



Government of India
Ministry of Earth Sciences



India Meteorological Department

PRESS RELEASE-9

Time of issue: 1330 hours IST

Dated: 16th September, 2024

Sub: Deep Depression over Gangetic West Bengal and adjoining Jharkhand

Yesterday's **Deep Depression** over Gangetic West Bengal moved slowly west-northwestwards and lay centered at 0830 hours IST of today, the 16th September 2024, over the **Gangetic West Bengal and adjoining Jharkhand** near latitude 23.1° N and longitude 86.7° E, about 40 km southeast of Purulia (West Bengal), 50 km southwest of Bankura (West Bengal), 60 km east-northeast of Jamshedpur (Jharkhand) and 140 km east of Ranchi (Jharkhand).

It is likely to move west-northwestwards across Gangetic West Bengal & Jharkhand and weaken into a depression during next 12 hours. Thereafter, it will continue to move west-northwestwards across Jharkhand and North Chhattisgarh during subsequent 24 hours.

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
16.09.24/0830	23.1/86.7	50-60 gusting to 70	Deep Depression
16.09.24/1730	23.3/85.9	50-60 gusting to 70	Deep Depression
17.09.24/0530	23.7/84.3	45-55 gusting to 65	Depression
17.09.24/1730	24.2/82.7	35-45 gusting to 55	Depression

Warnings:

(i) Rainfall warning

Jharkhand: Light to moderate rainfall at most places with **heavy to very heavy rainfall** at a few places & **isolated extremely heavy rainfall** over south Jharkhand & **isolated heavy to very heavy rainfall** over North Jharkhand on 16th September. Light to moderate rainfall at most places with **heavy to very heavy rainfall** at isolated places over Jharkhand on 17th September.

Gangetic West Bengal: Light to moderate rainfall at most places is very likely with **heavy rainfall** at isolated places over Gangetic West Bengal on 16th September.

Odisha: Light to moderate rainfall at most places is very likely with **heavy to very heavy rainfall** at isolated places over North Odisha on 16th September and **heavy rainfall** at isolated places over Northwest Odisha on 17th September.

Bihar: Light to moderate rainfall at most places with **heavy rainfall** at isolated places is very likely over South Bihar on 16th and 17th September.

Chhattisgarh: Light to moderate rainfall at most places with **heavy to very heavy rainfall** at isolated places over North Chhattisgarh during 16th to 17th September.

Contact: Cyclone Warning Division, Office of the Director General of Meteorology, India Meteorological Department, Ministry of Earth Sciences, E-mail: cyclonewarningdivision@gmail.com, Website: rsmcnewdelhi.imd.gov.in, 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.

Madhya Pradesh: Light to moderate rainfall at most places with **heavy to very heavy rainfall** at isolated places is likely over Northeast Madhya Pradesh on 16th & 17th September and **heavy rainfall** at isolated places on 18th September. Light to moderate rainfall at most places with **heavy rainfall** at isolated places over Northwest Madhya Pradesh during 17th to 18th September.

Uttar Pradesh: Light to moderate rainfall at many places with **heavy to very heavy rainfall** at isolated places over Southeast Uttar Pradesh during 16th and 17th September. Light to moderate rainfall at many places with **heavy to very heavy rainfall** at isolated places over West Uttar Pradesh on 17th and **heavy rainfall** at isolated places on 18th September.

(ii) Flash Flood Guidance: (Graphics Attached)

24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 17-09-2024:

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

Odisha - Keonjhar, Mayurbhanj, Deogarh, Baragarh, Jharsuguda, Subarnpur, Sambalpur and Sundargarh districts.

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

Jharkhand - Bokaro, Chatra, Deoghar, Dhanbad, Dumka, East & West Singhbhum, Garhwa, Giridih, Godda, Gumla, Hazaribagh, Jamtara, Khunti, Koderma, Latehar, Lohardaga, Pakur, Palamu, Ramgarh, Ranchi, Sahebganj, and Saraikela districts.

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

(iii) Wind warning:

Squally wind speed reaching 50-60 kmph gusting to 70 kmph is likely to prevail along & off West Bengal & north Odisha coasts and adjoining north Bay of Bengal during next 6 hours. Thereafter, it is likely to become 40-50 kmph gusting to 60 kmph till evening of 16th September and decrease further.

