



India Meteorological Department

(Ministry of Earth Sciences)

NATIONAL BULLETIN NO.: 12 (BOB/04/2024)

TIME OF ISSUE: 1230 HOURS IST

DATED: 10.09.2024

FROM: INDIA METEOROLOGICAL DEPARTMENT (FAX NO. 24643965/24699216/24623220)
TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)
CONTROL ROOM NDMA (FAX.NO. 26701729)
CABINET SECRETARIAT (FAX.NO.23012284, 23018638)
PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)
SECRETARY, MOES (FAX NO. 24629777)
H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)
DIRECTOR GENERAL, DOORDARSHAN (23385843)
DIRECTOR GENERAL, AIR (23421105, 23421219)
PIB MOES (FAX NO. 23389042)
UNI (FAX NO. 23355841)
D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912, 2436 3260)
DIRECTOR, PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)
CHIEF SECRETARY, ODISHA (FAX NO. 0674-2536660)
CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0863-2441029, 08645-246600)
CHIEF SECRETARY, JHARKHAND (FAX NO. 0651-2400255)
CHIEF SECRETARY, CHHATTISGARH (FAX NO. 0771-2221206)
CHIEF SECRETARY, MAHARASHTRA (FAX NO. 022-22028594)
CHIEF SECRETARY,UTTAR PRADESH(FAX NO. 52222-39283)
CHIEF SECRETARY, TELANGANA (FAX NO. 040-23453700)

Sub: Depression over North Chhattisgarh

The depression over North Chhattisgarh & adjoining interior Odisha moved west-northwestwards with a speed of 20 kmph during past 6 hours and lay centered at 0830 hours IST of today, the 10th September, 2024 over North Chhattisgarh near latitude 21.9°N and longitude 82.8°E, 70 km east-southeast of Bilaspur (Chhattisgarh), 140 km northeast of Raipur (Chhattisgarh) and 220 km east of Malanjkhand (East Madhya Pradesh).

It is very likely to move west-northwestwards across north Chhattisgarh and weaken into a well marked low pressure area over Chhattisgarh and adjoining East Madhya Pradesh around evening of today, the 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
10.09.24/0830	21.9/82.8	40-50 gusting to 60	Depression
10.09.24/1130	22.0/82.4	35-45 gusting to 55	Depression
10.09.24/1730	22.3/81.5	25-35 gusting to 45	Well Marked Low Pressure Area

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.

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: 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 isolated places on 10th; **heavy to very heavy rainfall** at a few places with **extremely heavy rainfall** at isolated places on 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.

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.

(ii) Wind warning

Squally weather with wind speed reaching 40-50 kmph gusting to 60 kmph is likely over north Chhattisgarh till 10th September evening. It will decrease gradually thereafter.

(iii) Flash Flood Guidance: (Graphics Attached)

24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 11-09-2024 :

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

Chhattisgarh - Baloda Bazar, Bastar, Bijapur, Bilaspur, Dantewara, Durg, Janjgir_Champa, Jashpur, Korba, Mungeli, Narayanpur, Rajnandgaon, Sukma and Surguja districts.

East Madhya Pradesh - Anuppur, Balaghat, Chhindwara, Damoh, Dindori, Katni, Mandla, Narshimapura, Panna, Seoni, Shahdol and Umaria districts.

Vidarbha - Bhandara, Chandrapur, Gadchiroli, Gondiya and Nagpur 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 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.
- ✓ 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.

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.

(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.

