

# Government of India Ministry of Earth Sciences India Meteorological Department



Press Release
Date: 11<sup>th</sup> July, 2025

Time of Issue: 1320 hours IST

Subject: Heavy to very heavy rainfall spell likely to continue over central & adjoining northwest India during next 4-5 days.

# Realised weather during past 24 hours till 0830 hours IST of today, the 11th July, 2025:

- Heavy to very heavy rainfall (7-20 cm) has been recorded at isolated places over East Uttar Pradesh, East Madhya Pradesh, Punjab; Heavy rainfall (7-11 cm) at isolated places over Himachal Pradesh, south Haryana, West Uttar Pradesh, East Rajasthan, Chhattisgarh, West Madhya Pradesh, Kerala, Coastal Karnataka, Gangetic West Bengal, Bihar, Jharkhand and Assam.
- Thunderstorm accompanied with Squally/Gusty winds with speed 40-60 kmph over Tamil Nadu, Kerala, interior Karnataka, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, East Uttar Pradesh, Chhattisgarh, Punjab, Madhya Maharashtra, Himachal 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** runs to near its normal position at mean sea level.
- The Low-Pressure area over south Jharkhand & neighbourhood has become less marked. However, associated cyclonic circulation lay over north Chhattisgarh in lower & middle tropospheric levels.
- An **upper air cyclonic circulation** lies over Haryana & neighbourhood in lower tropospheric levels.
- ❖ A **trough** runs from southwest Uttar Pradesh to northwest Bay of Bengal in lower tropospheric levels.
- Another **trough** runs from northeast Arabian Sea to the cyclonic circulation over north Chhattisgarh in middle tropospheric levels.

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

#### **Northwest India:**

- ✓ Isolated **heavy rainfall** likely over East Rajasthan, Uttarakhand, Himachal Pradesh during 11<sup>th</sup>-17<sup>th</sup>; Jammu-Kashmir during 14<sup>th</sup>-17<sup>th</sup>; West Uttar Pradesh during 11<sup>th</sup>-15<sup>th</sup>; south Haryana on 11<sup>th</sup>; East Uttar Pradesh on 12<sup>th</sup> & 15<sup>th</sup>; West Rajasthan during 12<sup>th</sup>-16<sup>th</sup> July with **very heavy rainfall over Uttar Pradesh on 11<sup>th</sup>; East Rajasthan during 11<sup>th</sup>-15<sup>th</sup>; Uttarakhand on 15<sup>th</sup> & 16<sup>th</sup> 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 Madhya Pradesh during 11<sup>th</sup>-17<sup>th</sup>; Chhattisgarh during 11<sup>th</sup>-14<sup>th</sup>; Jharkhand during 11<sup>th</sup>-15<sup>th</sup>; Sub-Himalayan West Bengal & Sikkim during 13<sup>th</sup>-16<sup>th</sup>; Gangetic West Bengal on 14<sup>th</sup>; Odisha during 11<sup>th</sup>-16<sup>th</sup>; Bihar on 11<sup>th</sup>, 15<sup>th</sup> & 16<sup>th</sup> July **with very heavy rainfall over Madhya Pradesh during 11<sup>th</sup>-14<sup>th</sup> July.**
- ✓ Light/moderate rainfall at most/many places accompanied with accompanied with thunderstorm, lightning & gusty winds speed reaching 30-40 kmph likely over the region during next 7 days.

- ✓ **Heavy rainfall** likely at isolated places over Konkan & Goa during 13<sup>th</sup>-15<sup>th</sup>; Gujarat Region during 12<sup>th</sup>-17<sup>th</sup>; Ghat areas of Madhya Maharashtra on 11<sup>th</sup>, 13<sup>th</sup> & 14<sup>th</sup> and Saurashtra on 13<sup>th</sup> July.
- ✓ Light/moderate rainfall at many/some places very likely over the region during next 7 days.

