



India Meteorological Department

(Ministry of Earth Sciences)

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Sub: Deep Depression over interior Odisha

The deep depression over coastal Odisha moved northwestwards with a speed of 22 kmph during past 6 hours and lay centered at 1730 hours IST of today, the 9th September, 2024 over interior Odisha near latitude 20.8°N and longitude 85.1°E close to Angul (Odisha), about 100 km northwest of Bhubaneswar (Odisha), 140 km east-southeast of Sambalpur (Odisha), 330 km east-southeast of Bilaspur (Chhattisgarh) and 360 km east of Raipur (Chhattisgarh).

It is very likely to move west-northwestwards across interior Odisha and weaken gradually into a Depression by midnight of today, the 9th September. Thereafter, it is very likely to continue to move west-northwestwards across north Chhattisgarh and weaken into a well marked low pressure area around evening of 10th September.

Forecast track and intensity are given in the following table:

Date/Time (IST)	Position (Lat. °N/ Long. °E)	Maximum Sustained Surface Wind Speed (Kmph)	Category Of Cyclonic Disturbance
09.09.24/1730	20.8/85.1	50-60 gusting to 70	Deep Depression
09.09.24/2330	21.4/84.4	45-55 gusting to 65	Depression
10.09.24/0530	21.8/83.6	40-50 gusting to 60	Depression
10.09.24/1130	22.2/82.6	35-45 gusting to 55	Depression
10.09.24/1730	22.5/81.6	25-35 gusting to 45	Well Marked Low Pressure Area

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

Odisha: Light to moderate rainfall at most places is very likely with heavy to very heavy rainfall at a few places with extremely heavy rainfall at isolated places over interior Odisha on 9th; heavy to very heavy rainfall at isolated places on 10th and isolated heavy rainfall on 11th September.

Chhattisgarh: Light to moderate rainfall at most places is likely with heavy to very heavy rainfall at a few places and extremely heavy rainfall at isolated places on 9th and heavy rainfall at isolated places on 10th September.

Vidarbha: Light to moderate rainfall at most places is very likely with heavy to very heavy rainfall at a few places and extremely heavy at isolated places on 9th and heavy to very heavy rainfall at isolated places on 10th and heavy rainfall at isolated places on 11th September.

East Madhya Pradesh: Light to moderate rainfall at many places is likely with isolated heavy to very heavy rainfall on 9th and heavy to very heavy at a few places with extremely heavy at isolated places on 10th September.

West Madhya Pradesh: Light to moderate rainfall at many places is likely with isolated heavy rainfall on 9th and heavy to very heavy rainfall at isolated places on 10th September.

South Uttar Pradesh: Light to moderate rainfall at many places is likely with heavy to very heavy rainfall at isolated places on 10th & 11th September.

Telangana: Light to moderate rainfall at many places is likely with heavy to very heavy rainfall at isolated places very likely on 9th September.

Jharkhand: Light to moderate rainfall at most places is very likely with heavy rainfall at isolated places over South Jharkhand during 9th to 10th September.

(ii) Wind warning

Squally weather with wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail over Northwest and adjoining westcentral Bay of Bengal and along & off north Andhra Pradesh-Odisha-West Bengal coasts till midnight of 9th September. It will decrease gradually thereafter.

Squally weather with wind speed reaching 50-60 kmph gusting to 70 kmph is likely over interior districts of Odisha and adjoining Chhattisgarh till midnight of today, the 9th September and becoming 40-50 kmph gusting to 60 kmph by morning of 10th September. It will decrease gradually thereafter.

(iii) Sea Condition: Rough sea condition over Northwest and adjoining westcentral Bay of Bengal and along & off north Andhra Pradesh-Odisha-West Bengal coasts till morning of 10th September. It is likely to improve gradually thereafter.

(iv) Fishermen Warning

Fishermen are advised not to venture into Northwest and adjoining westcentral Bay of Bengal; along & off Andhra Pradesh-Odisha-West Bengal coasts till 10th September.

(v) Flash Flood Guidance: (Graphics Attached)

24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 10-09-2024 :

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

Vidarbha –Bhandara, Gadchiroli, Gondiya and Nagpur

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

Chhattisgarh - Rajnandgaon, Bastar, Bijapur, Baloda Bazar, Bilaspur, Dantewara, Dhamtari, Gariaband, Janjgir, Champa, Kanker, Kondagaon, Mungeli, Narayanpur, Raigarh, Korba, Jashpur Korea and Sukma districts.