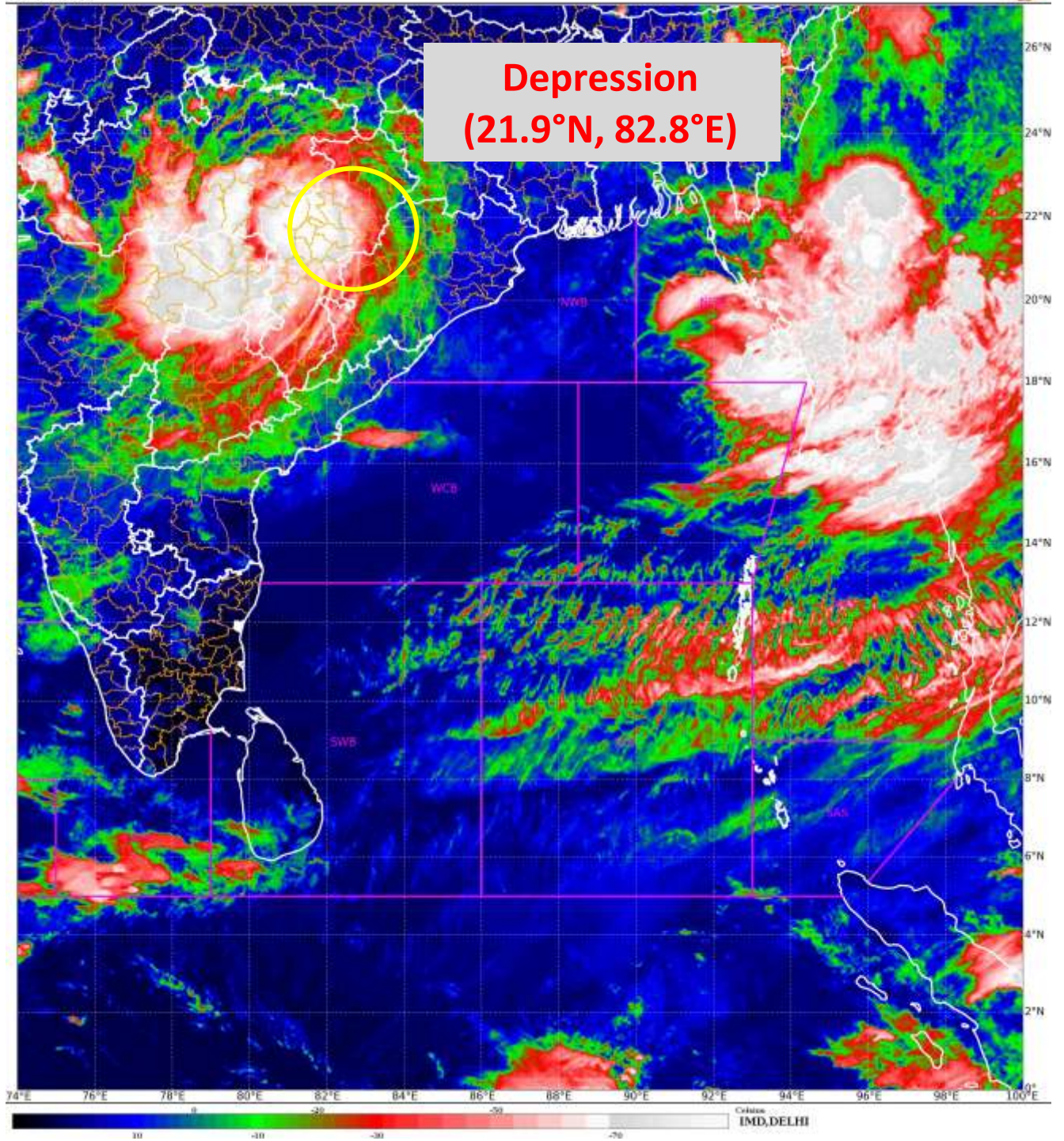
Rainfall recorded during 0830 hrs IST of 9th September to 0830 hours IST of 10th September (in cm) is placed in Annexure-1

The next bulletin will be issued at 1430 hrs IST of 10th September, 2024.

**(M Sharma)
Scientist- D, 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*

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.