#### **Northeast India:**

- ✓ Light/moderate rainfall at most places accompanied with **thunderstorm**, **lightning** likely to continue over Northeast India during next 7 days.
- ✓ Isolated **heavy rainfall** very likely over Assam & Meghalaya during 12<sup>th</sup>-17<sup>th</sup>; Mizoram & Tripura during 13<sup>th</sup>-15<sup>th</sup>; Arunachal Pradesh during 14<sup>th</sup>-17<sup>th</sup> July.

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

- ✓ Isolated **heavy rainfall** likely over Coastal Karnataka, Kerala during 11<sup>th</sup>-17<sup>th</sup> and South Interior Karnataka & Tamil Nadu during 15<sup>th</sup>-17<sup>th</sup> July.
- ✓ **Strong surface winds** (speed reaching 40-50 kmph) very likely over South Peninsular India during next 3 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 & Humdi weather conditions very likely in isolated pockets of east Assam on 11<sup>th</sup> & 12<sup>th</sup>; Tamil Nadu, Coastal Andhra Pradesh & Yanam and Rayalaseema during 11<sup>th</sup>-13<sup>th</sup> July.

## **Fishermen Warnings:**

Fishermen are advised to avoid venturing into the following from  $11^{th}$  July to  $16^{th}$  July 2025 to the following Areas:

#### Arabian Sea:

Along and off Konkan coast and adjoining sea area for day 3 & day 4 (13th & 14th July).

Along and off the Somalia coast and adjoining sea areas, Oman and adjoining Yemen coast & adjoining sea areas, most parts of westcentral and adjoining, some parts of eastcentral Arabian Sea, southern parts of north & northern parts of south Arabian Sea for day 1 to day 5 (11th to 16th July).

# **Bay of Bengal:**

Along and off north Andhra Pradesh coast for day 1 & day 2 (11th & 12th July). Most parts of westcentral Bay of Bengal and adjoining areas of eastcentral and southwest Bay of Bengal for day 1 (11th July), any parts of westcentral Bay of Bengal and adjoining parts of southwest Bay of Bengal for day 2 (12th July), some parts of westcentral Bay of Bengal for day 3 (13th July) & few parts of westcentral Bay of Bengal for day 4 (14th July), few parts of eastcentral bay of Bengal, many parts of southwest Bay of Bengal for day 3 (13th July); some southern parts of south Bay of Bengal; Over Gulf of Mannar for day 1 to day 5 (11th & 15th July).

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

ii. Weather conditions and forecast over Delhi/NCR during 11th to 14th 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: https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php

## Rainfall recorded (in cm) during past 24 hours till 0830 hours IST of today, the 11th July:

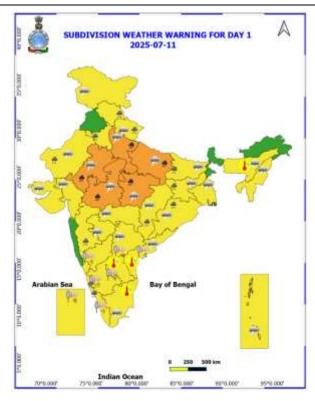
- ❖ East Uttar Pradesh: Attarra (dist Banda) 19; Chopan Fmo (dist Sonbhadra) 12; Chunar (dist Mirzapur) 9; Ghorawal (dist Sonbhadra), Manikpur (dist Chitrakoot) 7 Each;
- Punjab: Aliwal (dist Gurdaspur) 13;
- ❖ East Madhya Pradesh: Amarpatan (dist Satna) 12; Majhauli (dist Sidhi), Churhat (dist Sidhi) 10 Each; Rewaaws (dist Rewa) 9; Sihawal (dist Sidhi), Chitrangi (dist Singrauli) 8 Each; Beohari (dist Shahdol), Rampur (dist Sidhi), Vijayraghogarh (dist Katni), Mada (dist Singrauli), Singodi (dist Katni) 7 Each;
- Gangetic West Bengal: Diamond Harbour (dist South 24 Parganas) 11;
- Assam & Meghalaya: Neamatighat (dist Jorhat) 11; Dharamtul (dist Morigaon), Nahar Katia (dist Dibrugarh) 7 Each;
- Chhattisgarh: Biharpur (dist Surajpur) 10; Doura Kochali (dist Balrampur), Sakri (dist Bilaspur) 9 Each; Wandrafnagar (dist Balrampur) 8;
- **East Rajasthan**: Chaksu (dist Jaipur) 10; Bari (dist Dholpur) 9; Baseri SR (dist Dholpur), Jhunjhunu (dist Jhunjhunu) 8 Each;
- ❖ Haryana: Kalanaur (dist Rohtak), Mahendragarh AWS (dist Mahendragarh) 9 Each; Mahendragarh (dist Mahendragarh) 8;
- ❖ Kerala: Bayar AWS (dist Kasargod) 9; Peringome AWS (dist Cannur) 8; Kudulu (dist Kasargod), Vellanikkara (dist Thrissur), Chemberi AWS (dist Cannur), Muliyar AWS (dist Kasargod) 7 Each;
- ❖ Jharkhand: Hazaribagh Dvc (dist Hazaribag) 9; Tenughat (dist Bokaro), Jamtara Fmo (dist Jamtara), Koner (dist Hazaribag), Bau Kanke (dist Ranchi), Narayanpur (dist Jamtara) 7 Each;
- ❖ West Uttar Pradesh: Chandausi (dist Sambhal) 9; Khairagarh (dist Agra) 7;
- Coastal Karnataka: Bantwal (dist Dakshina Kannada) 8; Mudubidre (dist Dakshina Kannada), Shakti Nagar (dist Dakshina Kannada) 7 Each;
- ❖ West Madhya Pradesh: Bhander (dist Datia) 7;
- ❖ Bihar: Adhwara (dist Bhabua) 7.

