



**India Meteorological Department**

**(Ministry of Earth Sciences)**

**NATIONAL BULLETIN NO.: 01(BOB/05/2024)**

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**DATED: 13.09.2024**

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**Sub: Depression over northeast Bay of Bengal close to Bangladesh coast**

The well marked low pressure area over northeast Bay of Bengal and adjoining southeast Bangladesh coast moved west-northwestwards, concentrated into a depression and lay centred at 1730 hrs IST of today, the 13<sup>th</sup> September 2024, over northeast Bay of Bengal close to Bangladesh coast, near latitude 22.0° N and longitude 90.8° E, about 60 km southeast of Patuakhali (Bangladesh), 220 km east of Canning (West Bengal) and 260 km east-southeast of Kolkata (West Bengal).

Continuing to move west-northwestwards, it will cross Bangladesh coast near Patuakhali tonight. Thereafter, it will continue to move west-northwestwards across coastal Bangladesh and Gangetic West Bengal during subsequent next 48 hours

Forecast track and intensity are given in the following table:

<b>Date/Time (IST)</b>	<b>Position (Lat. °N/ Long. °E)</b>	<b>Maximum Sustained Surface Wind Speed (Kmph)</b>	<b>Category Of Cyclonic Disturbance</b>
13.09.24/1730	22.0/90.8	45-55 gusting to 65	Depression
13.09.24/2330	22.1/90.2	45-55 gusting to 65	Depression
14.09.24/0530	22.2/89.4	45-55 gusting to 65	Depression
14.09.24/1130	22.4/88.8	45-55 gusting to 65	Depression
14.09.24/1730	22.5/88.2	45-55 gusting to 65	Depression
15.09.24/0530	22.5/87.5	40-50 gusting to 60	Depression
15.09.24/1730	22.5/86.7	35-45 gusting to 55	Depression

**Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%**

**Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.**

## Warnings:

### (i) Rainfall warning

**Gangetic West Bengal:** Light to moderate rainfall at most places is very likely with **heavy to very heavy rainfall** at few places and **extremely heavy rainfall** at isolated places on 13<sup>th</sup> and 14<sup>th</sup>; **heavy to very heavy rainfall** at isolated places on 15<sup>th</sup> September.

**Odisha:** Light to moderate rainfall at most places is very likely with **heavy to very heavy rainfall** at isolated places on 13<sup>th</sup>; **heavy to very heavy rainfall** at a few places and **extremely heavy rainfall** at isolated places on 14<sup>th</sup> and **heavy to very heavy rainfall** at isolated places on 15<sup>th</sup> September.

**Jharkhand:** Light to moderate rainfall at most places with isolated **heavy rainfall** very likely on 13<sup>th</sup> and **heavy to very heavy rainfall** at isolated places on 14<sup>th</sup> & 15<sup>th</sup> September.

**Bihar:** Light to moderate rainfall at most places with **heavy rainfall** at isolated places very likely during 13<sup>th</sup>-15<sup>th</sup> September.

**Chhattisgarh:** Light to moderate rainfall at most places with isolated **heavy rainfall** on 14<sup>th</sup> & 15<sup>th</sup> September and **heavy to very rainfall** at isolated places on 16<sup>th</sup> September.

**Mizoram & Tripura:** Light to moderate rainfall at most places is very likely with **heavy to very heavy rainfall** at isolated places on 13<sup>th</sup> and isolated **heavy rainfall** on 14<sup>th</sup> September.

**Assam & Meghalaya:** Light to moderate rainfall at many places is very likely with isolated **heavy rainfall** during 13<sup>th</sup> -14<sup>th</sup> September.

### (ii) Flash Flood Guidance: (Graphics Attached)

#### 24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 14-09-2024:

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

**Odisha** - Baleswar, Mayurbhanj and Sundargarh districts.

**Gangetic West Bengal** - Bankura, Bardhaman, Birbhum, East and West Medinipur, Howrah, Hooghly, Kolkata, Murshidabad, Nadia, North & South 24 Parganas districts.

**Jharkhand** - Deoghar, Dumka, East Singhbhum, Godda, Pakur and Sahebganj districts.

**Mizoram and Tripura** - Chandel, Ukhrul, Lawngtlai, Lunglei, Saiha, Serchhip and South Tripura districts  
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over Area of Concern as shown in map due to expected rainfall occurrence in next 24 hours.

