



**India Meteorological Department
(Ministry of Earth Sciences)**

NATIONAL BULLETIN NO.: 21 (BOB/05/2024)

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Sub: Depression over Northeast Madhya Pradesh

The depression over North Chhattisgarh and adjoining Northeast Madhya Pradesh moved west-northwestwards with a speed of 25 kmph during past 6 hours and lay centered at 1730 hours IST of today, the 17th September 2024, over **Northeast Madhya Pradesh** near latitude 24.0° N and longitude 81.3° E, about 70 km southwest of Sidhi (Madhya Pradesh), 80 km southeast of Satna (Madhya Pradesh), and 180 km southeast of Khajuraho (Madhya Pradesh).

It is likely to move nearly west-northwestwards across northeast Madhya Pradesh and weaken into a Well-Marked Low Pressure Area during next 12 hours.

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

Madhya Pradesh: Light to moderate rainfall at most places with **heavy to very heavy rainfall** at isolated places is likely over North Madhya Pradesh on 17th September and **heavy rainfall** at isolated places on 18th September over Northwest Madhya Pradesh.

Uttar Pradesh: Light to moderate rainfall at many places with **heavy to very rainfall** at isolated places over Southeast and Southwest Uttar Pradesh on 17th September. Light to moderate rainfall at many places with **heavy rainfall** at isolated places over Southwest Uttar Pradesh on 18th September.

Jharkhand: Light to moderate rainfall at most places with **heavy rainfall** at isolated places over Jharkhand on 17th September.

Bihar: Light to moderate rainfall at most places with **heavy rainfall** at isolated places is very likely over South Bihar on 17th September.

Chhattisgarh: Light to moderate rainfall at most places with **heavy rainfall** at isolated places over North Chhattisgarh on 17th September.

East Rajasthan: Light to moderate rainfall at many places with **heavy rainfall** at isolated places on 17th September.

(ii) Wind warning:

Squally wind speed reaching 40-50 kmph gusting to 60 kmph over Northeast Madhya Pradesh, North Chhattisgarh, South Uttar Pradesh & North Chhattisgarh till night of 17th September and decrease thereafter.

Impact Expected (North Madhya Pradesh, South Uttar Pradesh, North Chhattisgarh and Jharkhand due to heavy rainfall and strong winds)

- ✓ 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
- ✓ Likely disruption of inland water transportation like small boats.
- ✓ 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 (North Madhya Pradesh, southeast Uttar Pradesh, Jharkhand, North Chhattisgarh and South Bihar due to heavy rainfall and strong winds)

- ✓ Judicious regulation of surface transports including railways.
- ✓ 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 places.

Significant amount of rainfall (from 0830 hours IST to 1730 hours IST of today, the 17th September) (in cm) is placed at Annexure-1.

The next bulletin will be issued at 0230 hrs IST of the 18th September, 2024.

