



Government of India
Ministry of Earth Sciences
India Meteorological Department

Press Release.

Date: 30th September, 2023

Time of Issue: 1400 hours IST

Subject: 1) Depression over Eastcentral Arabian Sea off south Konkan-Goa coasts
2) A Well Marked Low Pressure Area lies over Northwest Bay of Bengal.
3) Southwest Monsoon has further withdrawn from some parts of Northwest India today, the 30th September, 2023.
4) Heavy rainfall activity over East India during 30th September-03rd October and along west coast on 30th September & 01st October.

Weather observed during past 24 hours ending at 0830 hours IST of today (Annexure I):
For Flash Flood Guidance map (Annexure V)

Withdrawal of Southwest Monsoon:

- Southwest Monsoon has further withdrawn from some parts of Jammu-Kashmir, Himachal Pradesh and Uttarakhand; entire Punjab and Haryana-Chandigarh-Delhi; some parts of West Uttar Pradesh, West Madhya Pradesh and East Rajasthan and some more parts of West Rajasthan today, the 30th September, 2023.
- The line of withdrawal of Southwest Monsoon passes through Gulmarg, Dharamshala, Pantnagar, Etawah, Morena, Sawai Madhopur, Jodhpur, Barmer and 25.7°N/70.3°E.
- Conditions are becoming favourable for further withdrawal of Southwest Monsoon from remaining parts of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand and West Uttar Pradesh; some more parts of West Madhya Pradesh; remaining parts of Rajasthan and some parts of Gujarat state during next 3-4 days.

Significant Weather features:

- ❖ Yesterday's **Low-Pressure Area** over Eastcentral Arabian Sea off south Konkan-Goa coasts became a **Well Marked Low Pressure Area** over the same region at 0530 hrs IST of today 30th Sept and then further intensified into a **Depression** over the same region at 0830 hours IST of today, the 30th September, 2023, lay centred near latitude 15.9°N and longitude 72.8°E about 110 km west-northwest of Panjim (Goa), 130 km south-southwest of Ratnagiri (Maharashtra) and 250 km northwest of Honavar (Karnataka). It is likely to move east-northeastwards and cross Konkan-Goa coasts between Panjim and Ratnagiri by tonight.
- ❖ Yesterday's **Low-Pressure Area** over Northeast & adjoining Eastcentral Bay of Bengal became a **Well Marked Low Pressure Area** over Northwest Bay of Bengal at 0530 hours IST of today, the 30th September, 2023 and now persists over the same area. It is likely to move west-northwestwards across north Odisha & adjoining West Bengal coasts during next 24 hours.

Weather Forecast and Warnings: (Annexure II)

East India:

- Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Sub-Himalayan West Bengal & Sikkim, Bihar during 30th September-04th October; Gangetic West Bengal, Jharkhand, Odisha during 30th September to 03rd October; 01st-03rd October and Andaman & Nicobar Islands on 30th September & 01st October. **Isolated very heavy rainfall very likely over Gangetic West Bengal on 30th September; north Odisha during 30th September-02nd October; north Jharkhand on 30th September & 01st October; Bihar and Sub-Himalayan West Bengal & Sikkim on 30th September & 03rd October.**
- **Wind warning: Squally wind speed reaching 40-50 kmph gusting to 60 kmph** is prevailing and likely over North Bay of Bengal along & off North Odisha -West Bengal and adjoining Bangladesh coasts during 30th September to 1st October.
- **Sea condition: Rough sea condition is very likely** over North Bay of Bengal along & off North Odisha -West Bengal and adjoining Bangladesh coasts during 30th September to 1st October, 2023.
- **Fishermen** are advised not to venture into North Bay of Bengal along & off North Odisha -West Bengal and adjoining Bangladesh coasts till 1st October, 2023. **(Annexure IV)**

West India:

- Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy to very heavy rainfall with extremely heavy falls** very likely over Konkan, Goa and **heavy to very heavy rainfall** over Madhya Maharashtra on 30th September & 01st October.
- **Wind warning: Squally wind speed reaching 40-50 kmph gusting to 60 kmph** is prevailing over Eastcentral Arabian Sea along & off Maharashtra-Goa-Karnataka coasts. It is likely to become **45-55 kmph gusting to 65 kmph** from evening of today, the 30th September, 2023 and prevail during subsequent 24 hours.
- **Sea condition: Rough to very rough sea condition is very likely** over Eastcentral Arabian Sea along & off Maharashtra-Goa-Karnataka coasts on 30th September and 1st October, 2023.
- Fishermen are advised not to venture into Eastcentral Arabian Sea along & off Maharashtra-Goa-Karnataka coasts on 30th September and 1st October, 2023.