### (iii) Wind warning:

Squally wind speed reaching 45-55 kmph gusting to 65 kmph is prevailing over north Bay of Bengal and along & off Bangladesh, West Bengal, and north Odisha coasts. It is likely to continue so till evening of 14<sup>th</sup> September. It is likely to decrease, gradually becoming 40-50 kmph gusting to 60 kmph by morning of 15<sup>th</sup> September.

Squally wind speed reaching 35-45 kmph gusting to 55 kmph likely over Gangetic west Bengal and adjoining north Odisha during 14<sup>th</sup> & 15<sup>th</sup> September and over Jharkhand on 15<sup>th</sup> and 16<sup>th</sup> September.

### (iv) Sea Condition:

Rough to very rough sea condition is very likely to prevail over north Bay of Bengal and along & off West Bengal-Odisha coasts till morning of 16<sup>th</sup> September.

### (iv) Fishermen Warning:

Fishermen are advised not to venture into north Bay of Bengal and along & off Bangladesh, West Bengal, and Odisha coasts till morning of 16<sup>th</sup> September.

### Impact Expected (Gangetic West Bengal, Odisha, Bihar, Jharkhand, Chhattisgarh, Mizoram, and Tripura due to heavy rainfall)

- ✓ 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 and roadways due to water logging in roads and poor visibility due to heavy rain leading to increased travel time and incidents

**Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%**

**Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.**

- ✓ Likely disruption of marine and inland water transportation like small boats and trawlers.
- ✓ Minor damage to kutch roads.
- ✓ Possibilities of damage to vulnerable structure.
- ✓ Localized Landslides/Mudslides/landslips/mud slips/land sinks/mud sinks.
- ✓ Damage to horticulture and standing crops in some areas due to inundation and wind.
- ✓ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

**Action Suggested (Gangetic West Bengal, Odisha, Bihar, Jharkhand, Chhattisgarh, Mizoram, and Tripura due to heavy rainfall)**

- ✓ Fishermen are advised not to venture into north Bay of Bengal from 13th to 16th September morning.
- ✓ Judicious regulation of surface transports including railways and roadways and onshore/offshore activities.
- ✓ 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 Heavy Rainfall likely over various parts of the country**

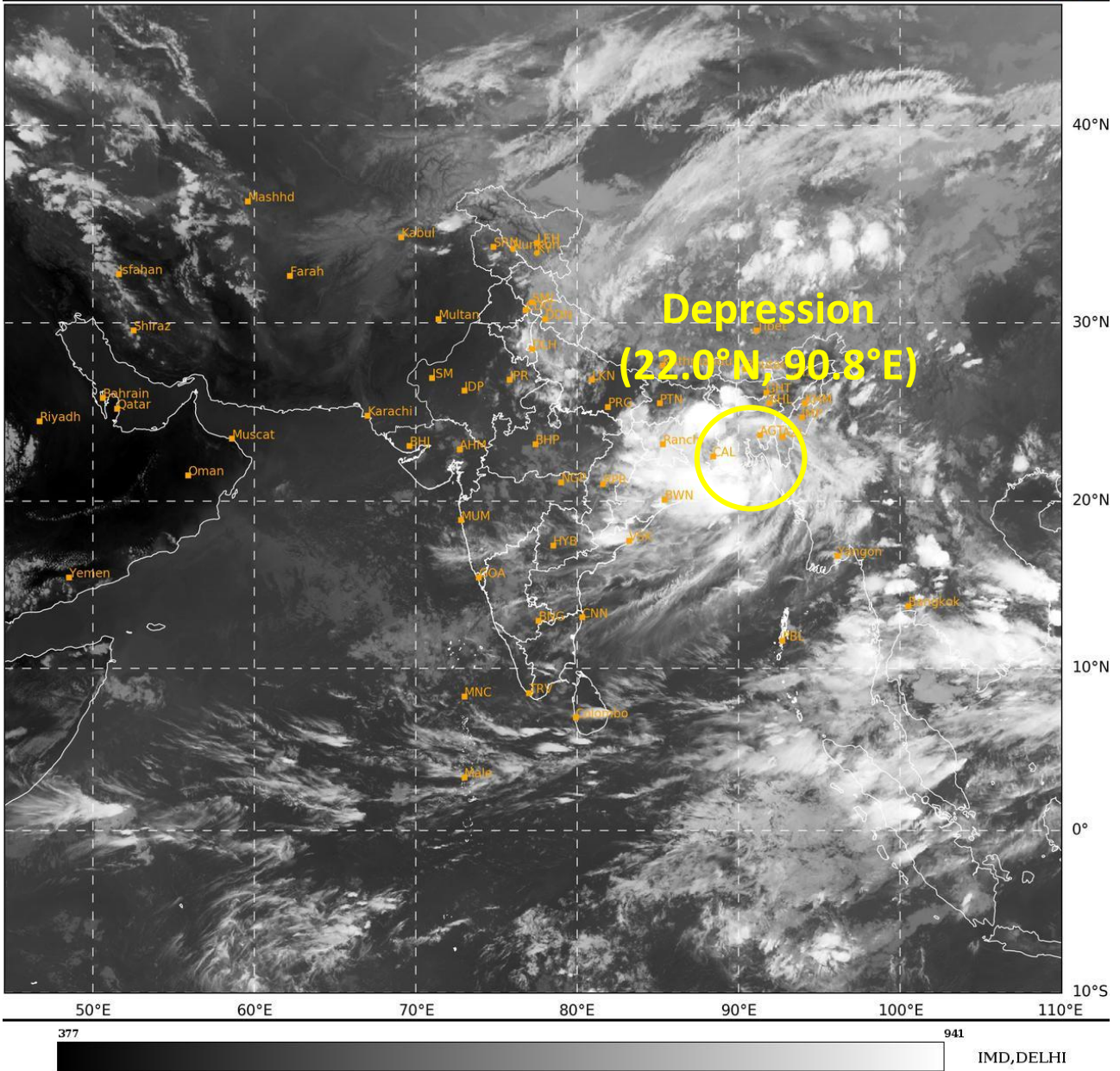
- ✓ Provide mechanical support to horticultural crops & staking to vegetables.
- ✓ Keep the harvested produce at safer place.