Odisha – Jharsuguda, Baragarh, Sambhalpur, and Koraput districts.

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.

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

(vi) Impact Expected (Odisha, Chhattisgarh, Madhya Pradesh, Vidarbha, south Uttar Pradesh, Telangana and Jharkhand due to heavy rainfall and squally wind)

- ✓ 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.
- ✓ Reduction of visibility over sea and adjoining coastal areas due to sea spray induced by strong wind and 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/mud slips/land sinks/mud sinks.
- ✓ 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)
- ✓ Uprooting of small trees and breaking of tree branches e.g. Banana, Papaya, Moringa, Orchards and etc. along coastal districts of North Odisha & adjoining West Bengal.

(vii) Action Suggested (Odisha, Chhattisgarh, Madhya Pradesh, Vidarbha, south Uttar Pradesh, Telangana and Jharkhand due to heavy rainfall)

- ✓ Fishermen are advised not to venture into Northwest and adjoining Northeast & Central Bay of Bengal; along & off north Andhra Pradesh-Odisha-West Bengal coasts till 10th September.
- ✓ Judicious regulation of offshore/onshore Operations
- ✓ 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.

Agromet advisories for Heavy Rainfall likely over various parts of the country

- ✓ Drain out excess water from rice, soybean, red gram, maize, cotton and turmeric in **Telangana**; from rice, finger millet, maize and groundnut in **Odisha** to prevent water logging.
- ✓ Provide mechanical support to horticultural crops & staking to vegetables.
- ✓ Keep the harvested produce at safer place.

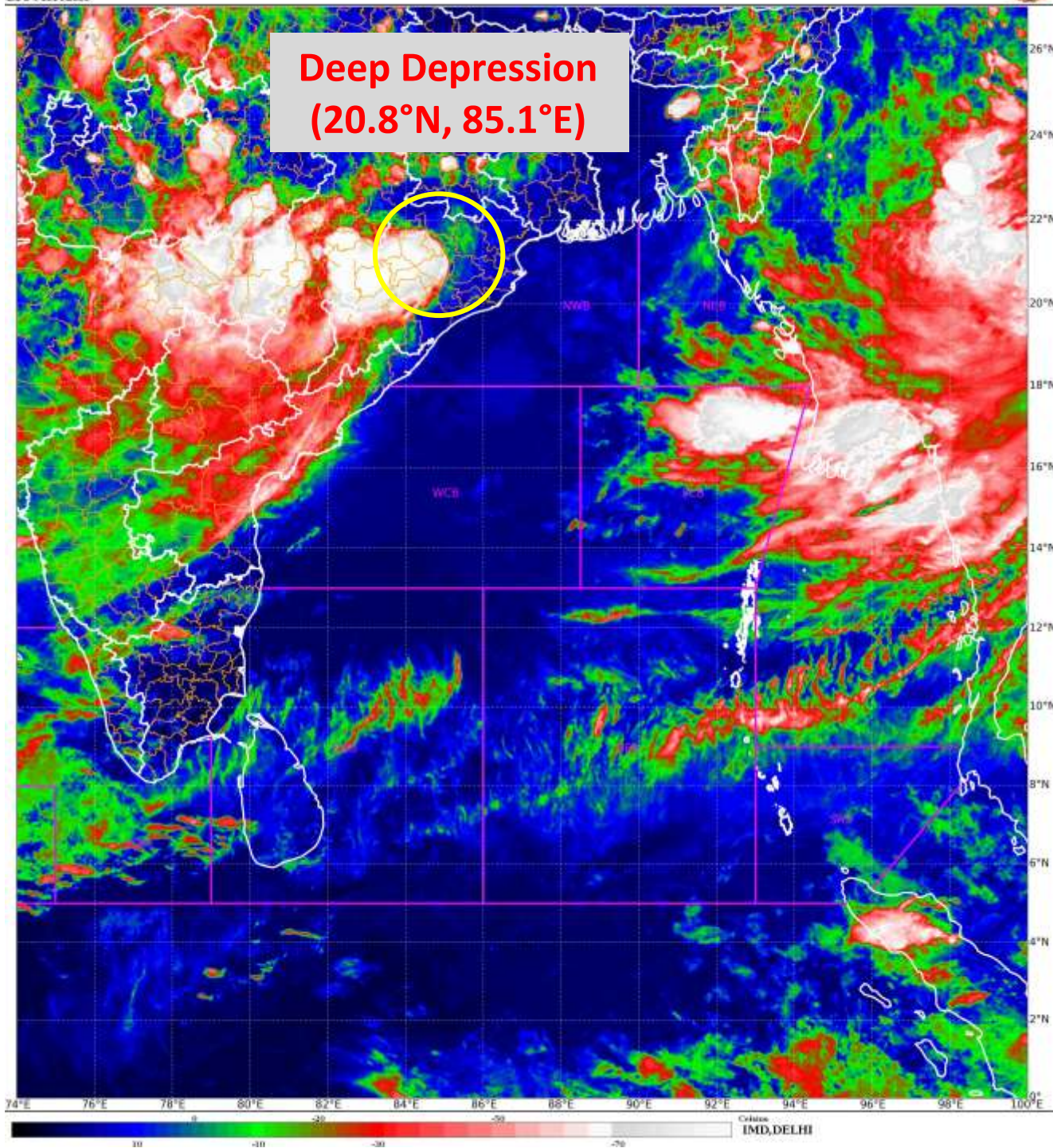
Significant rainfall recorded from 0830 hrs IST to 1730 hrs IST of today, the 9th September, 2024 (cm) is given in ANNEXURE-I.