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 OF DEPRESSION OVER NORTH CHHATTISGARH
BASED ON 0300 UTC (0830 IST) OF 10th SEPTEMBER, 2024.**

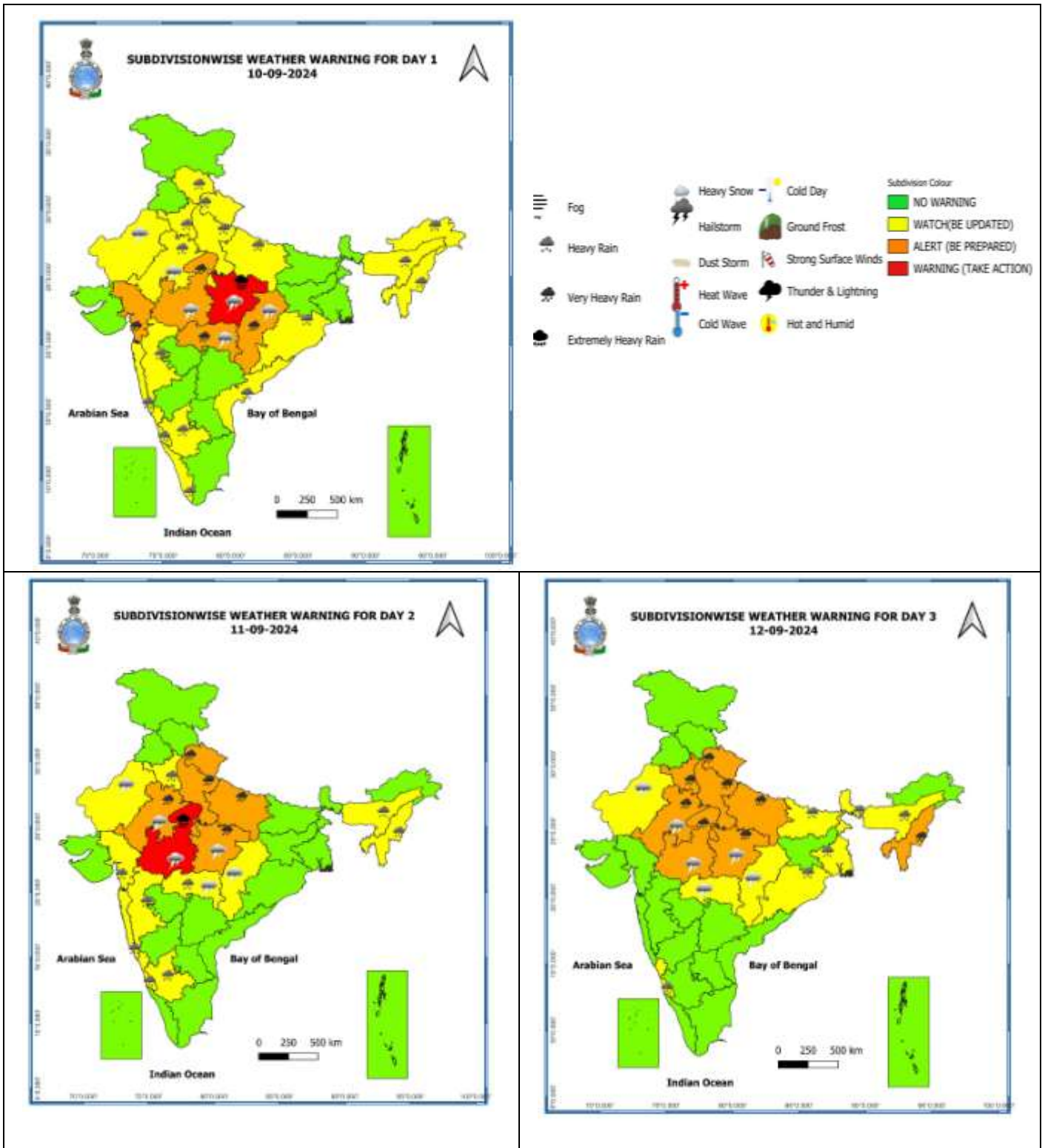


DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119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