*Significant amount of rainfall (in cm) recorded from 0830 hrs IST to 1730 hrs IST of today, the 13<sup>th</sup> September (is given in Annexure –I).*

*The next bulletin will be issued at 0130 hrs IST of 14<sup>th</sup> September, 2024.*

**(Dr Suprit Kumar)**  
**Scientist-E, RSMC, New Delhi**

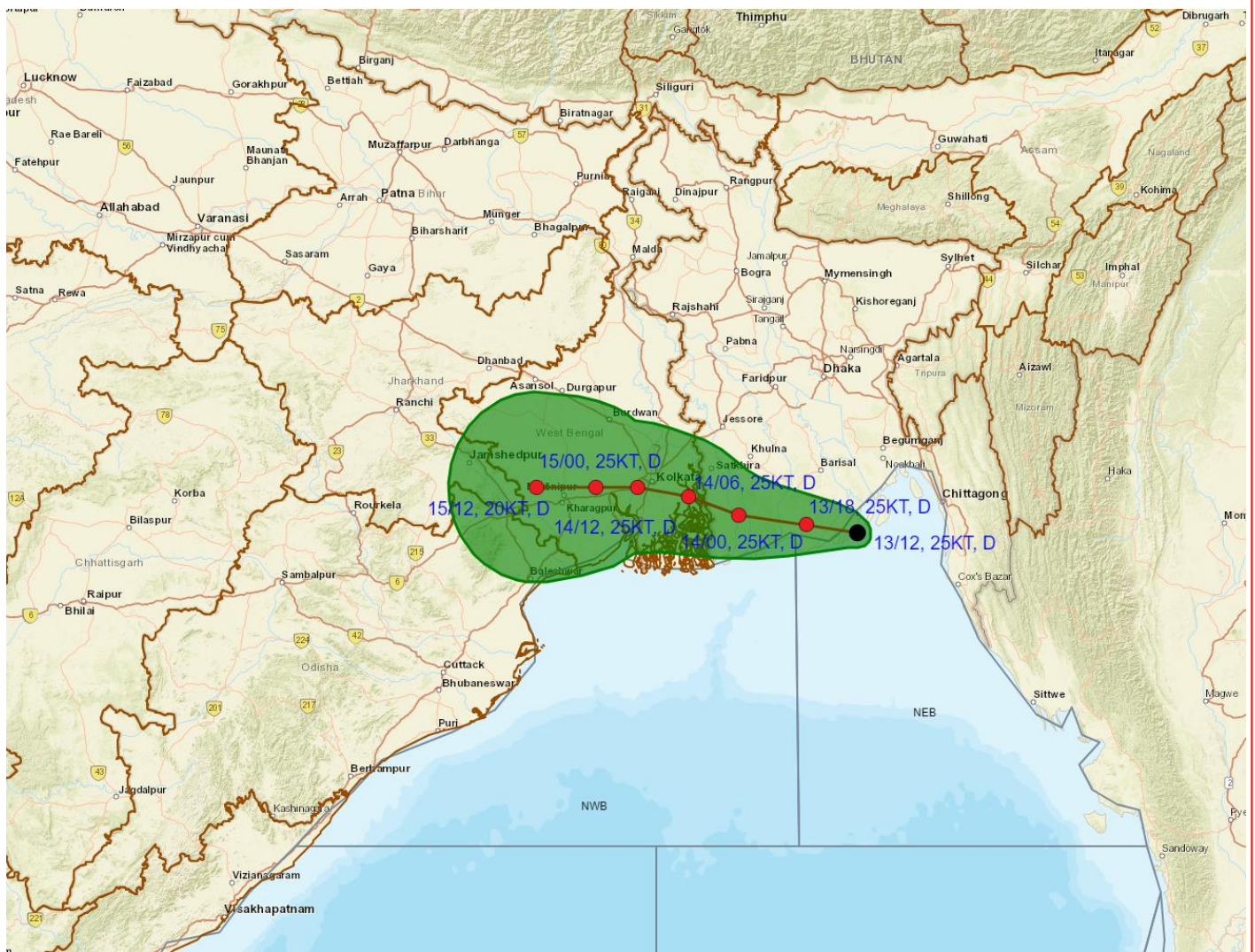
*Copy to: CRS, Pune/RMC Chennai /RMC Kolkata/RMC Guwahati/MC Bhubaneswar/MC Ranchi/MC Patna/MC Raipur/ MC Agartala/ MC Shillong/MC Aizawl*