Squally wind speed reaching 50-60 kmph gusting to 70 kmph is likely to prevail over Gangetic West Bengal and adjoining Jharkhand & north Odisha till evening of 16th September. Thereafter, it is likely to decrease gradually becoming 40-50 kmph gusting to 60 kmph over Jharkhand and adjoining Southeast Uttar Pradesh & North Chhattisgarh till 17th September evening and decrease thereafter.

(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 during next 6 hours.

Subsequently, Rough Sea condition is likely to prevail over north Bay of Bengal and along & off West Bengal-Odisha coasts from afternoon of 16th September and improve thereafter.

(iv) Fishermen Warning:

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

Impact Expected (Jharkhand, North Chhattisgarh, North Odisha, Gangetic West Bengal, South Bihar and Northeast Madhya Pradesh 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 and trawlers.
- ✓ Minor damage to kutcha roads.
- ✓ Possibilities of damage to vulnerable structure.

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- ✓ 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 (Jharkhand, North Chhattisgarh, North Odisha, Gangetic West Bengal, South Bihar and Northeast Madhya Pradesh due to heavy rainfall and strong winds)

- ✓ Fishermen are advised not to venture into north Bay of Bengal till 16th September.
- ✓ 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.

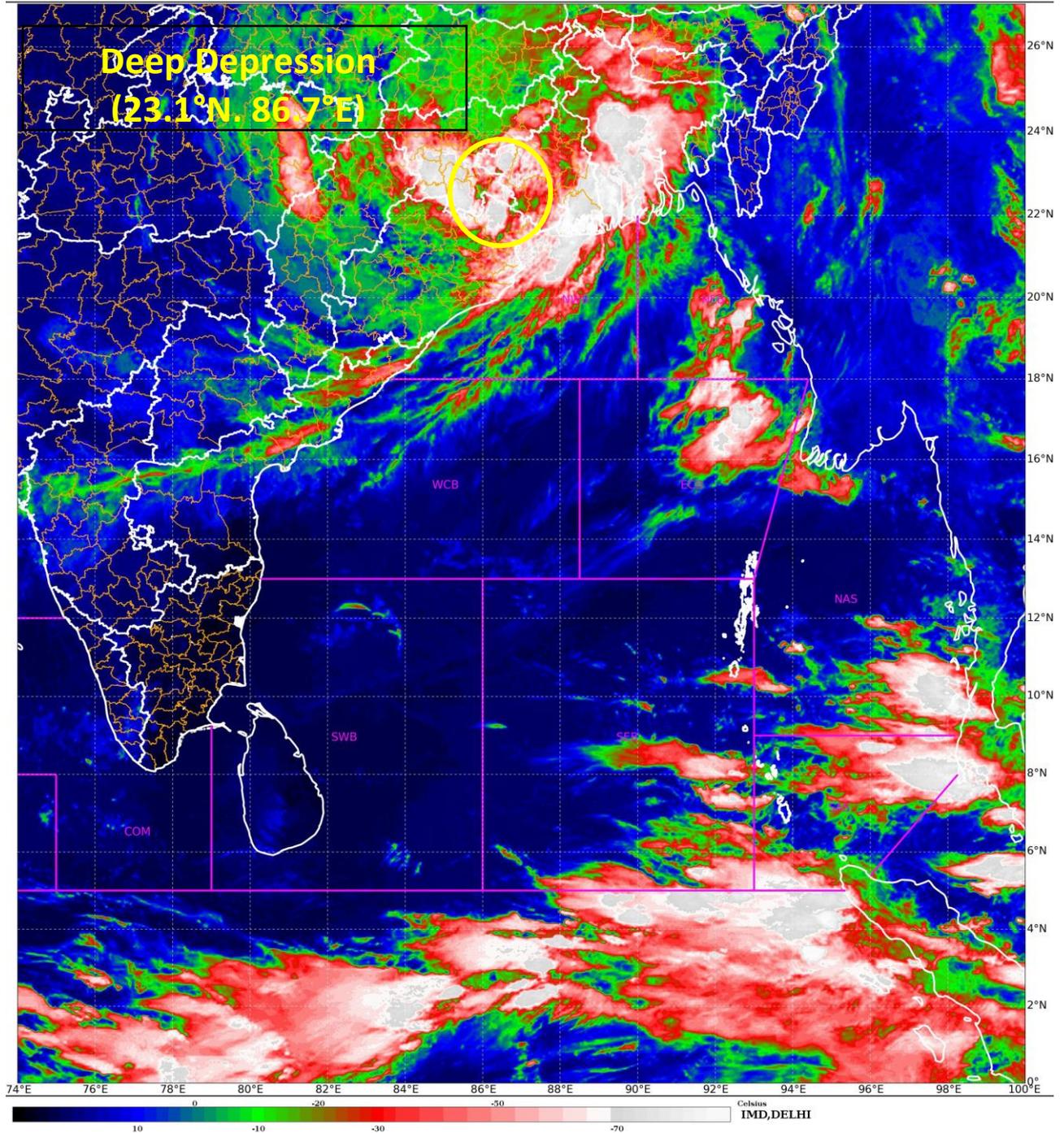
All associated graphics have been kept in Annexure-I. The 24 hours accumulated realised rainfall (≥ 7 cm) ending at 0830 hours IST of 15th September is kept in Annexure-II.