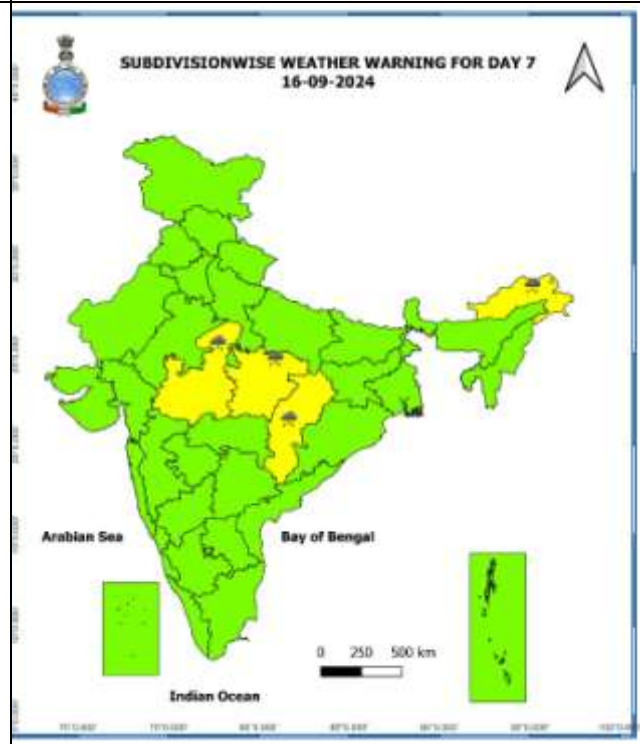
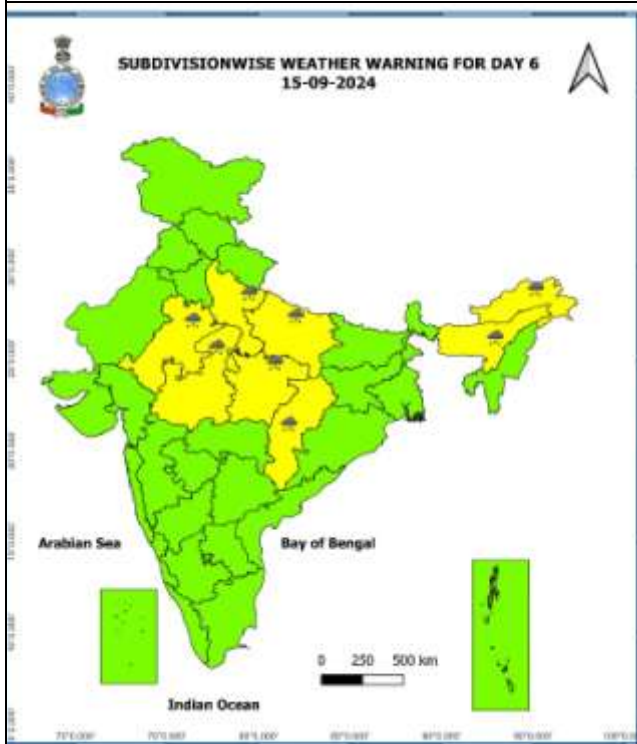
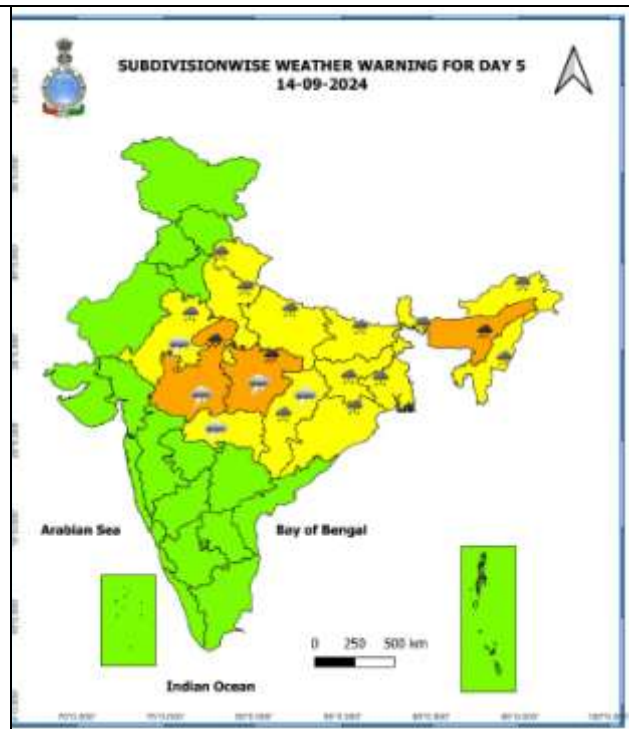
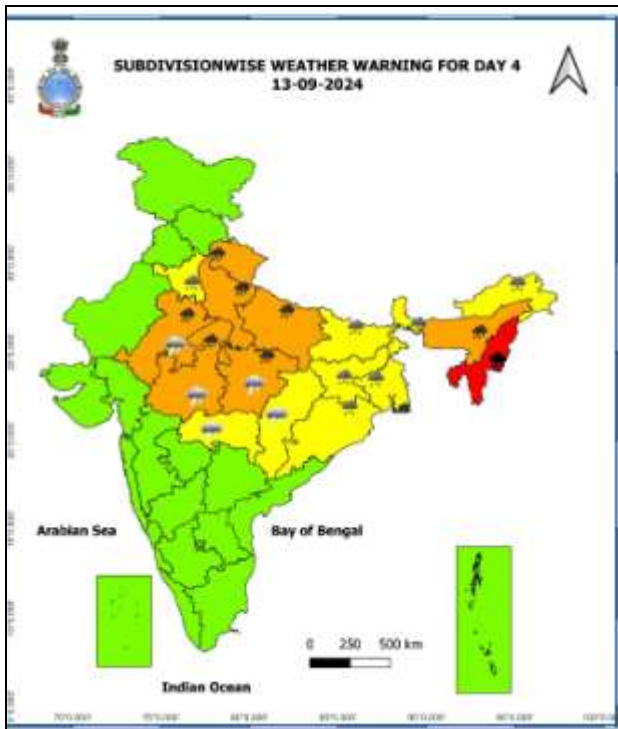
- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