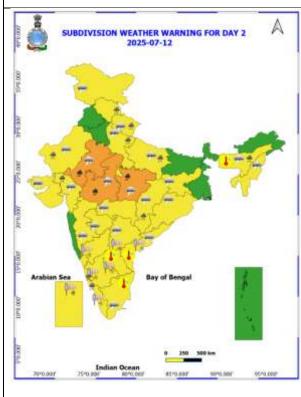
## Realised Gusty Winds (kmph) During Past 24hours ending at 0830 hrs IST of today the 11th July:

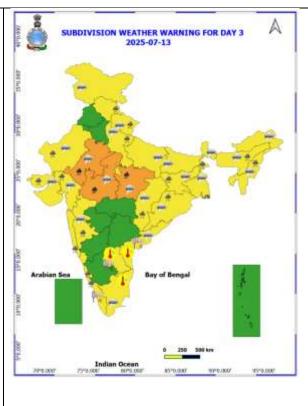
- **❖ Tamil Nadu:** Natham\_ISRO 61, Vedasandur 50, Tenkasi 46, Thiruchendur 44, Kovilpatti 43, Erode Isro 41, Kadavur Taluk Office 37, Tirur 37;
- East Uttar Pradesh: Fursatganj 48, Chandauli41;
- Chhattisgarh: Balod 48;
- **❖ Punjab**: Moga 46;
- Madhya Maharashtra: Nisam\_Baramati (Pune) 43, Vilholi (Nashik) 39;
- Himachal Pradesh: Kukumseri 41;