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**OBSERVED AND FORECAST TRACK OF DEPRESSION OVER NORTHEAST BAY OF BENGAL CLOSE TO BANGLADESH COAST BASED ON 1200 UTC (1730 IST) OF 13<sup>TH</sup> SEPTEMBER, 2024.**

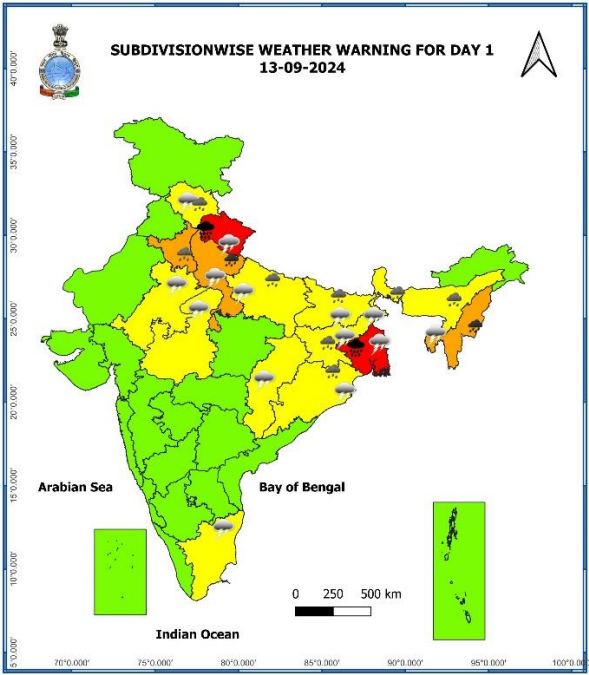


DATE/TIME IN UTC  
 IST=UTC + 0530  
 L: LOW PRESSURE AREA  
 WML: WELL MARKED LOW PRESSURE AREA  
 D: DEPRESSION (17-27 KT)  
 DD: DEEP DEPRESSION (28-33 KT)  
 CS: CYCLONIC STORM (34-47 KT)  
 SCS: SEVERE CYCLONIC STORM (48-63KT)  
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)  
 SuCS: SUPER CYCLONIC STORM ( $\geq$  120 KT)