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.

Warning Graphics



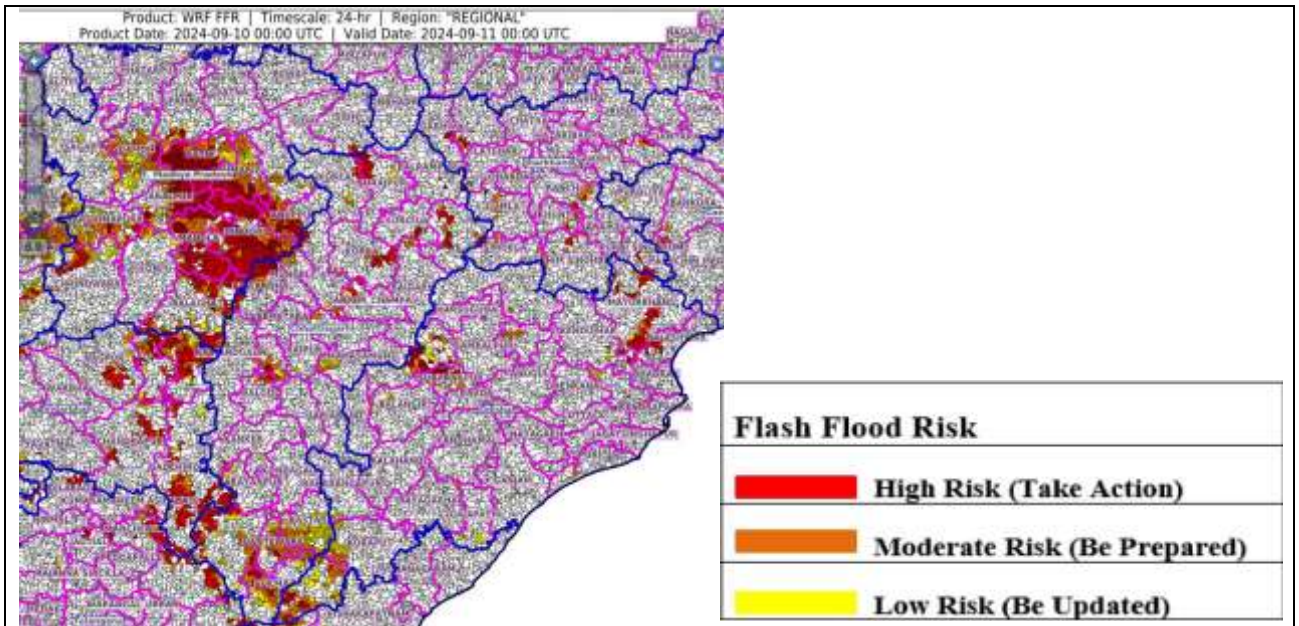
Spatial rainfall distribution: Isolated: <25%, A few: 26-50%, Many: 51-75%, Most: 76-100%
Rainfall amount (mm): Heavy rain: 64.5 – 115.5, Very heavy rain: 115.6 – 204.4, Extremely heavy rain: 204.5 or more.



