



India Meteorological Department

(Ministry of Earth Sciences)

NATIONAL BULLETIN NO.: 14 (BOB/04/2024)

TIME OF ISSUE: 2015 HOURS IST

DATED: 10.09.2024

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Sub: Well Marked Low Pressure Area over Northeast Madhya Pradesh and neighbourhood

The depression over North Chhattisgarh moved northwestwards and weakened into a well marked low pressure area over Northeast Madhya Pradesh and neighbourhood at 1730 hours IST of today, the 10th September.

However, there is a possibility of re-intensification of the system into a depression around evening of 11th September over central parts of North Madhya Pradesh and adjoining Uttar Pradesh.

Thus, the system is under continuous monitoring.

Warnings:

(i) Rainfall warning

Chhattisgarh: Light to moderate rainfall at most places is very likely with **heavy to very heavy rainfall** at a few places on 10th September.

East Madhya Pradesh: Light to moderate rainfall at most places is very likely with **heavy to very heavy rainfall** at a few places and **extremely heavy falls** at isolated places on 10th and **heavy to very heavy rainfall** at isolated places during 11th to 14th September.

West Madhya Pradesh: Light to moderate rainfall at many places is very likely with **heavy to very heavy rainfall** at a few places and **extremely heavy rainfall** at isolated places on 10th & 11th; **heavy to very heavy rainfall** at a few places during 12th to 14th September.

Vidarbha: Light to moderate rainfall at most places is likely with **heavy to very heavy rainfall** at a few places on 10th and 11th September.

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.

South Uttar Pradesh: Light to moderate rainfall at many places is likely with **heavy rainfall** at isolated places on 10th and heavy to very heavy at isolated places during 11th – 13th September.

Odisha: Light to moderate rainfall at many places is very likely with **heavy rainfall** at isolated places over northwest Odisha on 10th September.

(iii) Flash Flood Guidance: (Graphics Attached)

24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 11-09-2024 :

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

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

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

East Rajasthan - Banswara, Baran, Bundi, Dungarpur, Pratapgarh, Jhalawar and Kota districts.

Vidarbha - Bhandara, Gadchiroli, Gondiya and Amrawati districts.

West Madhya Pradesh - Agar-Malwa, Betul, Bhopal, Burhanpur, Dewas, Dhar, Guna, Harda, Jhabua, Khandwa, Raisen, Rajgarh, Ratlam, Videsha and Hoshangabad 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.

(iv) Impact Expected (Chhattisgarh, Madhya Pradesh, Vidarbha and South Uttar Pradesh 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 leading to increased travel time.
- ✓ Minor damage to kutchra 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)

(v) Action Suggested (Chhattisgarh, Madhya Pradesh, Vidarbha and South Uttar Pradesh)

- ✓ Judicious regulation of surface transports including railways and roadways.
- ✓ 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.

(vi) 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.

Rainfall recorded during 0830 hrs IST to 1730 hours IST of 10th September (in cm) is placed in Annexure-1

