



### **National Flash Flood Guidance Bulletin**

DATED: 25-07-2025 TIME OF ISSUE: 1905 IST VALID TILL: 2330 IST

From: India Meteorological Department, New Delhi (Email Id: <a href="mailto:sasiaffg.imd@gmail.com">sasiaffg.imd@gmail.com</a>)

To: RMC Chennai; RMC Nagpur; RMC Kolkata; RMC Mumbai; MC Bangalore, MC Raipur, MC Bhopal, MC Bhubaneshwar, MC Ranchi, MC Ahmedabad, MC Goa and all concerned FMO's.

Area of Concern (AoC): Few watersheds & neighborhoods of Coastal Karnataka, Chhattisgarh, East Madhya Pradesh, Vidarbha, West Madhya Pradesh, Odisha, Gangetic West Bengal, Jharkhand, Gujarat Region and Konkan & Goa Met subdivisions.

<u>Diagnostic Guidance:</u> Based on Merged Mean Areal Precipitation at 1730 IST, rainfall is up to 48 mm in last 6 hours and up to 139 mm in last 24 hours over few watersheds and neighborhood of Area of Concern (AoC) Met subdivisions. Land Surface Model shows few nearly saturated watersheds up to 80 to 98 % over Area of Concern (AoC) Met subdivisions and up to 50 % soil saturation over remaining parts of the country.

<u>Prognostic Guidance:</u> Dynamic Global (GFS) & Mesoscale Model (WRF & NCUM) forecasts very heavy rainfall up to 191 mm in next 24 hours.

## Observed Flash Flood Threat (IFFT) till 1730 IST of 25-07-2025:

No Flash flood threat observed in last 06 hours.







## Persistent Flash Flood Threat (PFFT) till 2330 IST of 25-07-2025 :

Moderate to High flash flood threat likely over few watersheds & neighbourhoods of following Met Subdivisions during next 6 hours.

**Chhattisgarh** - Jashpur, Korea, Surajpur and Surguja districts.

East Madhya **Pradesh** Sidhi district. Sambalpur and Sundargarh districts. Odisha -Gangetic West Bengal -Pashchim Medinipur, Puruliya and South 24 Parganas districts. Jharkhand - East Singhbhum, Saraikela 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 6 hours.

## 24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 26-07-2025:

Moderate to High flash flood risk likely over few watersheds & neighbourhoods of following Met Subdivisions during next 24 hours.

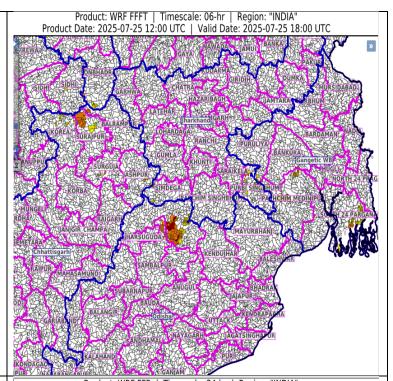
**Chhattisgarh** - Balarampur, Bilaspur, Janjgir\_Champa, Korba, Korea, Raigarh, Surajpur and Surguja districts.

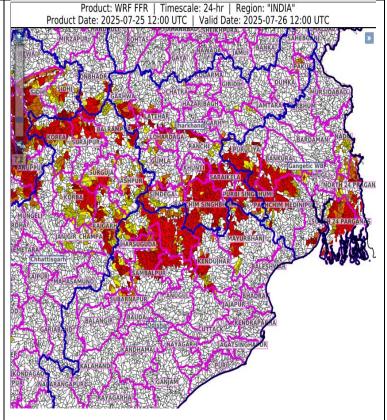
**Odisha** - Baragarh, Deogarh, Jharsuguda, Kendujhar, Mayurbhanj, Sambalpur, Subarnapur and Sundargarh districts.

**Gangetic West Bengal** - Bankura, Eastmednipur, Nadia, North 24 Pragana, Pashchim Medinipur, Puruliya and South 24 Parganas districts.

**Jharkhand** - Dhanbad, East Singhbhum, Garhwa, Gumla, Khunti, Latehar, Lohardaga, Palamu, Ranchi, Saraikela, Simdega and West Singhbhum 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 1730 IST of 26-07-2025:

Moderate to High flash flood risk likely over few watersheds & neighbourhoods of following Met Subdivisions during next 24 hours.