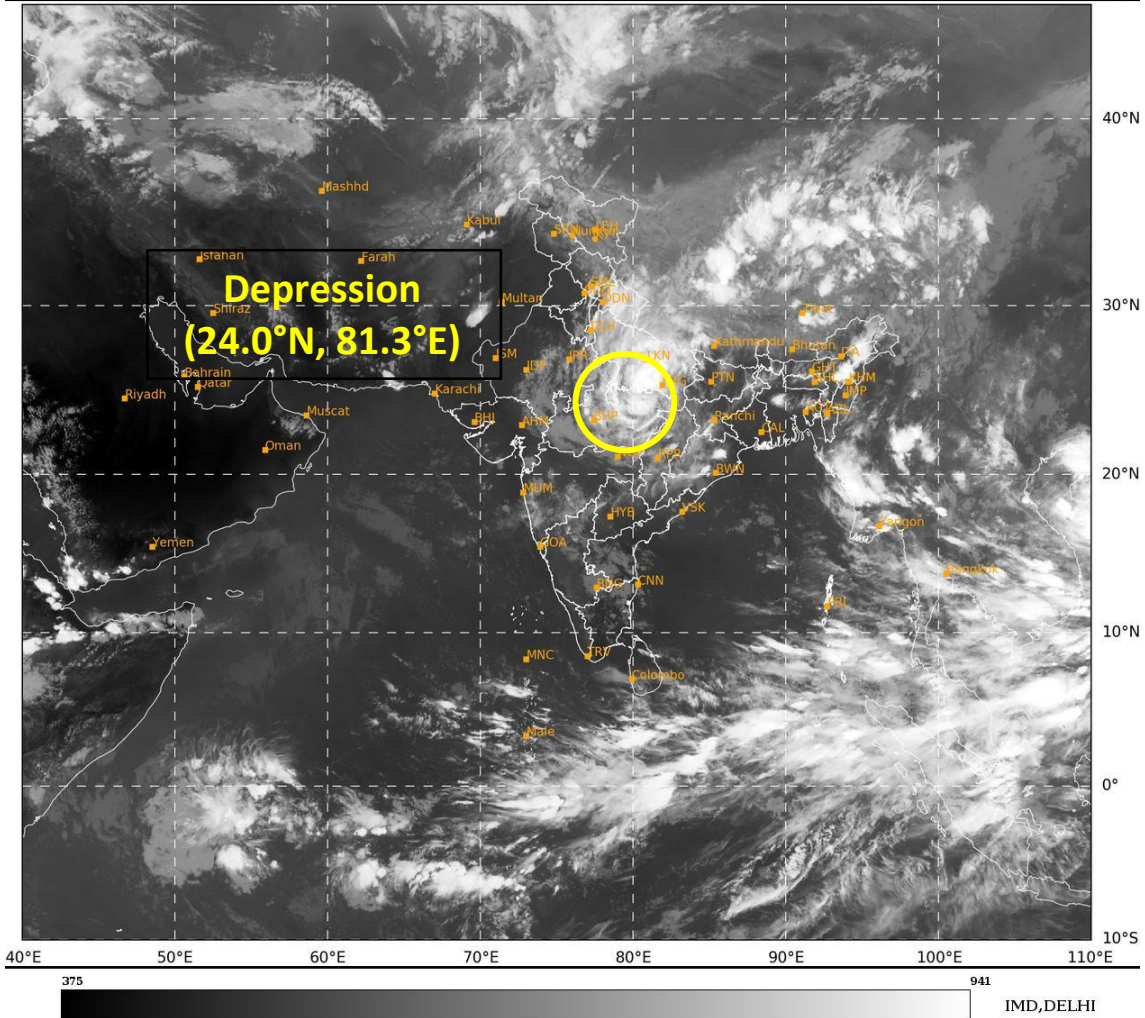
(Dr. Suprit Kumar)

Scientist-E, RSMC, New Delhi

Copy to: CRS, Pune/RMC Chennai /RMC Kolkata/MC Ranchi/MC Patna/MC Raipur/MC Bhopal/MC Lucknow