The next bulletin will be issued at 0230 hrs IST of 10th September, 2024.

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

*Copy to: CRS, Pune/ACWC Kolkata/ACWC Chennai/CWC Bhubaneswar/CWC
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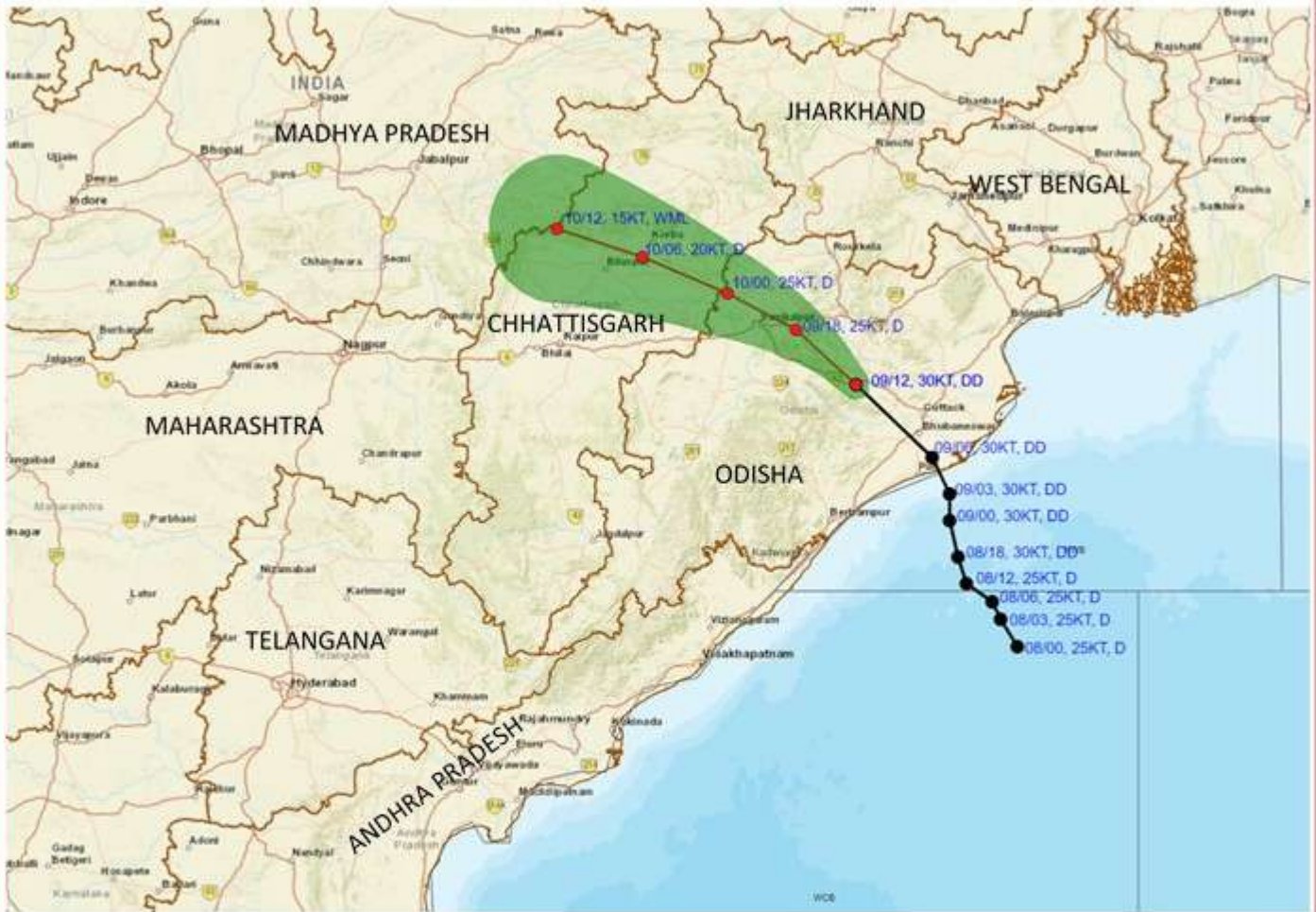
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**OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION OVER INTERIOR ODISHA
BASED ON 1200 UTC (1730 IST) OF 9th SEPTEMBER, 2024.**