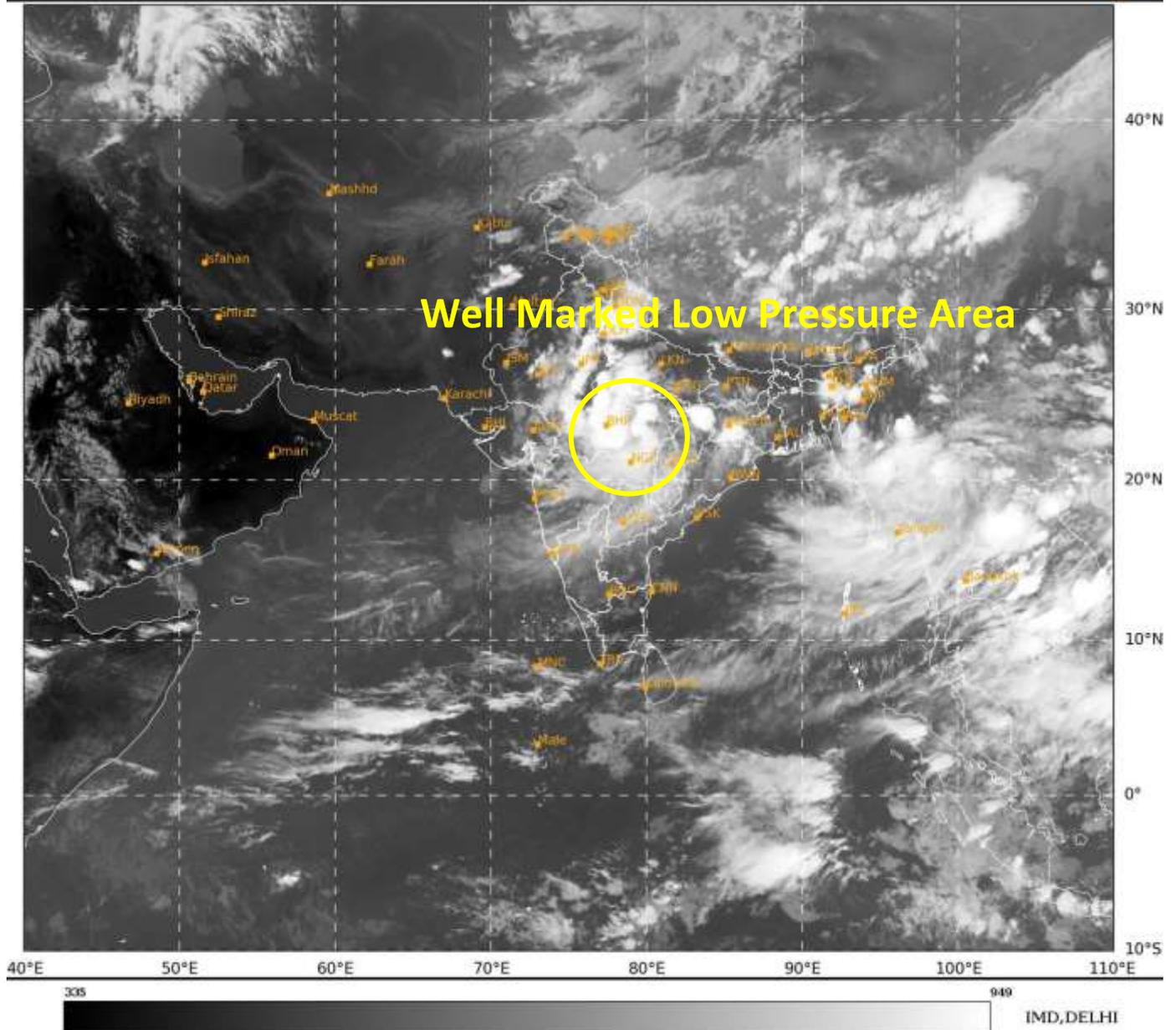
The next bulletin will be issued at 1130 hrs IST of 11th September, 2024.

(Ananda Kumar Das)
Scientist- F, RSMC, New Delhi

*Copy to: CRS, Pune/ACWC Kolkata/ACWC Chennai/CWC Bhubaneswar/CWC Visakhapatnam/
/MC Raipur/MC Ranchi/MC Hyderabad/MC Amaravati/MC Lucknow/MC Bhopal*

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OBSERVED TRACK OF DEPRESSION OVER BAY OF BENGAL DURING 08th TO 10th SEPTEMBER, 2024.