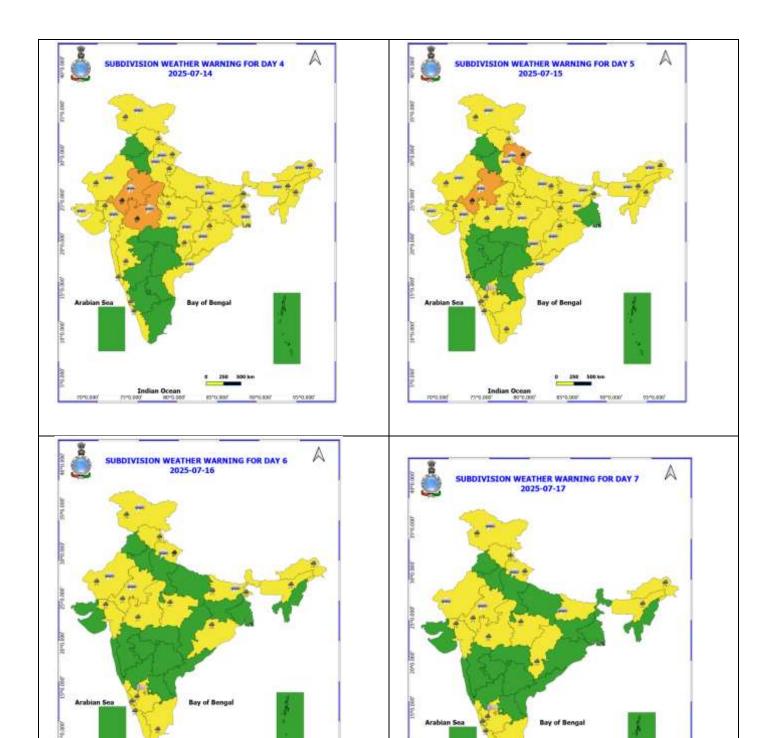
	Table	L'Arment de l'Arme	C. 11.52 (1								
7 Days Rainfall Forecast											
S.No.	Subdivision	11- Jul	12- Jul	13- Jul	14- Jul	15- Jul	16- Jul				
		Day 1		Day 3	Day 4	Day 5	Day 6	CONTRACTOR OF STREET			
-	ANDAMAN & NICOBAR ISLANDS	FWS		WB	100	WE	WS	FW			
	ARUNACHAL PRADESH	ISOL			FWS						
	ASSAM & MEHGHALAYA	SCT	FWS	the same of the same of	FWS						
4	NAGALAND, MANIPUR, MIZORAM AND TRIPURA		SCT	SCT	FWS	FWS	FWS				
- 5	SUB HIMALAYAN WEST BENGAL & SIKKIM	SCT	FWS	WS	WE	WS	WS	FW			
6	GANGETIC WEST BENGAL	FWS		WS	WS	WS	FWS				
7	ODISHA	FWS		WS	W	FWS	SCT	SC			
8	JHARKHAND	WS	FWS	WS	WS	1075	SCT	SC			
9	BIHAR	SCT	ISOL	SCT	SCT	FWS	FWS	SC			
10	EAST UTTAR PRADESH	SCT	FWS	FWS	SCT	FWS	FWS	SC			
11	WEST UTTAR PRADESH	SCT	SCT	FWS	FWS	FWS	FWS	SC			
12	UTTARAKHAND	FWS	FWS	FWS	FWS	WS	MS	F۷			
13	HARYANA, CHANDIGARH & DELHI	SCT	SCI	FWS	SCT	SCT	SCT	SC			
14	PUNJAB	ISOL	ISOL	SCT	SCT	SCT	SCT	SC			
15	HIMACHAL PRADESH	FWS	SCT	FWS	WS	Ws	Wa				
16	JAMMU AND KASHMIR AND LADAKH	SCT	SCT	SCT	SCT	FWS	FWS	SC			
17		SCT	SCT	SCT	FWS	FWS	FWS	FW			
18	EAST RAJASTHAN	FWS	FWS	FWS	FWS	FWS	FWS	FW			
19	WEST MADHYA PRADESH	FWS		WS	9/19	W.	FWS				
	EAST MADHYA PRADESH	WS	WS	WS	WS	Ws	WE	V			
21	GUJRAT REGION	FWS	FWS	WS	WE	WS	FWS	FW			
22	SAURASHTRA & KUTCH	SCT		FWS	FWS	FWS					
23	The state of the s	WS	Wis		100	FWS					
24	TOTAL STANDARD CONTRACTOR CONTRAC	SCT	SCT	SCT	SCT	ISOL	ISOL				
25	MARATHWADA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISC			
26	VIDARBHA	FWS	THE RESERVE OF THE PERSON	THE RESIDENCE OF THE PARTY OF T	SCT	SCT	SCT	2244			
27	CHHATTISGARH	Wa	100		FWS	للاقتنان كالمتالك		_			
	COASTAL ANDHRA PRADESH	ISOL	ISOL	ISOL	ISOL		SCT				
29	TELANGANA	SCT	The second living to the second	SCT		SCT	SCT	FW			
30	RAYALASEEMA	ISOL	-	ISOL	ISOL	ISOL	ISOL	SC			
31	TAMILNADU & PUDUCHERRY	ISOL	ISOL	ISOL	ISOL	ISOL	SCT	SC			
32	COSTAL KARNATAKA	100	900	With	1000		WE				
	NORTH INTERIOR KARNATAKA	SCT	SCT	SCT	FWS	FWS	115	FW			
_	SOUTH INTERIOR KARNATAKA	FWS			FWS						
-	KERALA AND MAHE	1 443	1110	WE	140	1440	140				
-	LAKSHADWEEP	FWS	FWS	FWS	FWS	FWS	1,00	IA.			