South India: Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** very likely over ghat areas of Tamil Nadu, Interior Karnataka on 30th; Coastal Karnataka and Kerala & Mahe on 30th September & 01st October.

Isolated very heavy rainfall very likely over Coastal Karnataka and Kerala today.

Central India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Chhattisgarh during 30th September to 02nd October and East Madhya Pradesh on 01st & 02nd October.

Northeast India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 30th September and during 01st-03rd October and over Arunachal Pradesh on 03rd & 04th October.

No significant weather over rest parts of the country.

For more details kindly refer:

https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php

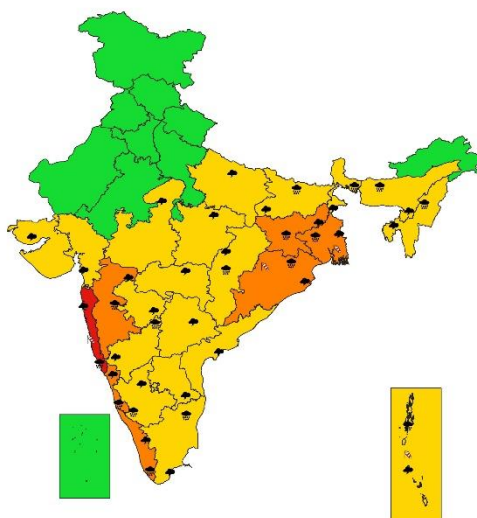
Rainfall observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 30th September, 2023):

- **Heavy to very heavy rainfall** at isolated places over south Konkan & Goa, Kerala and **heavy rainfall** at isolated places over East Madhya Pradesh, Coastal Andhra Pradesh, Telangana, Andaman & Nicobar Islands, Odisha, Bihar, Gangetic West Bengal, Jharkhand, Madhya Maharashtra, Marathwada, Tamil Nadu and Coastal & South Interior Karnataka.
- **Significant rainfall recorded (in cm):**
 - ✓ **Konkan & Goa:** Mapusa (dist North Goa) 13, Margao (dist South Goa) 11, Canacona (dist South Goa) 10, Ponda (dist North Goa) 10, Quepem (dist South Goa) 10, Pernem (dist North Goa) 10, Sanguem (dist South Goa) 9, Panjim - Imd Obsy (dist North Goa) 9, Dodamarg (dist Sindhudurg) 9, Dabolim N.a.s.- Navy (dist South Goa) 9, Sawantwadi (dist Sindhudurg) 8, Mormugao - Pmo Imd (dist South Goa) 7, Kudal (dist Sindhudurg) 7,
 - ✓ **Kerala:** Ernakulam South (dist Ernakulam) 13, Hosdurg (dist Kasargod) 11, Quilandi (dist Kozhikode) 10, Palluruthy Arg (dist Ernakulam) 10, Pirappancode Aws (dist Thiruvananthapuram) 9, Kozhikode (dist Kozhikode) 9, Mavelikara (dist Alapuzha) 9, Kunnamangalam Aws (dist Kozhikode) 8, Choondy Aws (dist Ernakulam) 8, Peermade To (dist Idukki) 8, Kochi I.a.f. (dist Ernakulam) 8, Kunnathanam Aws (dist Pathanamthitta) 7, Paripalli Aws (dist Kollam) 7, Cherthala (dist Alapuzha) 7, Vyttili (dist Wynad) 7, Mannarkkad (dist Palakkad) 7, Bayar Aws (dist Kasargod) 7, Madikkai Aws (dist Kasargod) 7, Kanjirappally (dist Kottayam) 7,
 - ✓ **Odisha:** Soro (dist Balasore) 11, Ghasipura (dist Keonjhar) 9, Banpur (dist Khurda) 9, Burla (dist Sambalpur) 8, Ranpur (dist Nayagarh) 8, Bhuban (dist Dhenkanal) 8, Bari (dist Jajpur) 7, Pattamundai (dist Kendrapara) 7, Udala (dist Mayurbhanj) 7, Nh5 Gobindpur (dist Balasore) 7, Baripada (dist Mayurbhanj) 7, Anandpur (dist Keonjhar) 7,
 - ✓ **South Interior Karnataka:** Kottigehara (dist Chikkamagaluru) 11,
 - ✓ **Coastal Karnataka:** Castle Rock (dist Uttara Kannada) 10, Kadra (dist Uttara Kannada) 8, Uppinangadi (dist Dakshina Kannada) 7, Karwar Obsy (dist Uttara Kannada) 7, Gokarna (dist Uttara Kannada) 7,
 - ✓ **Gangetic West Bengal:** Murshidabad-10,
 - ✓ **Telangana:** Jagadevpur (dist Siddipet) 9, Mortad (dist Nizamabad) 8, Balkonda (dist Nizamabad) 7, Mustabad (dist Rajanna Sircilla) 7, **Tekmal (dist Medak) 7,**
 - ✓ **Andaman & Nicobar Islands:** Car Nicobar-8
 - ✓ **Marathwada:** Nilanga (dist Latur) 8, Ardhapur (dist Nanded) 7,
 - ✓ **East Madhya Pradesh:** Amarpatan (dist Satna) 7,
 - ✓ **Coastal Andhra Pradesh:** Narsipatnam (dist Anakapalli) 7, Bobbili (dist Vizianagaram) 6, Yerragondapalem (dist Prakasam) 5,
 - ✓ **Madhya Maharashtra:** Jamkhed (dist Ahmednagar) 8,
 - ✓ **Jharkhand:** Fatehpur, Baharagora-7 each,
 - ✓ **Tamil Nadu:** Puzhal ARG (dist Tiruvallur) 8, Chinnakalar (dist Coimbatore), Alandhur (dist Chennai), Valparai PTO (dist Coimbatore), Kozhiporvilai (dist Kanyakumari) 7 each,
 - ✓ **Bihar:** Shambhuganj (dist Banka) 8, Katoria (dist Banka) 7, Pirpaiti (dist Bhagalpur) 7.