Next Press Release will be issued at 1430 hours IST of tomorrow, the 17th September, 2024.

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SAT : INSAT-3DR IMG
IMG_TIR1_TEMP 10.8 um
LIC Mercator

16-09-2024/(0215 to 0242) GMT
16-09-2024/(0745 to 0812) IST



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OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION OVER GANGETIC WEST BENGAL AND ADJOINING JHARKHAND BASED ON 0300 UTC (0830 IST) OF 16TH 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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OBSERVED AND FORECAST TRACK ALONG WITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER GANGETIC WEST BENGAL AND ADJOINING JHARKHAND BASED ON 0300 UTC (0830 IST) OF 16TH SEPTEMBER, 2024.



DATE/TIME IN UTC

IST=UTC + 0530

L: LOW PRESSURE AREA

WML: WELL MARKED LOW PRESSURE AREA

D: DEPRESSION (17-27 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)

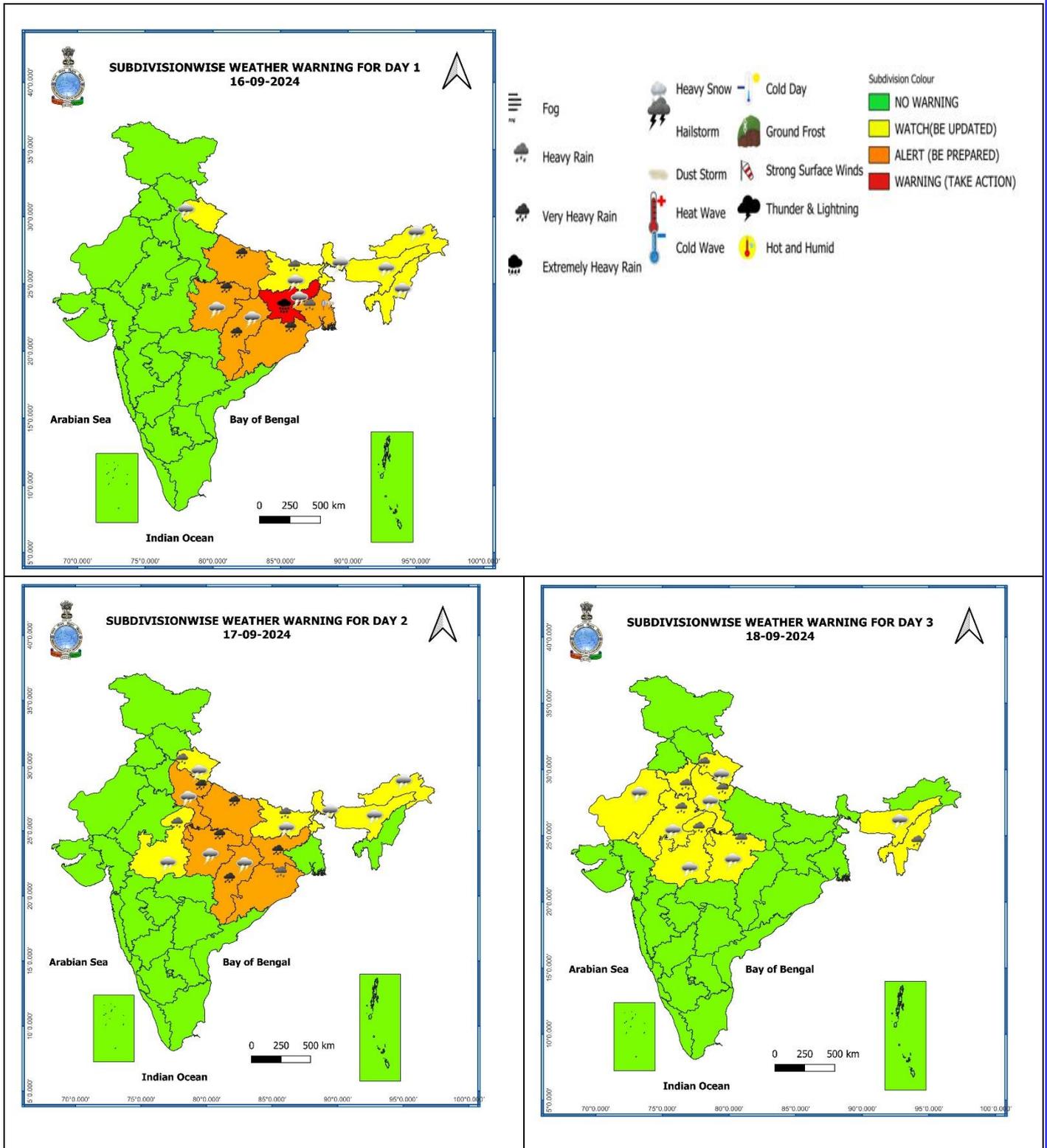
■ ≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