• 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 <a href="https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php">https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php</a>

#### Weather forecast over Delhi/NCR during 11th to 14th July 2025

#### **Past Weather:**

There has been rise in the minimum temperature up to 1 to  $2^{\circ}\text{C}$  and fall in maximum temperature up to 3 to  $6^{\circ}\text{C}$  over Delhi/NCR during the past 24 hours. The maximum and minimum temperatures over Delhi were around 28 to  $31^{\circ}\text{C}$  and 24 to  $26^{\circ}\text{C}$  respectively. The minimum temperature was below normal up to 1 to  $2^{\circ}\text{C}$  and the maximum temperature was below normal up to 3 to  $5^{\circ}\text{C}$ . Partly cloudy sky conditions with predominant surface wind from the southeast direction with wind speeds up to  $10^{\circ}\text{C}$  kmph prevailed during the past 24 hours. Light to moderate rainfall has been recorded in most places of Delhi. Generally cloudy sky conditions with a windspeed of less than  $06^{\circ}\text{C}$  kmph from the west direction prevailed over the region in the forenoon today.

#### Weather Forecast:

**11.07.2025:** Generally cloudy sky. Light to moderate rain accompanied by thunderstorms/lightning. The maximum temperatures over Delhi are likely to be in the range of 31 to 33°C. The maximum temperature will be below normal up to 2 to 4 °C. The predominant surface wind will likely be from the northwest direction with a wind speed of less than 15 kmph in the afternoon. The wind speed will gradually decrease becoming 08-12 kmph from the northeast direction during evening and night.

**12.07.2025:** Partly cloudy sky. Very light to light rain accompanied by thunderstorms/lightning. 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 below normal up to 1 to 3°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 20 kmph during the morning hours. The wind speed will gradually decrease becoming less than 15 kmph from the northwest direction in the afternoon. It will decrease to less than 12 kmph from the northwest direction during the evening and night.

**13.07.2025:** Partly cloudy sky. Very light to light rain accompanied by thunderstorms/lightning. The maximum and minimum temperatures over Delhi are likely to be in the range of 35 to 37°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 north direction with a wind speed of less than 15 kmph during the morning hours. The wind speed will gradually decrease becoming less than 10 kmph from the north direction in the afternoon. It will increase to less than 15 kmph from the southeast direction during the evening and night.

**14.07.2025:** Partly cloudy sky. Very light to light rain accompanied by thunderstorms/lightning. The maximum and minimum temperatures over Delhi are likely to be in the range of 32 to 34°C and 23 to 25°C, respectively. The minimum temperature will be near normal 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 15 kmph during the morning hours. The wind speed will gradually increase, becoming less than 18 kmph from the southeast direction in the afternoon. It will decrease to less than 12 kmph from the east direction during the evening and night.

## Impact expected and Action Suggested due to moderate 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** over south Uttar Pradesh on 11<sup>th</sup>; East Rajasthan during 11<sup>th</sup>-15<sup>th</sup>; Uttarakhand on 15<sup>th</sup> & 16<sup>th</sup> July. Madhya Pradesh during 11<sup>th</sup>-14<sup>th</sup> July.