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

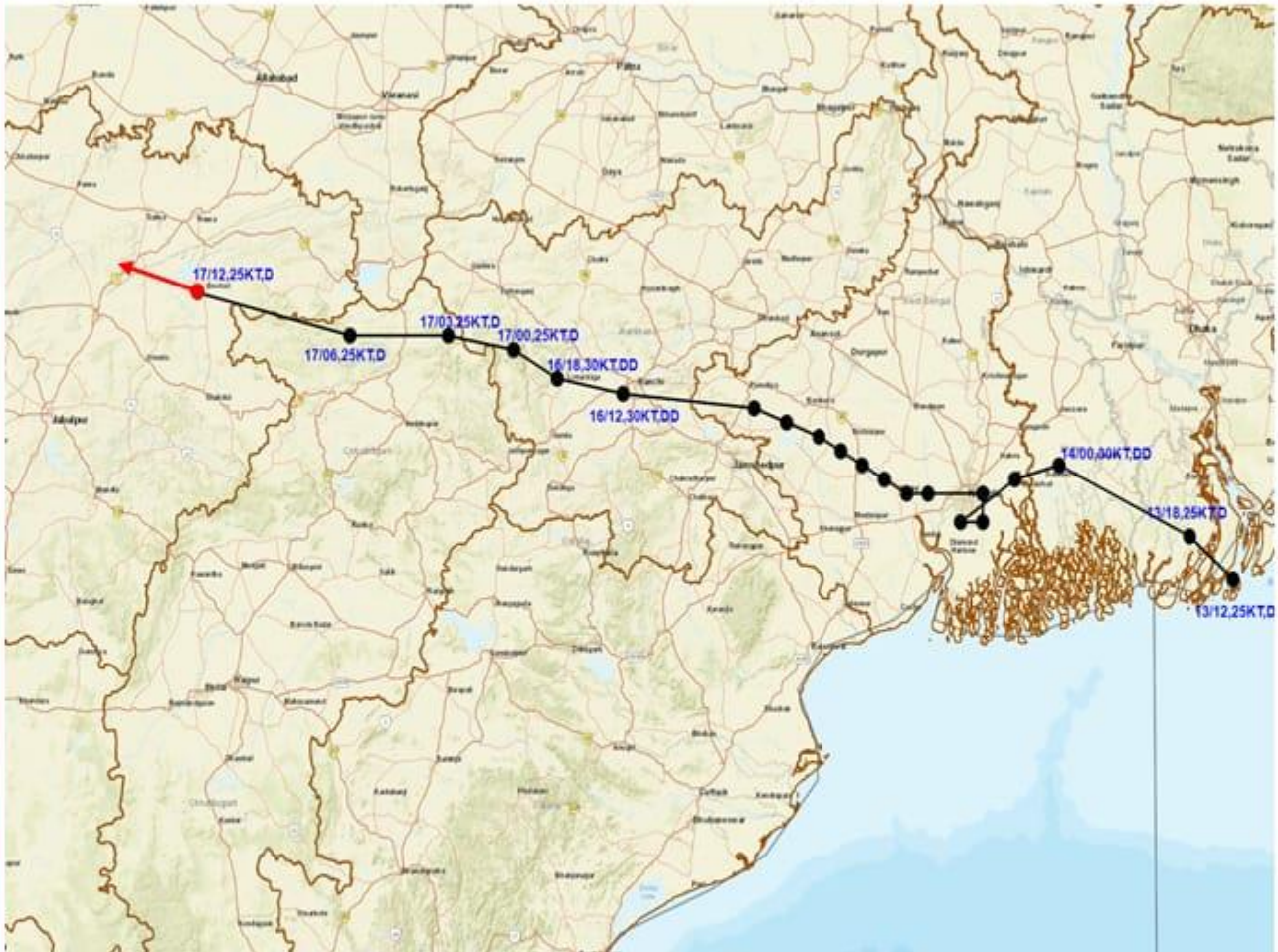
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OBSERVED AND FORECAST TRACK OF DEPRESSION OVER NORTHEAST MADHYA PRADESH BASED ON 1200 UTC (1730 IST) OF 17TH SEPTEMBER 2024.