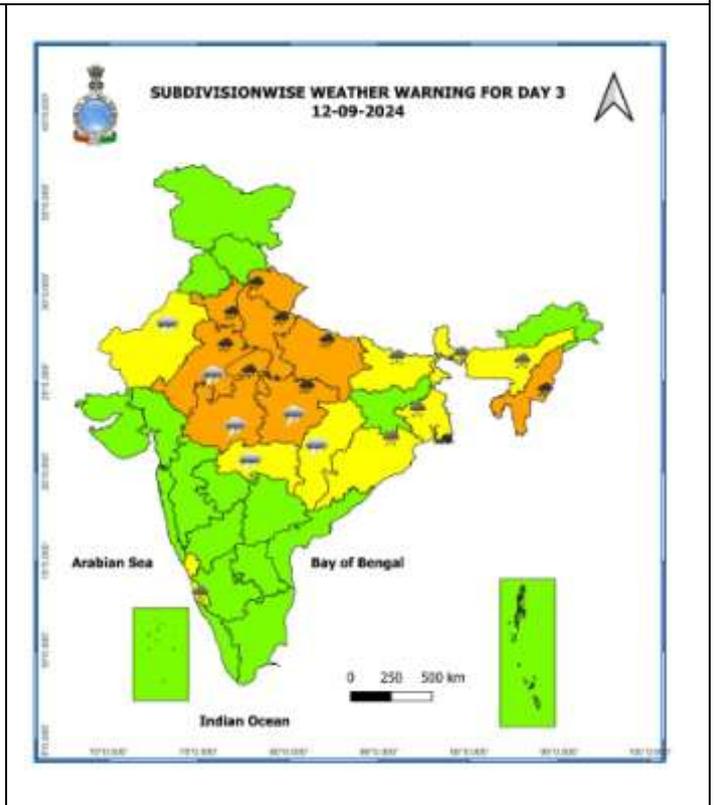
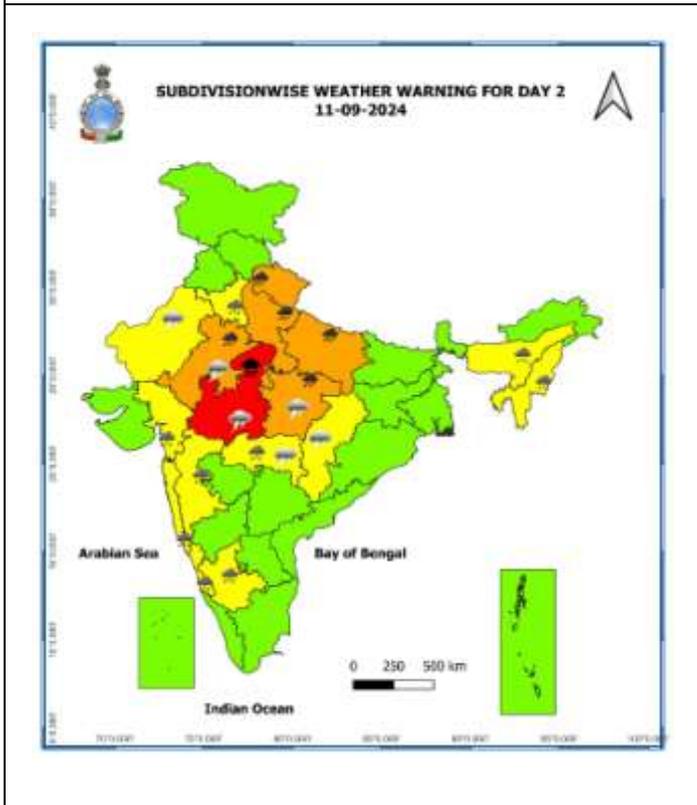