Obsy: Observatory; **AWS:** Automatic Weather Station; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation



SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
(30-9-2023)

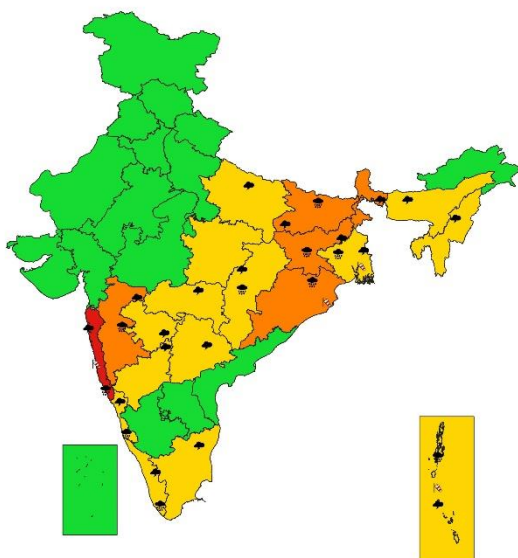


Subdivision Warning
 ☁ Heavy Rain
 ☁ Heavy Snow
 ⚡ Thunderstorms & Lightning
 🌧 Hailstorm
 ☁ Dust Storm
 🌪 Strong Surface Winds
 🔥 Heat Wave
 ❄ Cold wave
 🌫 Fog

Subdivision color
 🟢 NO WARNING
 🟡 WATCH (BE UPDATED)
 🟠 ALERT (BE PREPARED)
 🔴 WARNING (TAKE ACTION)



SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
(1-10-2023)

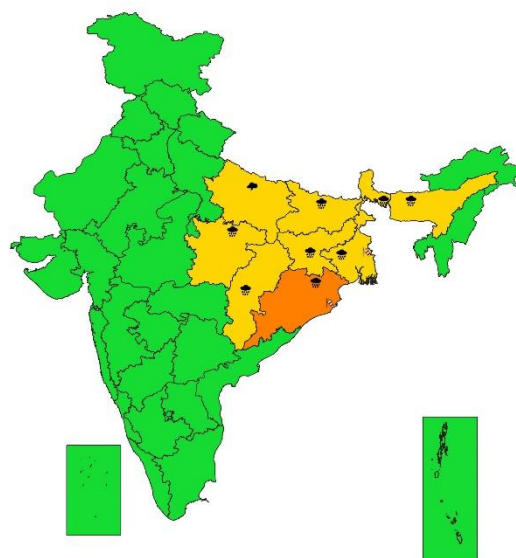


Subdivision Warning
 ☁ Heavy Rain
 ☁ Heavy Snow
 ⚡ Thunderstorms & Lightning
 🌧 Hailstorm
 ☁ Dust Storm
 🌪 Strong Surface Winds
 🔥 Heat Wave
 ❄ Cold wave
 🌫 Fog