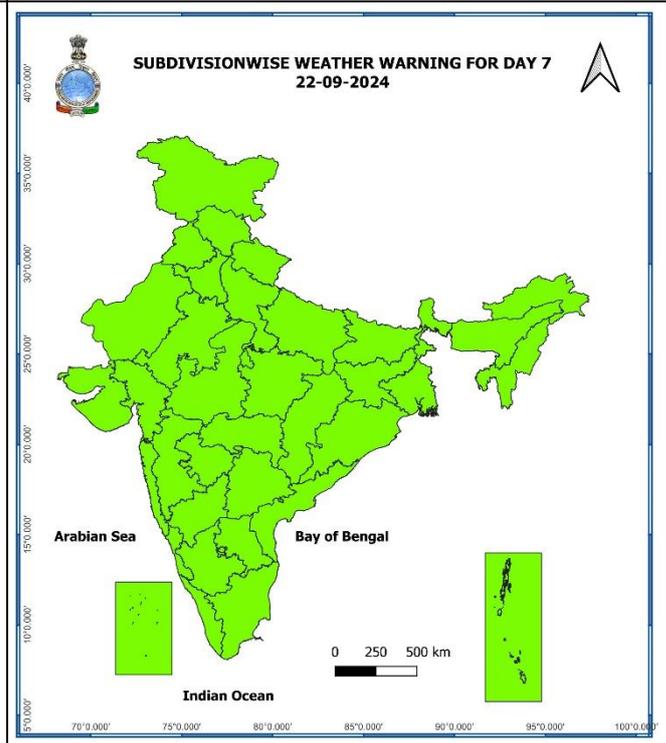
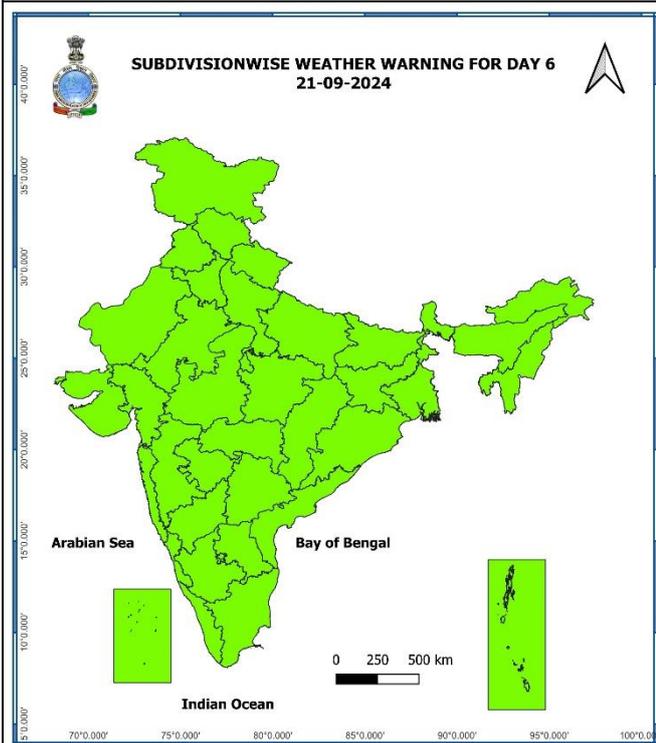
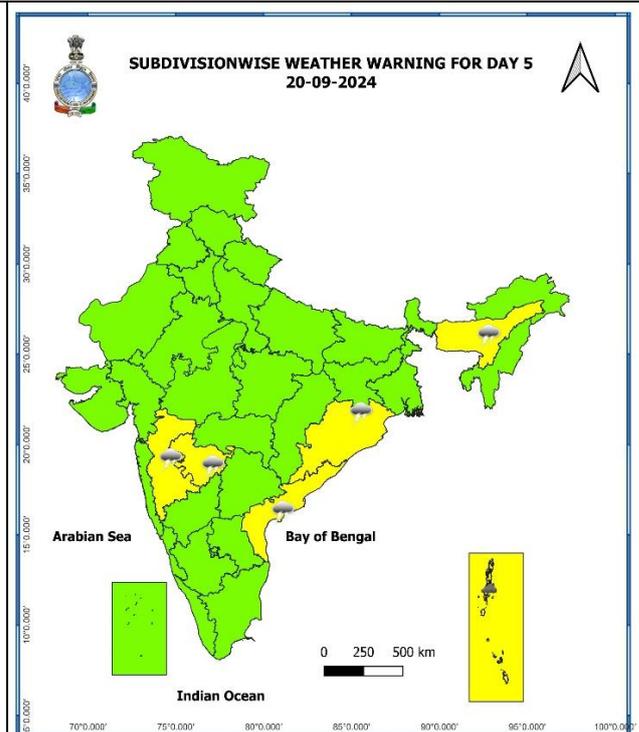