- 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.

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.

Flash Flood Guidance



24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 11-09-2024 :

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

Chhattisgarh - Baloda Bazar, Bastar, Bijapur, Bilaspur, Dantewara, Durg, Janjgir_Champa, Jashpur, Korba, Mungeli, Narayanpur, Rajnandgaon, Sukma and Surguja districts.

East Madhya Pradesh - Anuppur, Balaghat, Chhindwara, Damoh, Dindori, Katni, Mandla, Narshimapura, Panna, Seoni, Shahdol and Umaria districts.

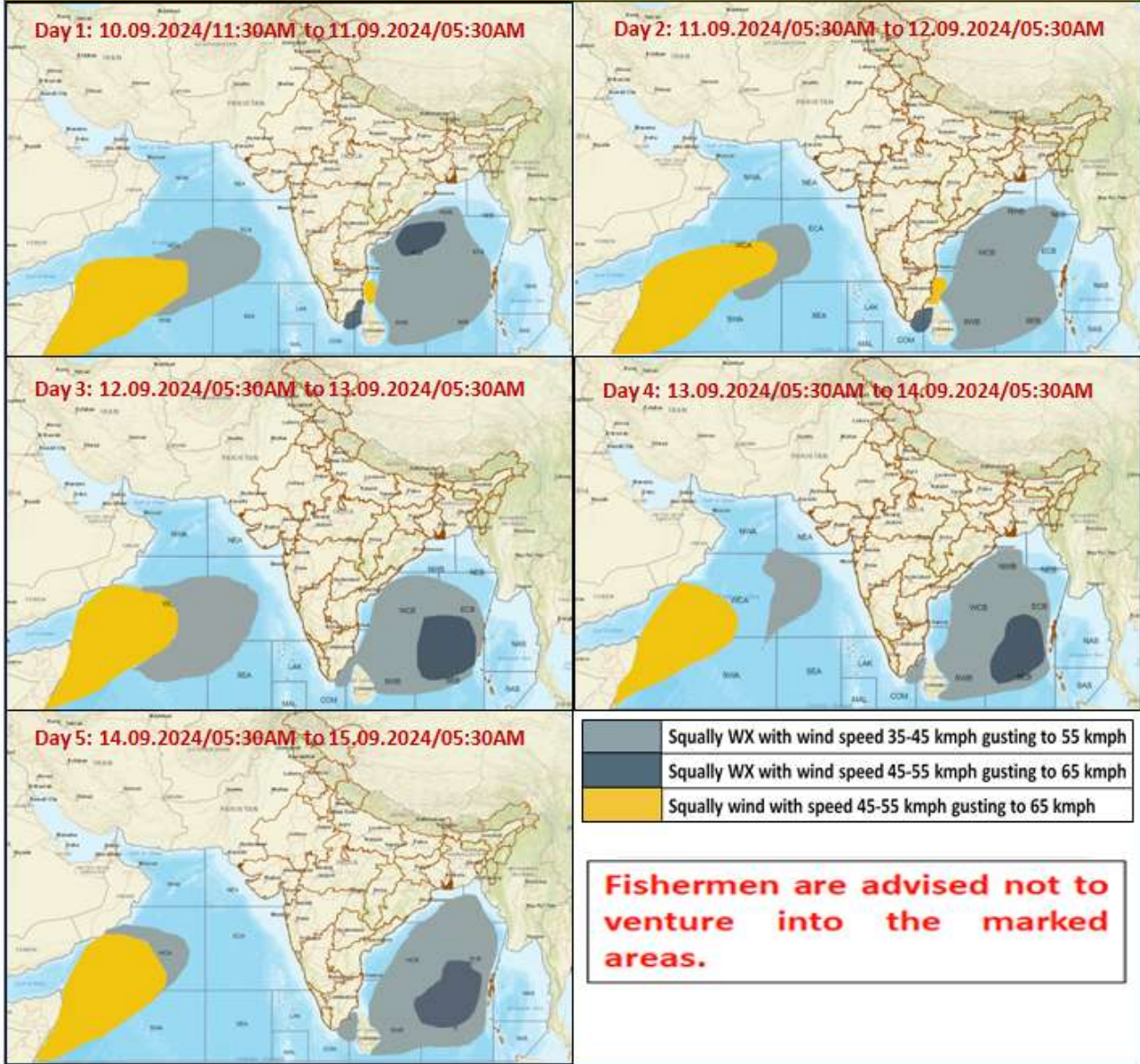
Vidarbha - Bhandara, Chandrapur, Gadchiroli, Gondiya and Nagpur districts.