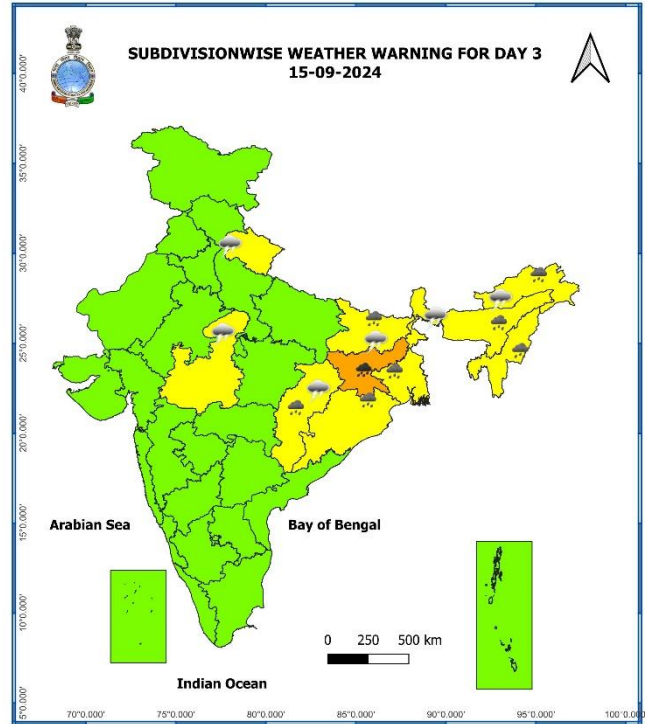
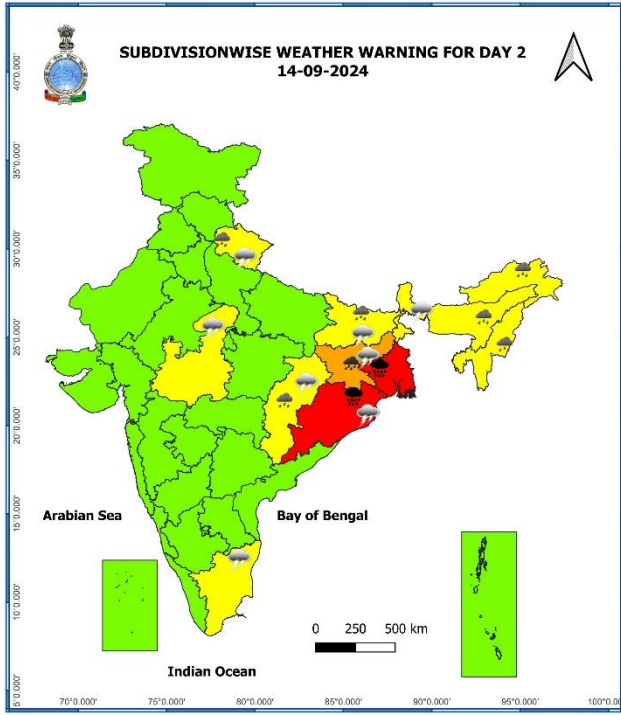
● LESS THAN 34 KT  
 ○ 34-47 KT  
 ○  $\geq$  48 KT  
 — OBSERVED TRACK  
 — FORECAST TRACK  
 ▲ CONE OF UNCERTAINTY