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

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.



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER INTERIOR ODISHA BASED ON 1200 UTC (1730 IST) OF 9th SEPTEMBER, 2024.



DATE/TIME IN UTC

IST=UTC + 0530

L: LOW PRESSURE AREA

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D: DEPRESSION (17-27 KT)

DD: DEEP DEPRESSION (28-33 KT)

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SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

● LESS THAN 34 KT

○ 34-47 KT

● ≥ 48 KT

— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY

AREA OF MAXIMUM SUSTAINED WIND SPEED:

■ 28-33 KT (52-61 KMPH)

■ 34-49 KT (62-91 KMPH)

■ 50-63 KT (92-117 KMPH)

■ ≥ 64 KT (≥118 KMPH)

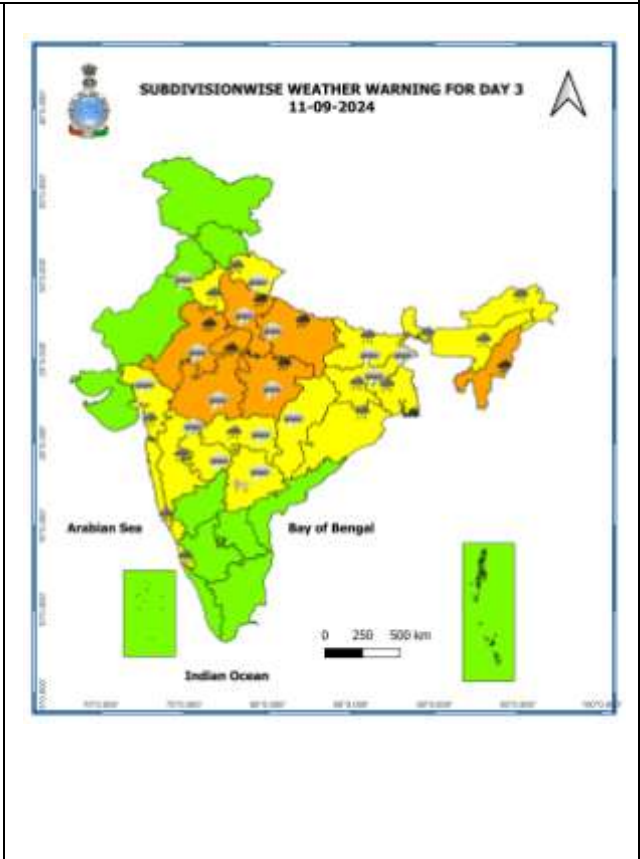
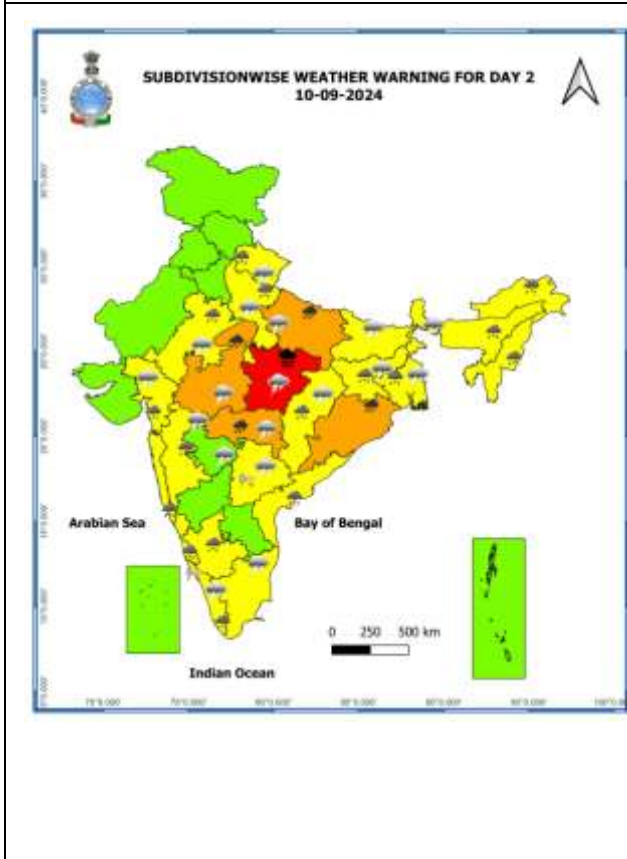
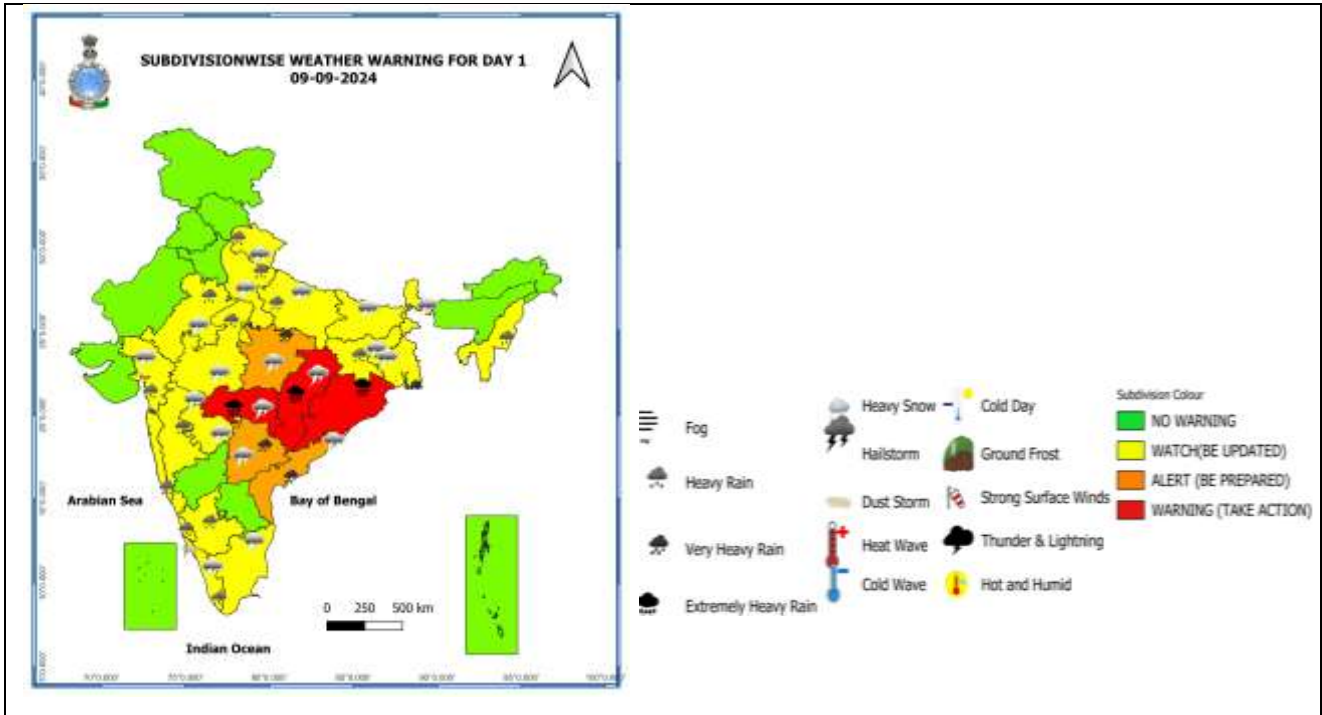
IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