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.

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.

Fishermen Warning Graphics



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.

Significant rainfall recorded from 0830 hrs IST of 9th September to 0830 hrs IST of today, the 10th September, 2024 (cm):

- **Chhattisgarh:** Lal Bahadur Nagar (Rajnandgaon) 24, Sukma (Sukma) 19, Dongargarh (Rajnandgaon) 19, Gurur (Balod) 19, Rajnandgaon (Rajnandgaon) 18, Bhanupratappur (Kanker) 18, Khairagarh (KhairagarhChhGandai) 17, Balod (Balod) 16, Durgkondal (Kanker) 16, Baloda Bazar (Baloda Bazar) 16, Mohla (Mohala Manpur Chowki) 15, Lawan (Baloda Bazar) 15, Chhuria (Rajnandgaon) 15, Dhanora (Kondagaon) 15, Dongargaon (Rajnandgaon) 15, Bhatapara (Baloda Bazar) 15, Marri Bangla Deori (Balod) 15, Pallari/palari (Baloda Bazar) 14, Charama (Kanker) 14, Pithora (Mahasamund) 14, Dhamtari (Dhamtari) 14, Keshkal (Kondagaon) 14, Gangalur (Bijapur) 14, Doundi (Balod) 14, Pakhanjur (Kanker) 14, Khadgaon (Mohala Manpur Chowki) 14, Nerharpur (Kanker) 13, Suhela (Baloda Bazar) 13, Kukrel (Dhamtari) 13, Sonakhan (Baloda Bazar) 13, Antagarh (Kanker) 13, Manpur (Mohala Manpur Chowki) 12, Labhandih (Raipur) 12, Arjunda (Balod) 12, Darbha (Bastar) 12, Kanker (Kanker) 12, Kashdol (Baloda Bazar) 12, Raipur (Raipur) 12, Bhakhara (Dhamtari) 12, Komakhan (Mahasamund) 12,
- **East Madhya Pradesh:** Kirnapur (Balaghat) 20, Matiyari (Mandla) 13, Baihar (Balaghat) 13, Lanji (Balaghat) 12, Lalburra (Balaghat) 10, Bichhia (Mandla) 9, Dhanora (Seoni) 7, Paraswada (Balaghat) 7, Harrai (Chindwara) 7;
- **West Madhya Pradesh:** Raoti (Ratlam) 10, Satwas (Dewas) 9, Gogawan (Khargone) 9, Nasrullahganj (Sehore) 7, Petlawad (Jhabua) 7;

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.