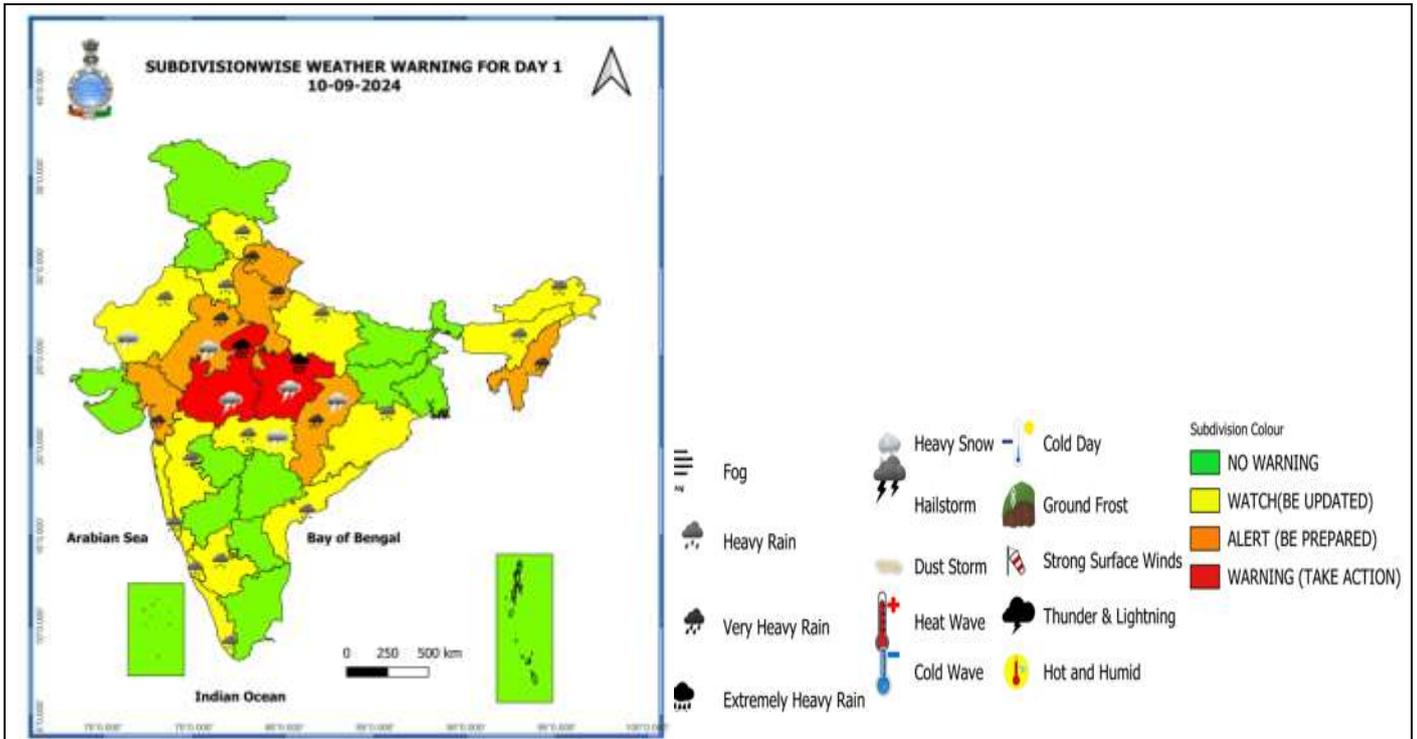


