in the range of 34 to 36°C and 25 to 27°C respectively. The minimum temperature will be below normal up to 1 to 2°C and the maximum temperature will be near normal. The predominant surface wind will likely be from the northwest direction with a wind speed of less than 10 kmph during the morning hours. The wind speed will gradually increase becoming less than 12 kmph from the southwest direction in the afternoon. It will decrease becoming less than 10 kmph from the vening and night.

Impact expected and Action Suggested due to light rainfall with thunderstorm/lightning:

- Be cautious and take precautionary measures, though there is the likelihood of thunderstorms/lightning.
- Damage to standing crops, Minor to major damage to power and communication lines due to breaking of branches, Partial damage to vulnerable structures due to strong winds, Loose objects may fly.
- People are advised to keep a watch on the weather for worsening conditions and be ready to move to safer places accordingly, 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.

Impact & Action Suggested

Very heavy rainfall very likely at isolated places over Jammu & Kashmir, north Punjab, Chhattisgarh, Bihar and Jharkhand on 16th; Uttarakhand on 16th, 17th and during 20th-22nd; West Uttar Pradesh on 17th; East Uttar Pradesh on 16th & 17th; Himachal Pradesh on 21st & 22nd; Kerala & Mahe, Tamil Nadu, Coastal & South Interior Karnataka during 16th-22nd July.

Impact Expected

- Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of (Rajasthan and West Madhya Pradesh) 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 Jammu & Kashmir, provide adequate drainage facilities in fields of maize and transplanted rice in Sub Tropical Zone and maize fields in Intermediate Zone.
- In Uttarakhand, ensure proper drainage facilities in soybean, maize, barnyard millet, finger millet, pigeon pea, kidney beans, vegetables and orchards. Harvest matured vegetables and fruits and store in safe place.
- In Madhya Pradesh, make provision to drain out excess water from rice nurseries and fields of soybean, maize and vegetables in Kymore Plateau and Satpura Hill Zone, rice, vegetables and fruit orchards in Bundelkhand Zone and soybean and pearl millet in Gird Zone.
- In Chhattisgarh, make arrangements for drainage of excess water from fields of rice, maize, pigeon pea, minor millets and vegetables. Provide mechanical support to tall/weak crops with stakes or bamboo to prevent lodging or breakage.
- In Jharkhand, make necessary arrangements to drain out excess water from maize fields, rice and vegetable nurseries. Cover the vegetable nurseries with polythene sheets.
- In Bihar, do not allow rain water to stagnate in fields of maize, ragi, kodo, Sava, and vegetables in North East Alluvial Zone and ensure proper drainage in maize and vegetable crops in low-lying areas of South Bihar Alluvial Zone.
- Drain out excess water from rice and finger millet nurseries, groundnut, vegetables and orchards in Konkan and rice and finger millet nurseries in *ghat* areas of Madhya Maharashtra.
- In Coastal Karnataka, drain out excess water from rice nurseries, transplanted rice fields and plantations of arecanut and coconut in Coastal Zone and from rice nurseries and fields of maize, cotton and ginger and plantations of arecanut in Hill Zone. In South Interior Karnataka, make necessary arrangements to drain out excess water from fields of paddy, maize, black gram, green gram, field bean, cowpea, sugarcane, vegetables, ginger and plantations of coffee, pepper, cardamom, arecanut and banana in Southern Dry Zone and rice nurseries, fields of paddy, finger millet, maize and plantations of arecanut and black pepper in Southern Transition Zone.
- In Kerala, ensure proper drainage facilities in rice nurseries, transplanted rice fields, coconut and banana plantations to prevent water logging. Undertake propping in banana to protect the plants from heavy rains.

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 / fruitbearing plants to avoid lodging due to strong winds.

Flash flood guidance:

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 17-07-2025 :

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours.

East Uttar Pradesh - Azamgarh, Ballia, Chandauli, Deoria, Gazipur, Gorakhpur, Santkabirnagar, Mau, Mirzapur, Santravidasnagar, Sonbhadra and Varanasi districts. North Chhattisgarh - Balarampur, Jashpur, Korba, Korea, Raigarh, Surajpur and Surguja districts. Bihar - Arwal, Aurangabad, Bhabua, Gopalganj, Bhojpur, Buxar, Gava, Madubani, Nalanda, Patna, Rohtas, Saran, and Vaishali Siwan districts. Jharkhand - Bokaro, Chatra, Dhanbad, Garhwa, Giridih, Gumla, Khunti, Latehar, Lohardaga, Palamu, Ramgarh, Ranchi and Simdega districts.

Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over Area of Concern (AoC) as shown in map due to expected rainfall occurrence in next 24 hours.

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 17-07-2025 :

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours.

Himachal Pradesh - Chamba, Kangra, Kullu, Mandi and Shimla districts. Jammu & Kashmir & Ladakh - Doda, Kathua, Kulgam, Riasi and Udhampur districts.

Uttarakhand - Almora, Bageshwar, Chamoli, Champawat, Dehradun, Nanital, Pauri Garhwal, Pithoragarh, Rudraprayag, Tehri Garwal and Uttarkashi districts.

Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over Area of Concern (AoC) as shown in map due to expected rainfall occurrence in next 24 hours.





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



* 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: 011-2434-459 (Service to the Nation since 1875)





National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

	Heavy: 64.5 to 115.5 mm/cm *
ain/ Snow *	Very Heavy: 115.6 to 204.4 mm/cm* 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
leat 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
arm Night	Warm Night: When minimum temperature departure 4.5 °C to 8.4 °C.
00000000000000000000000000000000000000	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 departure is \$4.5 C & actual withhum temperature is \$15 C
	Based on departure
Cold Day	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
	Phenomenon of small droplets suspended in air and the horizontal visibility < 1km
-	Moderate Fog: When the visibility between 500-200 metres
Fog	Very Dense Fog: when the visibility between 50- 200 metres Very Dense Fog: when the visibility < 50 metres
understorm	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.
12000-01-0	Ice deposits on ground
Frost	Air temperature ≤4*C (over Plains)
	A strong wind that rises suddenly, lasts for atleast 1 minute.
-	Moderate: Wind speed 52-61 kmph
Squall	Severe: Wind speed 62-67 kmph
	Very Severe: Wind speed >87 kmph
	Effect of various waves in the sea over specific area
Con State	Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre
Sea State	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
	Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots) Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)
Cyclone	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)

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