#### **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 / Extremely Heavy Rainfall

- ➤ In **Gird Zone** of **Madhya Pradesh**, postpone sowing of soybean and pearl millet and drain out excess water from already sown fields. In **Satpura Plateau zone**, make arrangements for proper drainage in the fields of maize, soybean and vegetables. Protect vegetable nurseries with green net or any other medium. In **Kymore Plateau and Satpura Hill Zone**, drain out excess water from vegetables.
- In **Chhattisgarh**, ensure proper drainage in rice nurseries and fields of rice, maize, pigeon pea, minor millets and vegetables.
- In **Mid Hills Sub Humid Zone** of **Himachal Pradesh**, provide support to the cucumber vines and maintain proper drainage in vegetable and maize fields. In **Sub Montane and Low Hills Sub Tropical Zone**, ensure proper drainage in maize fields to avoid water logging.
- 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 **South Western Semi-Arid Zone** of **West Uttar Pradesh**, make proper arrangements to drain out excess water from the fields of paddy, spring sugarcane, pigeon pea, maize and vegetables.
- ➤ In **Southeastern Humid Plain Zone** of **East Rajasthan**, make provision to drain out excess water from rice nurseries and fields of maize, soybean and black gram. In **Flood Prone Eastern Plain Zone**, postpone sowing / re- sowing of sesame, green gram and pearl millet during heavy rains.
- In **Jharkhand**, make necessary arrangements to drain out excess water from maize fields, rice and vegetable nurseries. Cover the vegetable nurseries with polythene sheets.

## 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.

## Livestock / Fishery

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- 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

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.

#### Flash flood guidance:

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 12-07-2025 :

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

East Madhya Pradesh - Anuppur, Balaghat, Chhatarpur, Chhindwara, Damoh, Dindori, Jabalpur, Katni, Mandla, Narshimapura, Niwari, Panna, Sagar, Satna, Seoni, Shahdol, Sidhi, Singrauli, Tikamgarh and Umaria 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.

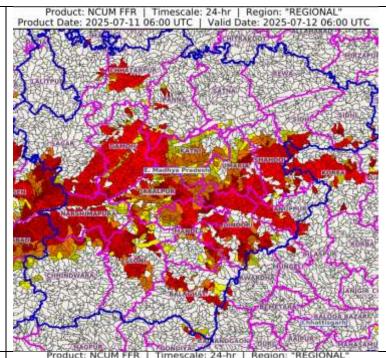
24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 12-07-2025 :

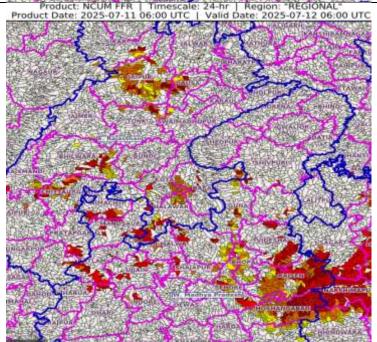
Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours.

East Rajasthan - Banswara, Bhilwara, Bundi, Chittaurgarh, Dausa, Jaipur, Pratapgarh, Rajsmand, Sikar, Swaimadhopur, Tonk and Udaipur districts.

West Madhya Pradesh - Agar-Malwa, Ashoknagar, Betul, Bhopal, Guna, Indore, Jhabua, Mandsaur, Nimach, Raisen, Rajgarh, Ratlam, Sehore, Shajapur, Shivpuri, Ujjain, Videsha and Hoshangabad 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.



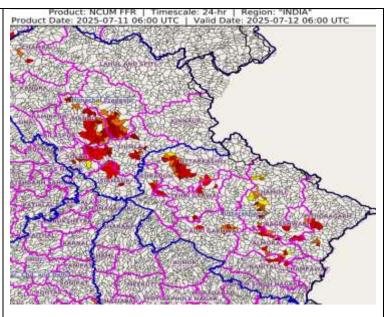


24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 12-07-2025 :

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

Himachal Pradesh - Chamba, Kullu, Mandi, Shimla, Sirmaur and Solan districts. Uttarakhand - Almora, Bageshwar, Chamoli, 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

# **LEGENDS**



# SPATIAL DISTRIBUTION (% of Stations reporting)

6 Stations Category		% Stations	Category					
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	COLOUR CODED 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)				
<b>.</b>	0 1:-ba-:	+ Hot Day		Probabilistic Forecast				
Inunder	& Lightning	4		Terms	Probability of Occurrence (%			
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.