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (≥ 20 KT)

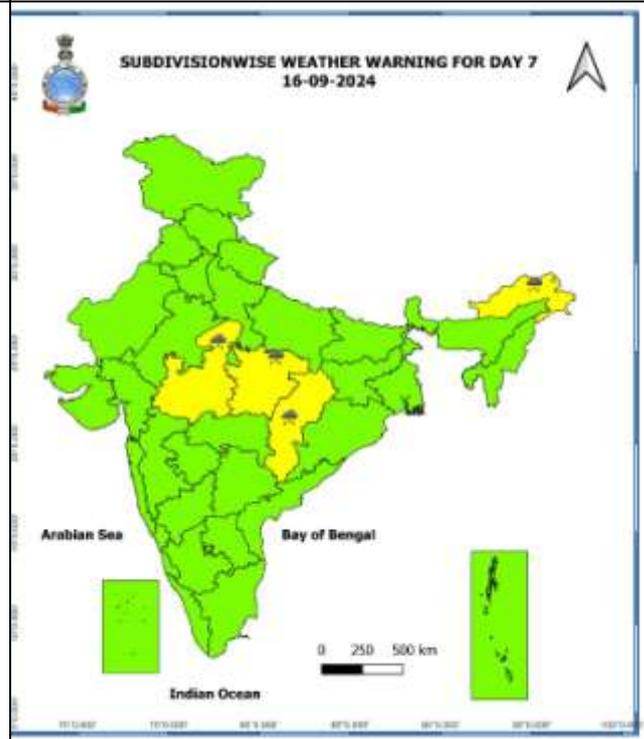
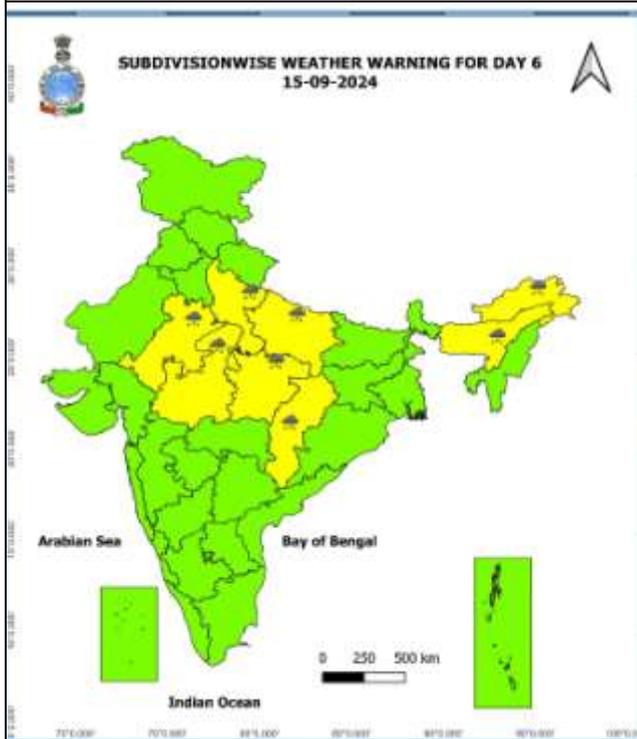
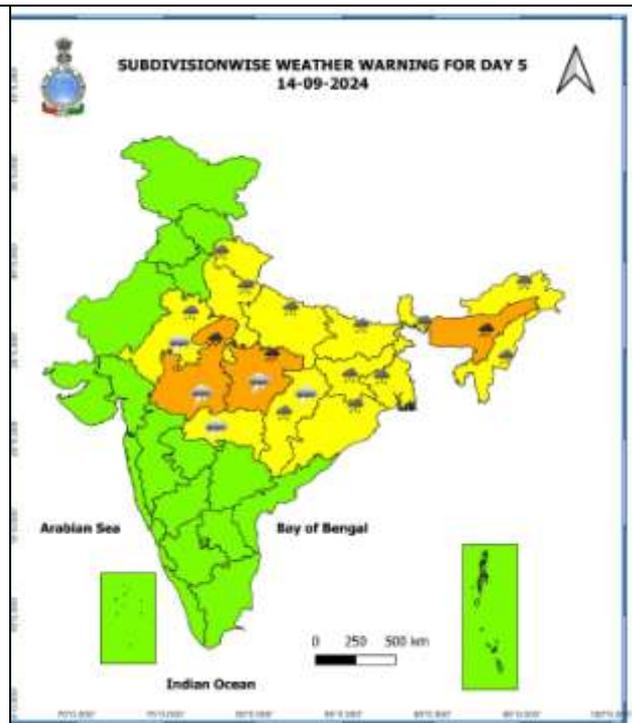
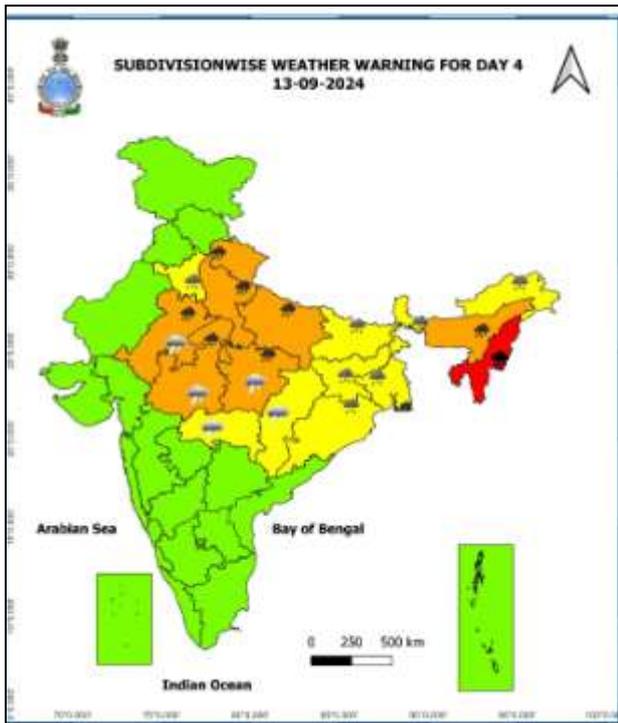
- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