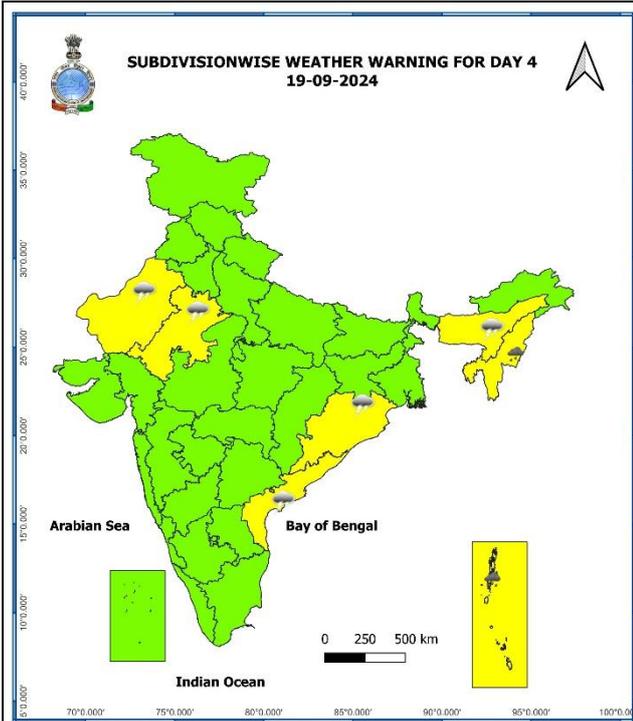
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations