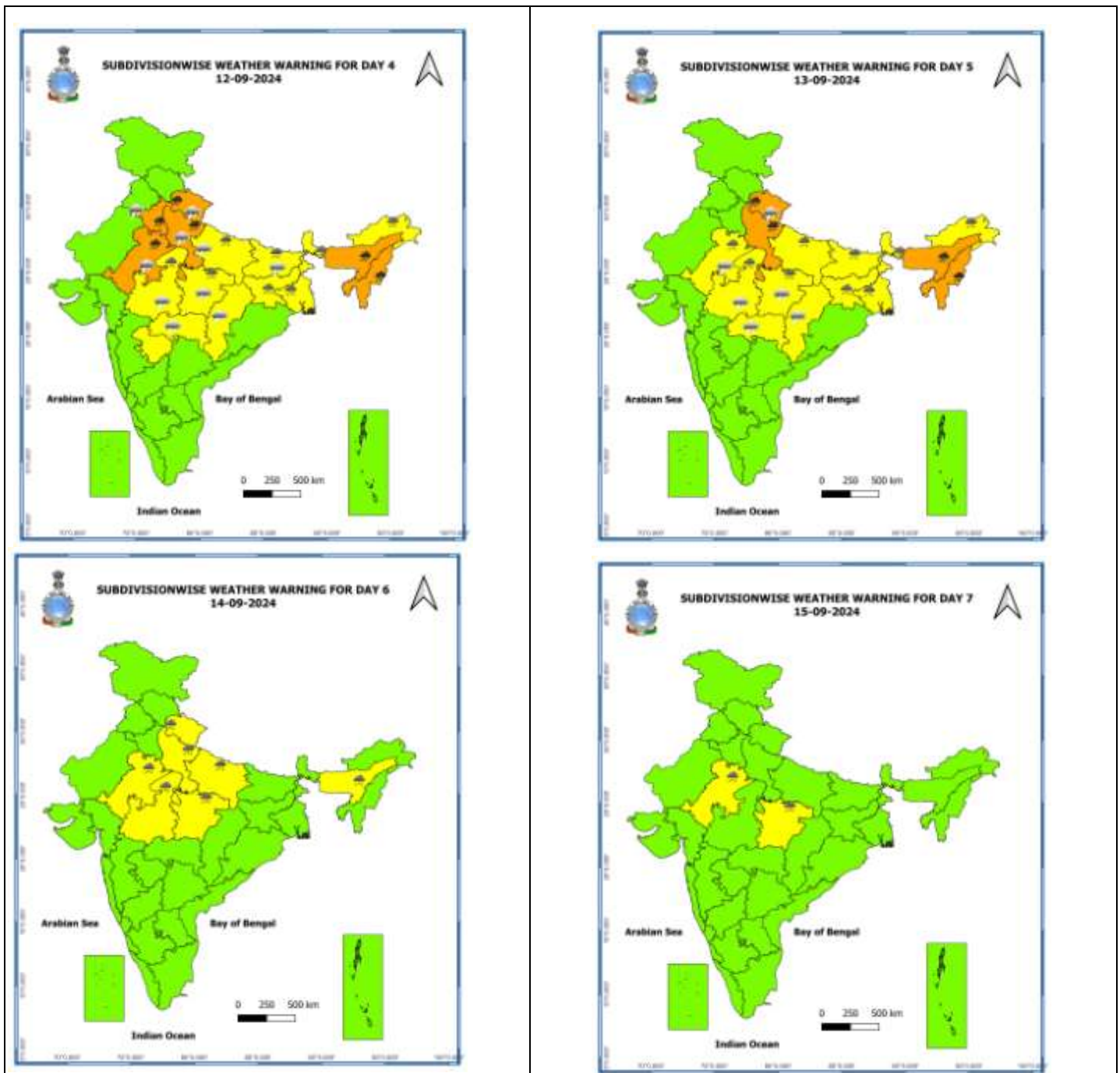
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Warning Graphics