**Warning Graphics**

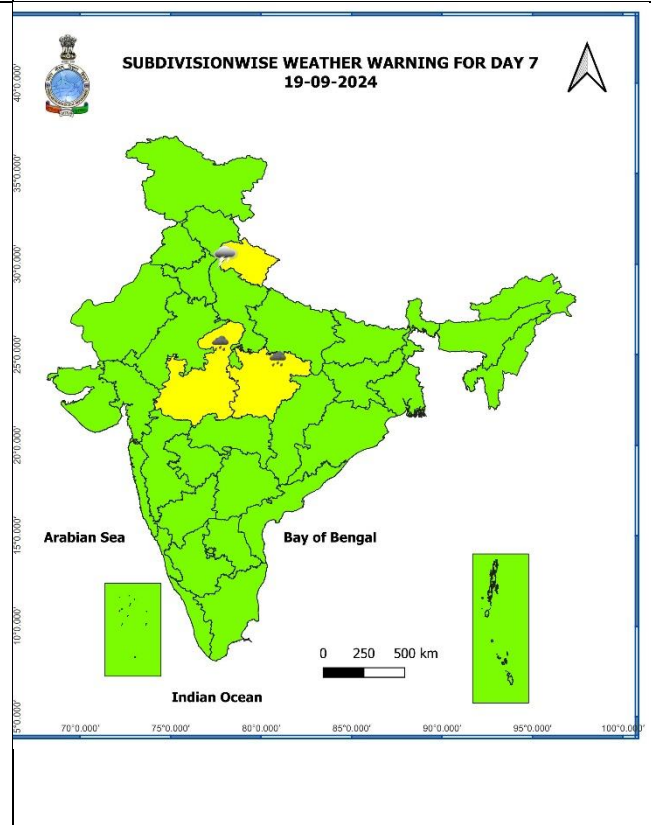
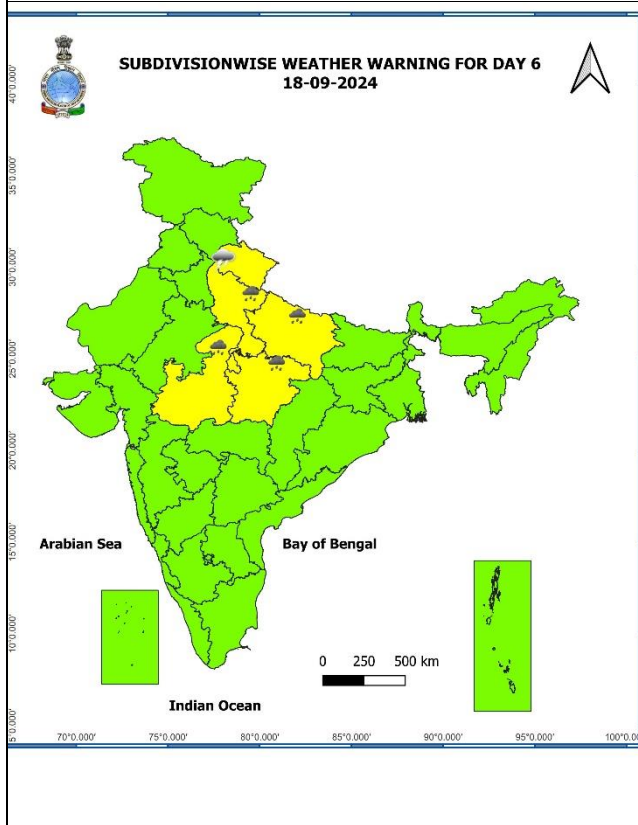
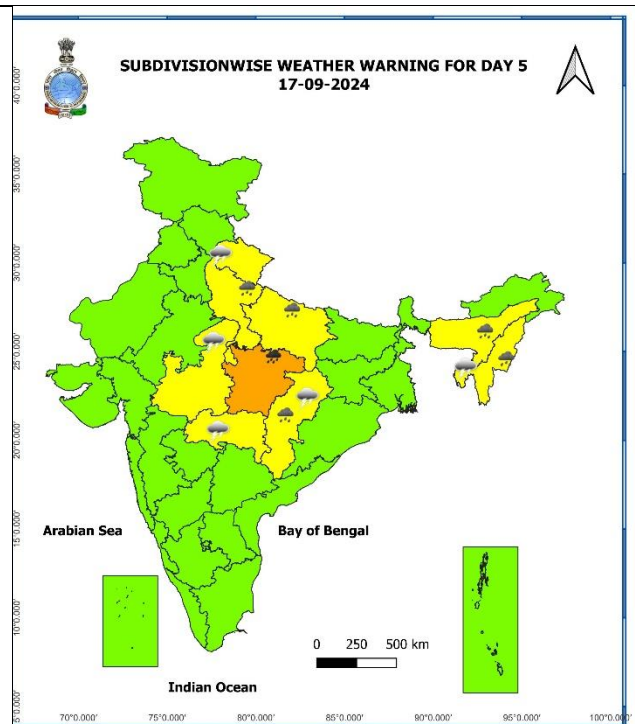
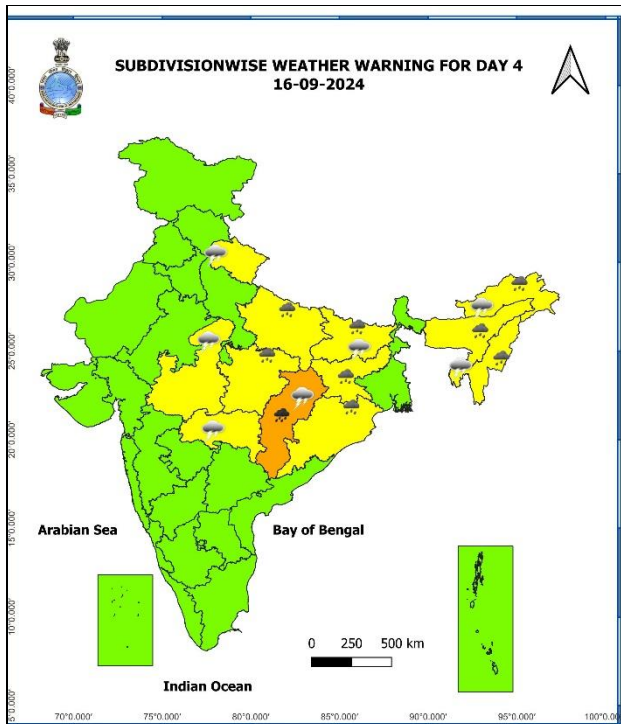
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%  
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- |  |                      |  |            |  |                      |                           |
|--|----------------------|--|------------|--|----------------------|---------------------------|
|  | Fog                  |  | Heavy Snow |  | Cold Day             | <b>Subdivision Colour</b> |
|  | Heavy Rain           |  | Hailstorm  |  | Ground Frost         |                           |
|  | Very Heavy Rain      |  | Dust Storm |  | Strong Surface Winds |                           |
|  | Extremely Heavy Rain |  | Heat Wave  |  | Thunder & Lightning  |                           |
|  |                      |  | Cold Wave  |  | Hot and Humid        |                           |