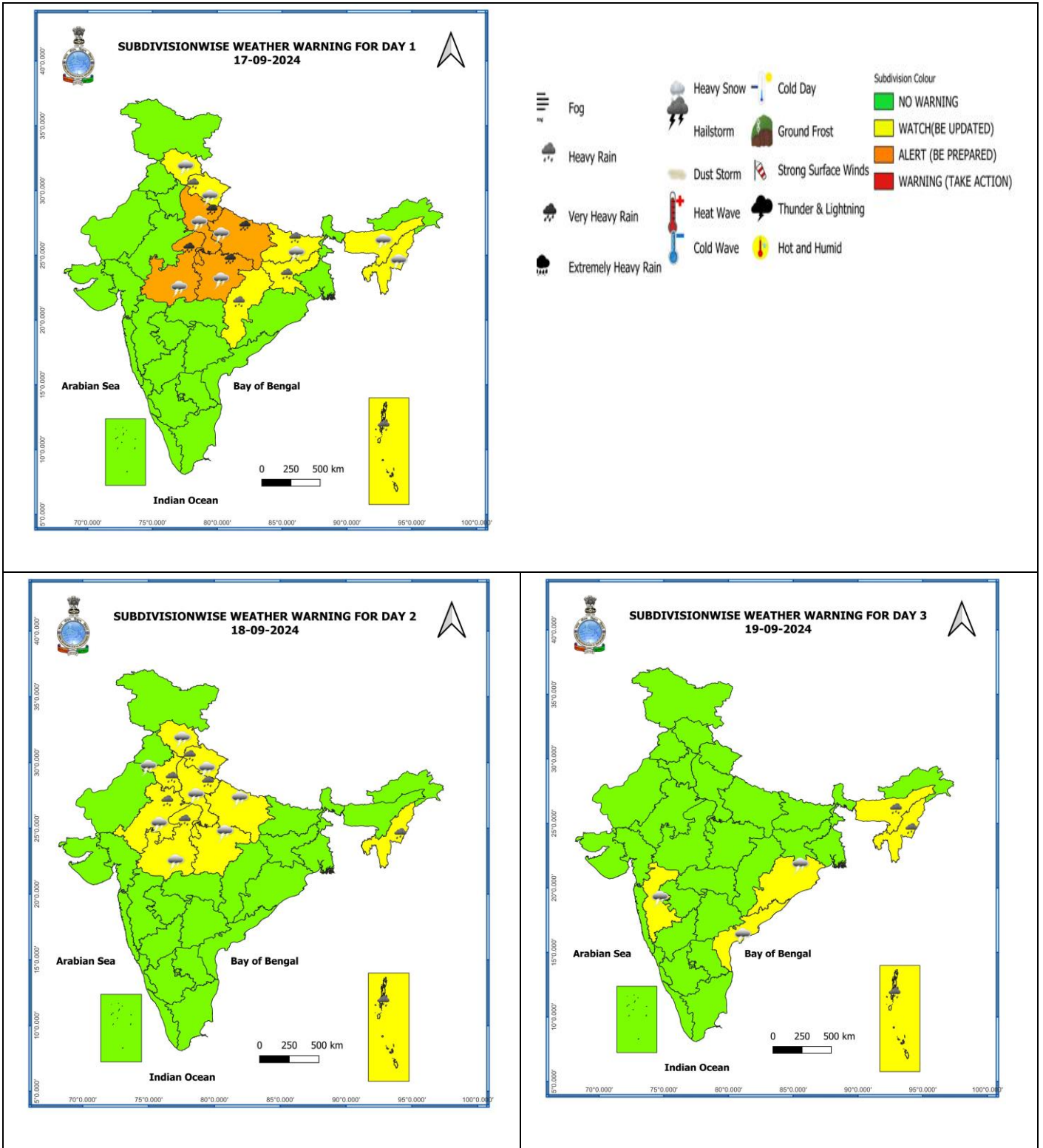


DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119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