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Warning Graphics



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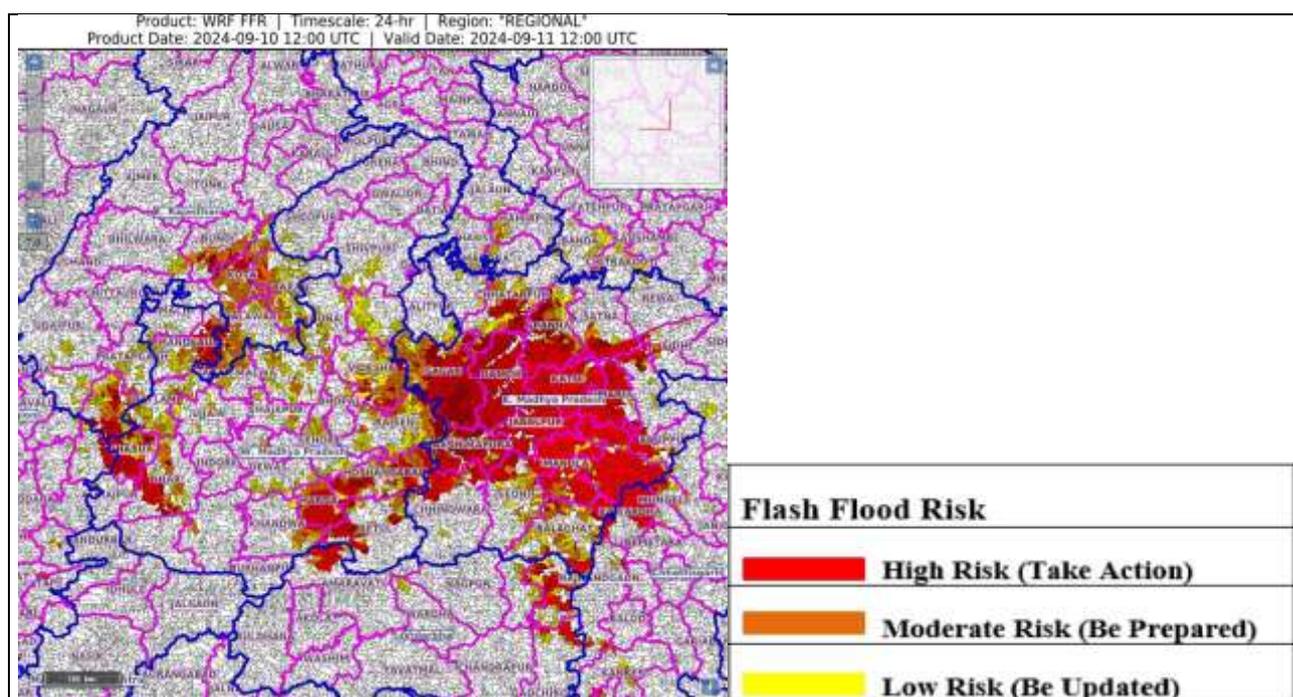


- Action may be taken based on **ORANGE AND RED COLOUR** warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