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

**Vidarbha** - Bhandara, Chandrapur, Gadchiroli, Gondiya and Wardha districts.

**West Madhya Pradesh** - Ashoknagar, Betul, Bhopal, Guna, Raisen, Rajgarh, Sehore, Shivpuri, Videsha and Hoshangabad districts.

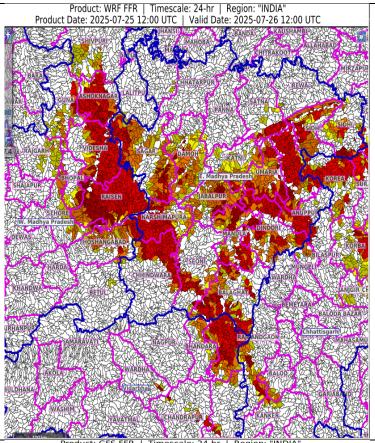
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over Area of Concern (AoC) as shown in map due to expected rainfall occurrence in next 24 hours.

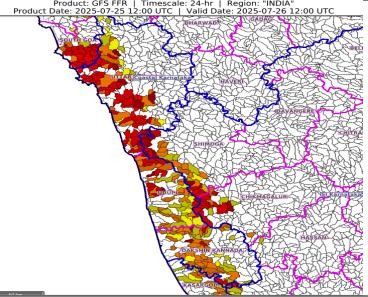
## 24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 26-07-2025 :

**Moderate to High flash flood risk** likely over few watersheds & neighbourhoods of following Met Subdivisions during next 24 hours.

Coastal Karnataka - Dakshin Kannada, Udupi and Uttar Kannada 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.









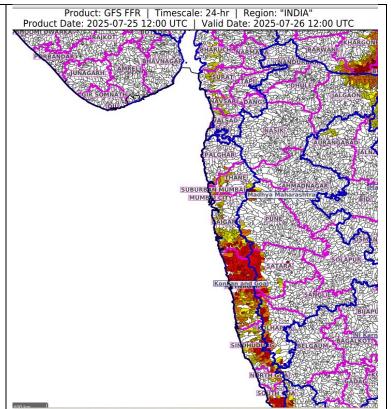
## 24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 26-07-2025:

Moderate to High flash flood risk likely over few watersheds & neighbourhoods of following Met Subdivisions during next 24 hours.

**Gujarat Region** - Daman, Bharuch, Navsari, Surat and Valsad districts.

Konkan & Goa - North Goa, South Goa, Mumbai City, Palghar, Raigarh, Ratnagiri, Sindhudurg, Suburban Mumbai and Thane 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.



Note: Next Bulletin will be issued based on 0530 IST of 26-07-2025.





## **Terms and Terminologies**

#### **Merged Mean Areal Precipitation (MAP)**

This product is derived for each basin based on the best available mean areal precipitation estimates from bias-adjusted satellite/radar estimated rainfall and Gauge data.

#### Flash Flood Guidance (FFG)

The FFG value indicates the total volume of rainfall over the given duration which is just enough to cause bankfull flow at the outlet of the draining stream.

#### **Imminent Flash Flood Threat (IFFT)**

The values indicate the difference of the Merged MAP and the corresponding FFG for the given duration. In this case, the IFFT value is considered a current "observation".

#### **Persistent Flash Flood Threat (PFFT)**

The values indicate the difference of recent persisted Merged MAP and the corresponding FFG of the given duration. In this case, the PFFT is considered a "forecast" with persistence of observed rainfall.

#### **Forecast Flash Flood Threat (FFFT)**

The values indicate the difference of forecasts of mean areal rainfall by NWP models and the corresponding current FFG of the given duration.

### Flash Flood Risk (FFR)

Flash Flood Risk products of 12-hour, 24-hour and 36-hour are relative frequencies of positive flash flood threat for the entire forecast lead time interval. This is a measure of the forecast flash flood occurrence frequency and may be considered as a flash flood outlook.

Flash Flood Threat	Flash Flood Risk
High Threat (Take Action)	High Risk (Take Action)
Moderate threat (Be Prepared)	Moderate Risk (Be Prepared)
Low Threat (Be Updated)	Low Risk (Be Updated)