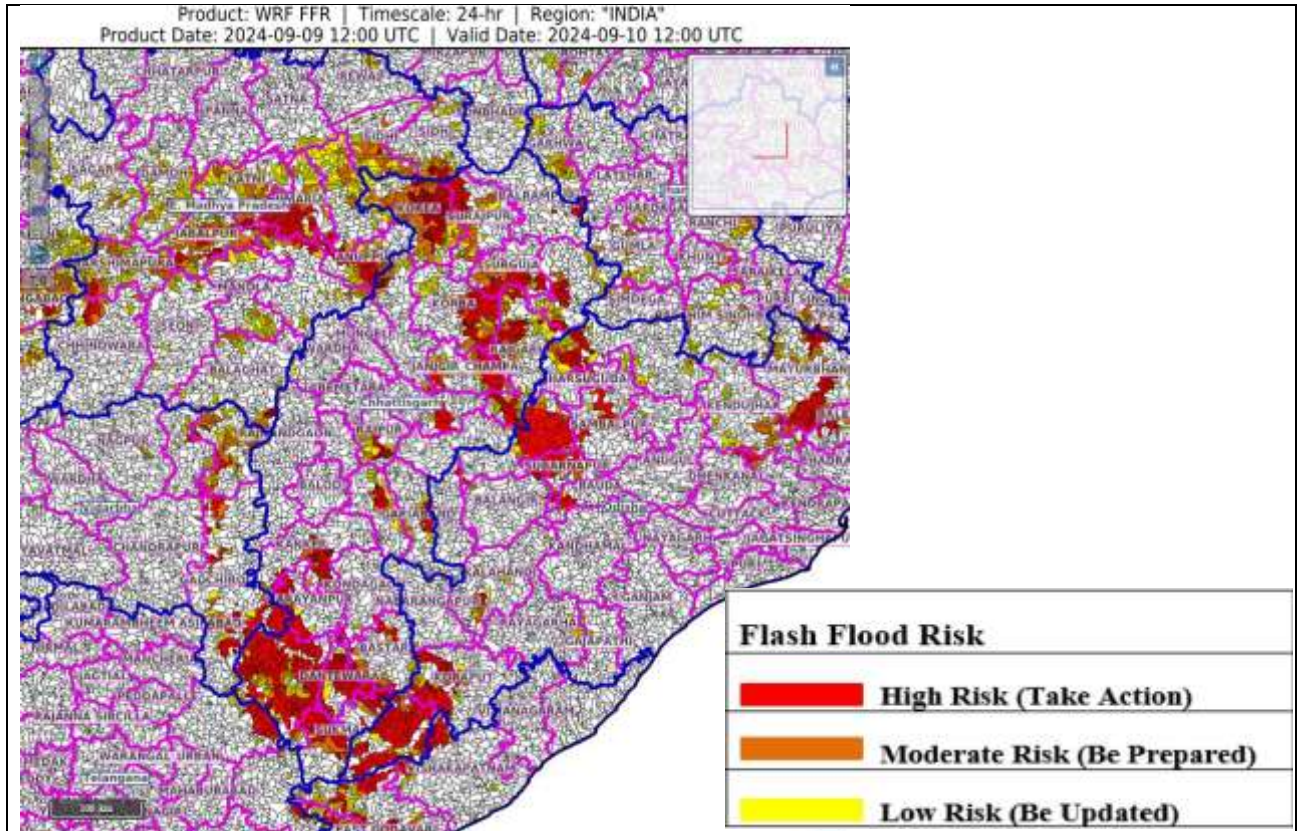
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- Action may be taken based on **ORANGE AND RED** COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

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Flash Flood Guidance



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Chhattisgarh: Bhanupratappur & Balod-7 each, Jagdalpur-6;

Odisha: Nabrangpur-6, Malkangiri, Koraput & Boudh-4 each, Daringabadi, Bhawanipatna & Sonapur-3 each, Jajpur & Naupada-2 each;

Vidarbha: Gondia-5;

West Madhya Pradesh: Ratlam-3, Ujjain-2;