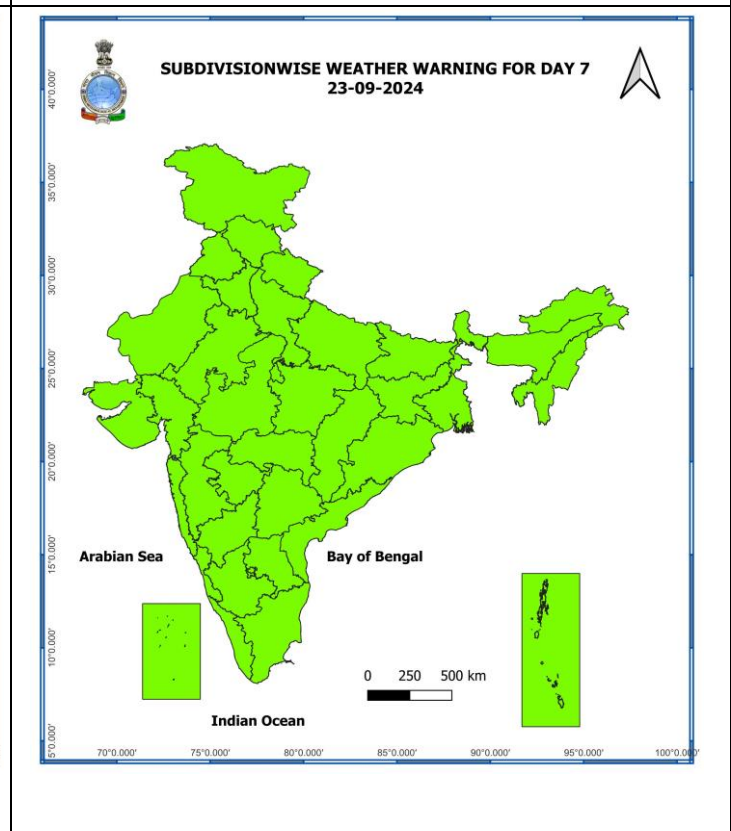
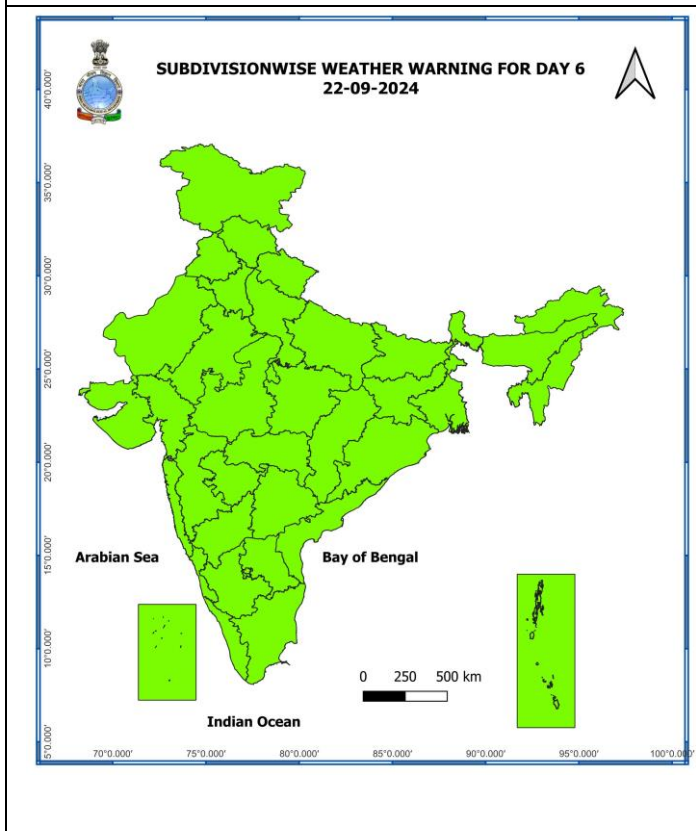
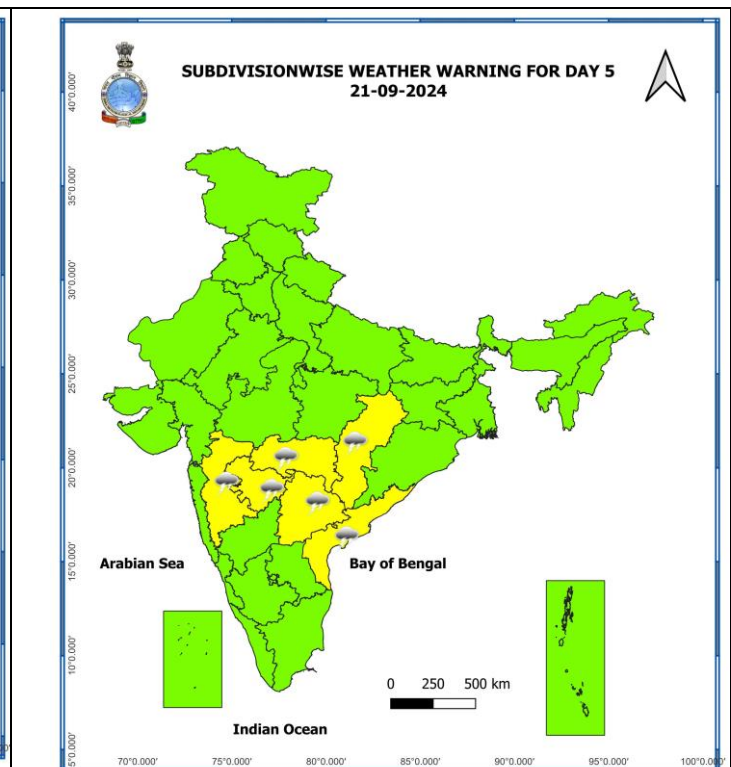
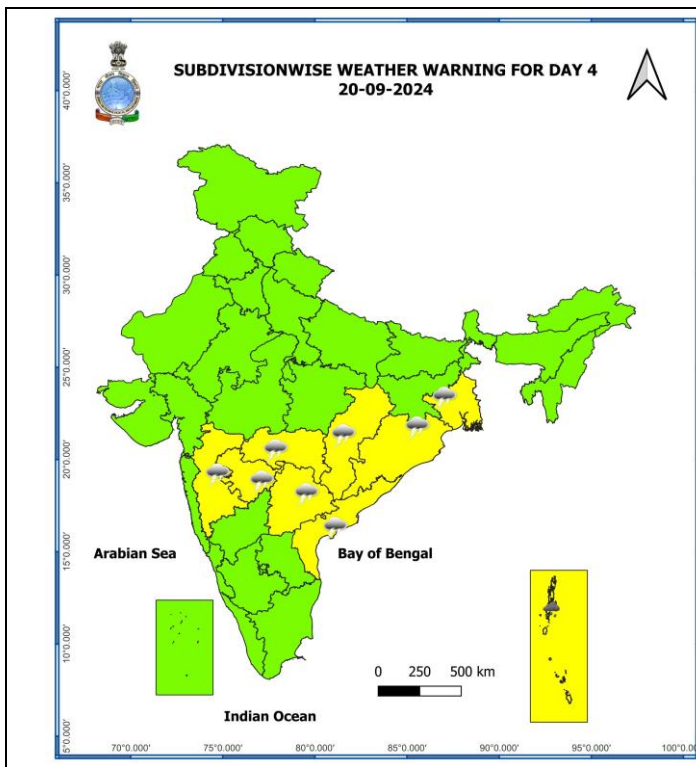
- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

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Weather 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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Annexure-1

Significant amount of rainfall (from 0830 hours IST to 1730 hours IST of today, the 17th September) (in cm):

East Madhya Pradesh: Rewa-10, Sidhi-7, Satna-5, Sagar and Mandla-3 each, Narsinghpur-2, Nowgong, Damoh, Jabalpur and Umaria-1 each;

East Uttar Pradesh: Prayagraj-6, Varanasi-4;

East Rajasthan: Dholpur-4;

West Madhya Pradesh: Gwalior-2, Hoshangabad-1;

Odisha: Keonjhar and Bhubaneswar-2 each.

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