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Warning Graphics



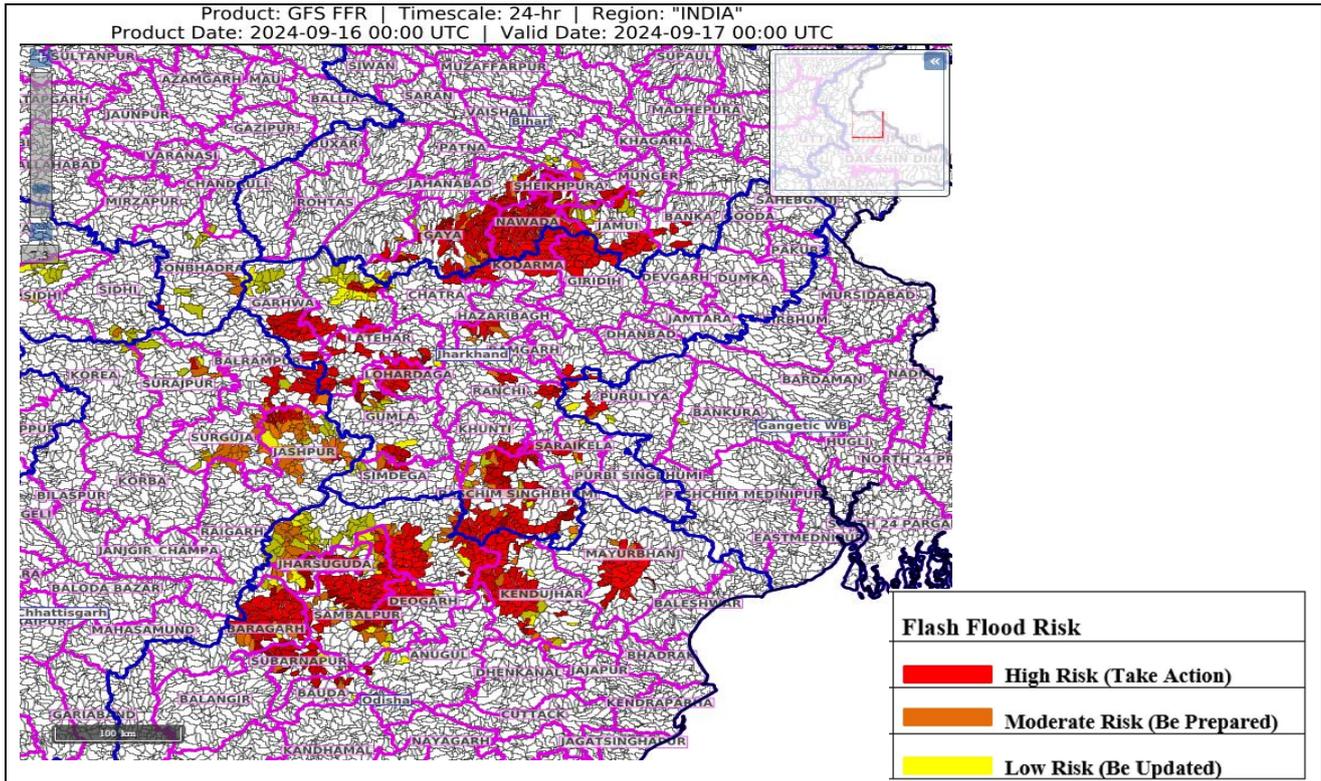
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- Action may be taken based on **ORANGE AND RED COLOUR** warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

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Flash Flood Guidance



24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 17-09-2024 :

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

Odisha - Keonjhar, Mayurbhanj, Deogarh, Baragarh, Jharsuguda, Subarnpur, Sambalpur and Sundargarh districts.