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

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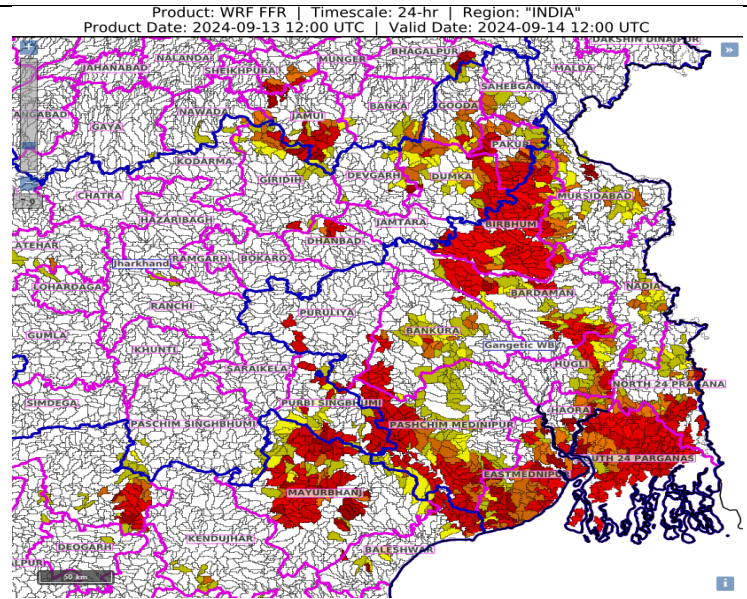
## Flash Flood Guidance

**4 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 14-09-2024 :**

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- Odisha** - Baleshwar, Mayurbhanj and Sundargarh districts.
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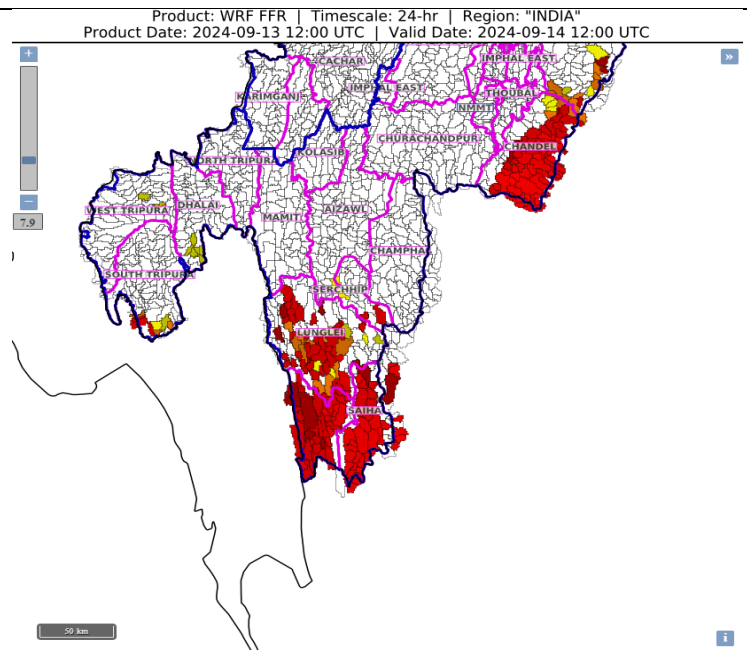