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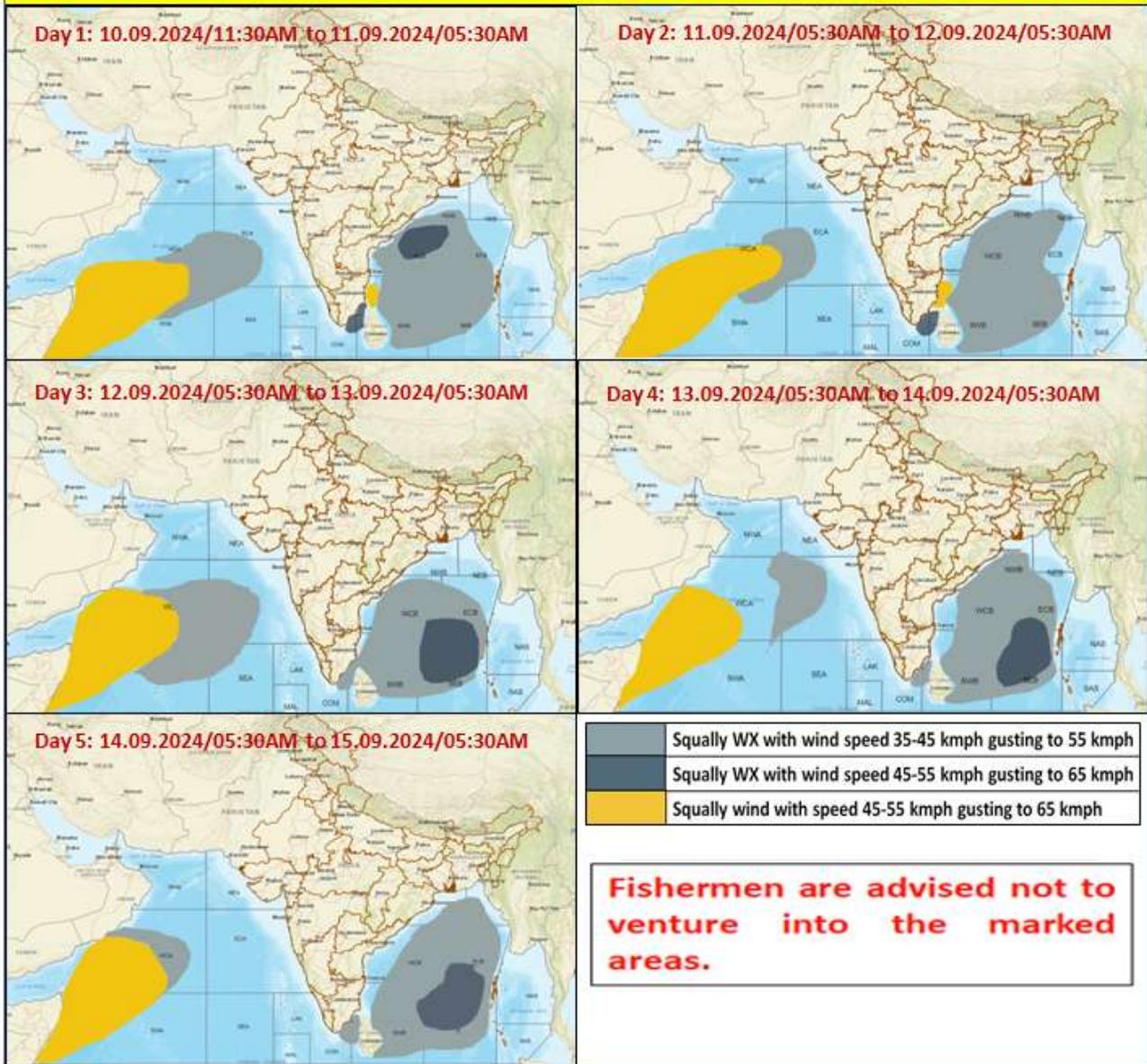
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Fishermen Warning Graphics



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ANNEXURE –I

Significant rainfall recorded from 0830 hrs IST to 1730 hrs IST of today, the 10th September, 2024 (cm):

East Madhya Pradesh: Seoni 16, Malanjkhanda 8, Mandla 7, Chhindwara 6;

Gujarat State: Surat 9, Navsari 6, Chhotaudepur 6, Patan 3, Ahmadabad 3, Dahod 2;

West Uttar Pradesh: Muzaffarnagar 9, East Rajasthan: Churu 7, Ajmer 4, Mount Abu 3;

Vidarbha: Gondia 3; Kerala: Ayyankunnu, Aralam, and Panniyoor, 3 each; Pinarayi, 2;

Jharkhand: Ranchi 2;

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