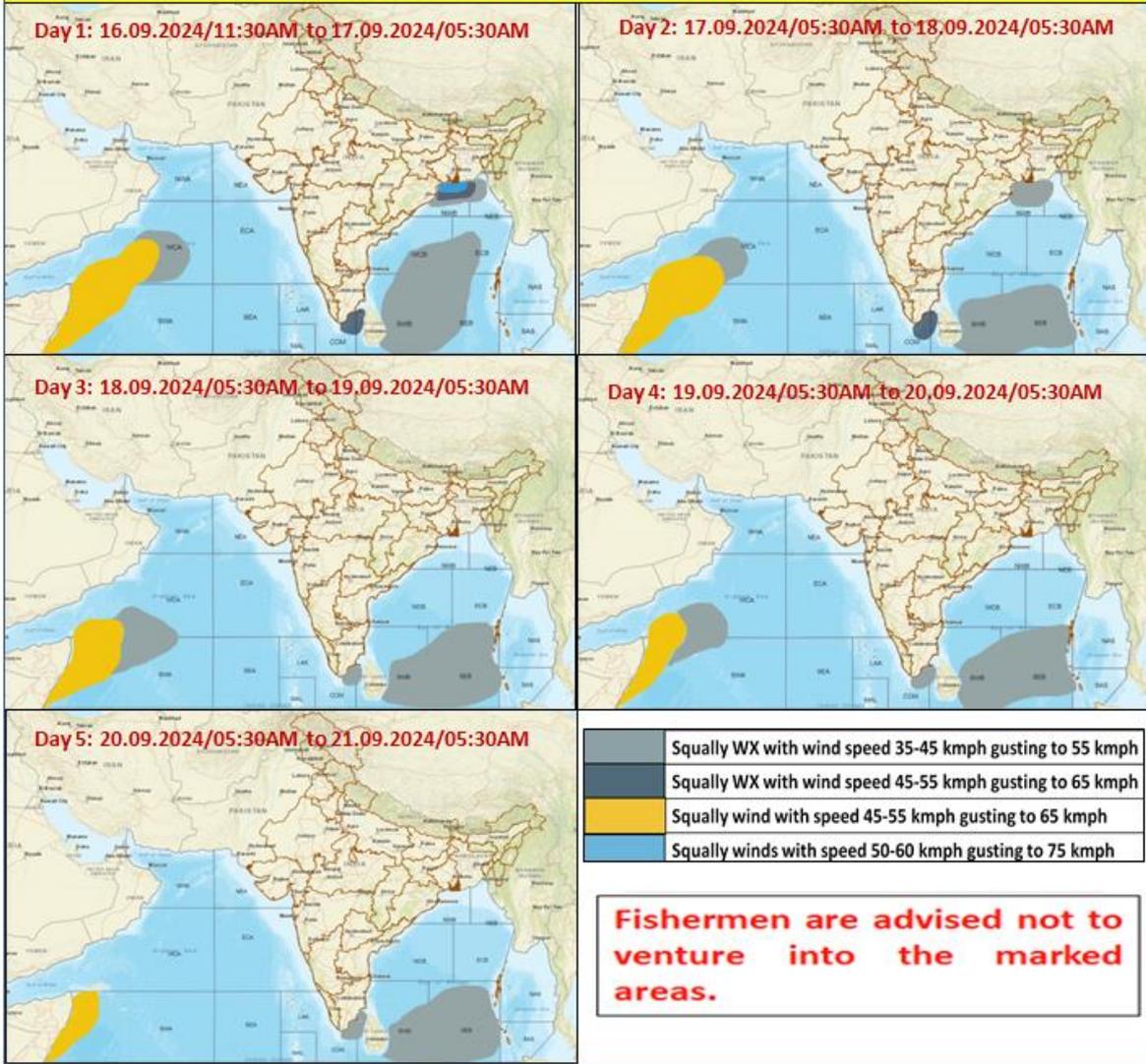
Chhattisgarh - Balarampur, Jashpur, Korea, Surajpur and Surguja districts.

Jharkhand - Bokaro, Chatra, Deoghar, Dhanbad, Dumka, East & West Singhbhum, Garhwa, Giridih, Godda, Gumla, Hazaribagh, Jamtara, Khunti, Koderma, Latehar, Lohardaga, Pakur, Palamu, Ramgarh, Ranchi, Sahebganj, and Saraikela districts.

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

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Fishermen Warning Graphics



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Significant amount of rainfall (from 0830 hours IST of 15.09.2024 to 0830 hours IST of 16.09.2024) (in cm):