**24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 14-09-2024 :**

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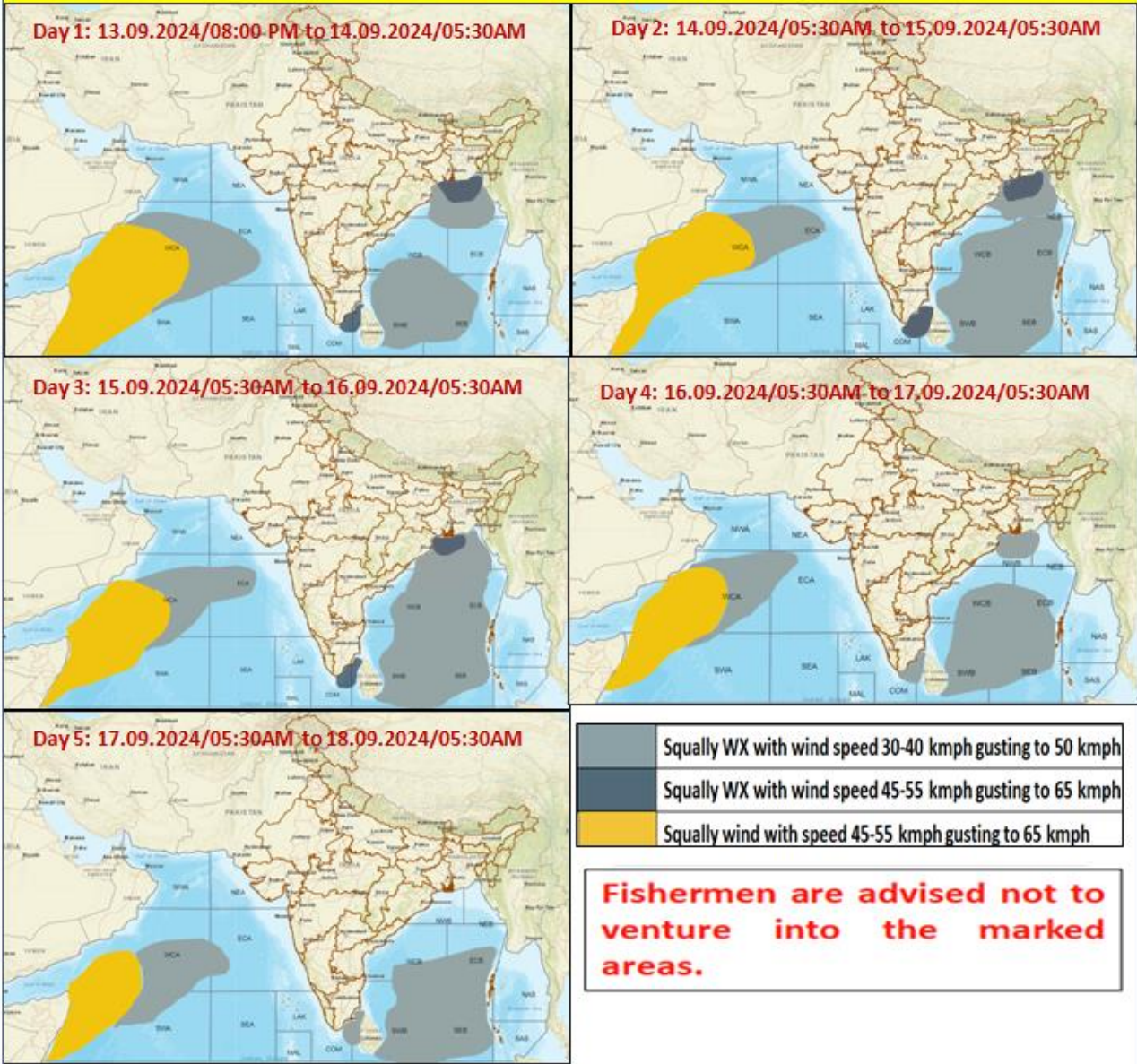
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### Fishermen Warning Graphics



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**Significant Rainfall recorded during past 24 hours till 0830 hours IST of today  
13.09.2024 (in cm):**

- ❖ **Uttarakhand:** Pancheshwar & Nainital-15, Kashipur-14, Chorgalia & Bhimtal-13, Rudrapur-12, Champawat, Pati, Devidhura, Lohaghat-11 each, Dahari-10, Pithoragarh-9, Pantnagar-8, Mukteshwar-5, Khatima-3, New Tehri & Dehradun-2 each;
- ❖ **Himachal Pradesh:** Shimla-2;
- ❖ **Delhi:** Palam-6, Ayanagar & Safdarjung-5 each;
- ❖ **Gangetic West Bengal:** Bagati-6, Berhampore, Haldia & Sagar Islands-5 each, Uluberia-4, Alipore-3, Barrackpore, Salt Lake & Digha-2 each;
- ❖ **Jharkhand:** Daltonganj-5;
- ❖ **Odisha:** Rourkela-4
- ❖ **West Uttar Pradesh:** Sarsawa-4, Muzaffarnagar & Najibabad-2 each;

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