- ❖ **Jharkhand:** Tandwa(Chatra) 16, Lawalong(Chatra) 15, Simaria(Chatra) 14, Maithon DVC (Dhanbad) 14, Maithon (Dhanbad) 13, Gurabandha (East Singbhum) 12, Gobindpur DVC (Dhanbad) 12, Sindri DVC (Dhanbad) 11, Putki (Dhanbad) 11, Chandrapura (Bokaro) 11, Chandankiary (Bokaro) 11, Panchet (Dhanbad) 11, Panchet DVC (Dhanbad) 11, Ghatsila (East Singbhum) 11, Latehar Balumat KVK AWS (Latehar) 11, Musabani (East Singbhum) 11, Potka (East Singbhum) 10, Chakulia (East Singbhum) 10, Karmatand (Jamtara) 10, Jamshedpur Aero (East Singbhum) 10, Dhalbhumgarh (East Singbhum) 10, Parsabad (Koderma) 10, Jamtara (Jamtara) 9, Putki DVC (Dhanbad) 9, Bariyatu (Latehar) 9, Jamshedpur (East Singbhum) 9, Koderma DVC (Koderma) 9, Bau Kanke (Ranchi) 9, Hazaribagh DVC (Hazaribagh) 8, Majhgaon (West Singbhum) 8, Shilaichak (Chatra) 8, Dumri DVC (Giridih) 8, Rajdhanwar (Giridih) 7, Chandil (Seraikela-kharsawan) 7, Chandwa (Latehar) 7, Maheshpur (Pakur) 7, Messenjor (Dumka) 7, Jamtara Fmo (Jamtara) 7, Tonto (West Singbhum) 7, Nimdih (Seraikela-kharsawan) 7, Nawadih (Bokaro) 7, Dhurki (Garhwa) 7, Bagodari (Giridih) 7, Phusro (Bokaro) 7, Balumath (Latehar) 7, Chaibasa (West Singbhum) 7, Garhwa (Garhwa) 7, Kharsema (Seraikela-kharsawan) 7, Tenughat (Bokaro) 7,
- ❖ **Gangetic West Bengal:** Asansol(CWC) (Paschim Bardhaman) 15, Asansol (Paschim Bardhaman) 15, Suri (pto) (Birbhum) 15, Suri (CWC) (Birbhum) 13, Kharidwar (Purulia) 13, Burnpur (Paschim Bardhaman) 12, Purihansa (Purulia) 11, Luchipur (Paschim Bardhaman) 11, Bankura(CWC) (Bankura) 10, Harinkhola (Hooghly) 10, Gheropara (Birbhum) 10, Sri Niketan (Birbhum) 9, Tusuma (Purulia) 9, Rajnagar (Birbhum) 9, Phulberia (Purulia) 9, Purulia (Purulia) 8, Bankura (Bankura) 8, Mankar (Purba Bardhaman) 8, Simula (Purulia) 8, Tantloi (Birbhum) 8, Amtala (Murshidabad) 8, Lalgah (Jhargram) 8, Rampurhat (DRMS) (Birbhum) 8, Panagarh (IAF) (Paschim Bardhaman) 8, Narayanpur (Birbhum) 7, Labpur (Birbhum) 7, Nalhati (Birbhum) 7, Durgapur (Paschim Bardhaman) 7, Tilpara Barrage (Birbhum) 7, Hetampur (Birbhum) 7, Amfu Kharagpur (West Midnapore) 7, Kalaikunda (IAF) (West Midnapore) 7,
- ❖ **Chhattisgarh:** Ramchandrapur (Balrampur) 15, Kusmi (Balrampur) 13, Samari (Balrampur) 12, Wandrafnagar (Balrampur) 11, Ramanujganj (Balrampur) 8, Rajpur (Balrampur) 8, Raghunath Nagar (Balrampur) 8, Chando (Balrampur) 8, Pratappur (Surajpur) 7,
- ❖ **Odisha:** Udala (Mayurbhanj) 14, G B Nagar (Mayurbhanj) 12, Nawana (Mayurbhanj) 12, Balimundali (Mayurbhanj) 12, Raruana (Mayurbhanj) 11, Betanati (Mayurbhanj) 11, Karanjia (Mayurbhanj) 11, Bahalda (Mayurbhanj) 11, Kaptipada (Mayurbhanj) 10, Balasore (Balasore) 10, Joshipur (Mayurbhanj) 10, Jaipur (Balasore) 10, Sarasakana (Mayurbhanj) 9, Tiring (Mayurbhanj) 9, Nh5 Gobindpur (Balasore) 9, Kusumi (Mayurbhanj) 9, Bijatala (Mayurbhanj) 9, Nilgiri (Balasore) 8, Joda (Keonjhar) 8, Jaleswar (Balasore) 8, Remuna (Balasore) 8, Jamsolaghat (Mayurbhanj) 8, Rasagovindapur (Mayurbhanj) 8, Baripada (Mayurbhanj) 8, Rajghat (Balasore) 8, Bhograi (Balasore) 8, Rairangpur (Mayurbhanj) 8, Muruda (Mayurbhanj) 8, Bangiriposi (Mayurbhanj) 7, Suliapada (Mayurbhanj) 7, Samakhunta (Mayurbhanj) 7, Chandua Kuliana (Mayurbhanj) 7, Sukruli (Mayurbhanj) 7,
- ❖ **East Madhya Pradesh:** Chitrangi (Singrauli) 11, Mauganj (Rewa) 8,
- ❖ **East Uttar Pradesh:** Churk (Sonbhadra) 10, Chopan Fmo (Sonbhadra) 8, Robertsganj (Sonbhadra) 7, Dudhi (Sonbhadra) 7,
- ❖ **Bihar:** Sanjhauli (Rohtas) 8, Chakai (Jamui) 8, Rajauli (Nawada) 7,
- ❖ **Sub-Himalayan West Bengal:** Rongo (Kalimpong) 8, Lava (Kalimpong) 8, Jhallong (Kalimpong) 7,

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