Subdivision color
 🟢 NO WARNING
 🟡 WATCH (BE UPDATED)
 🟠 ALERT (BE PREPARED)
 🔴 WARNING (TAKE ACTION)

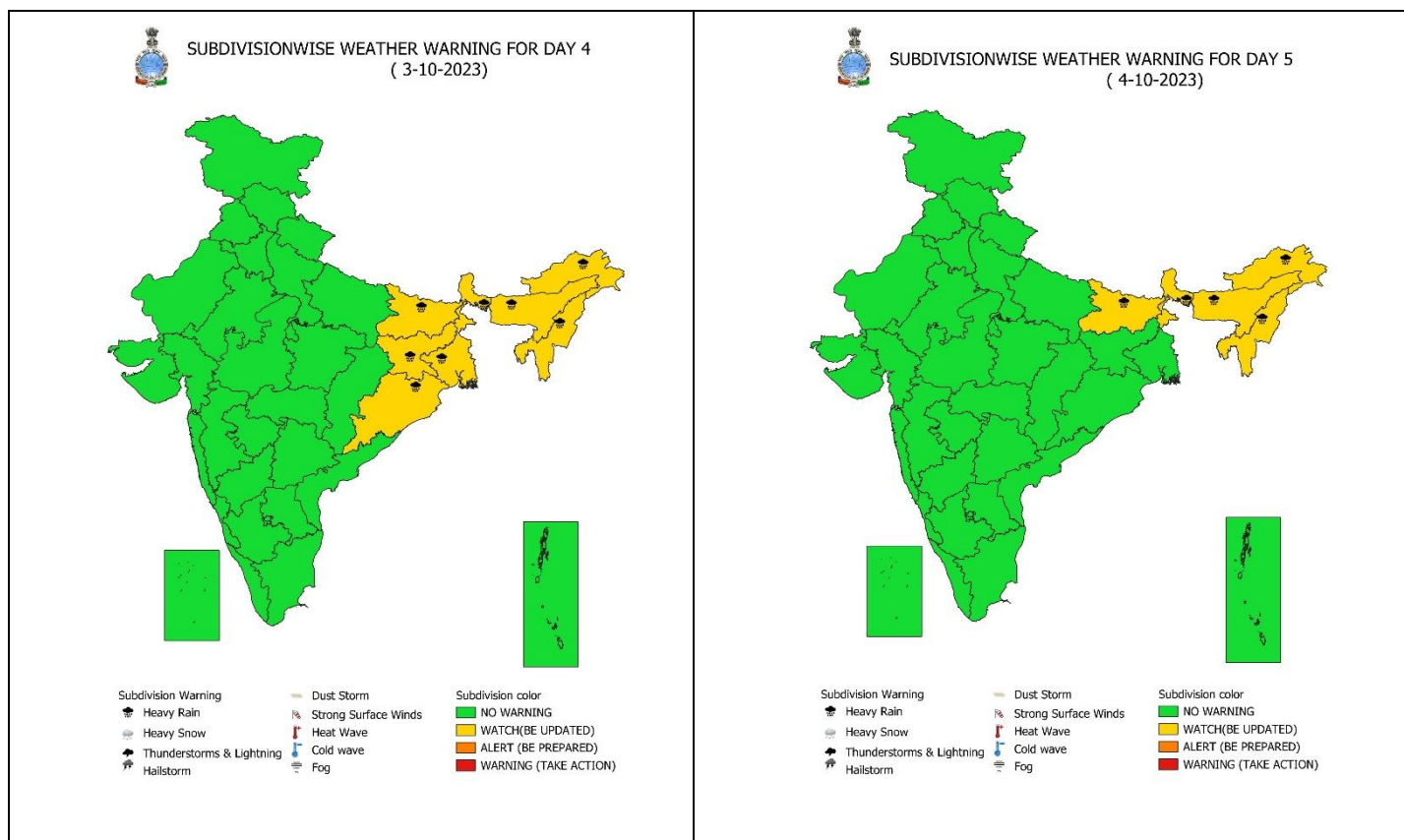


SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
(2-10-2023)



Subdivision Warning
 ☁ Heavy Rain
 ☁ Heavy Snow
 ⚡ Thunderstorms & Lightning
 🌧 Hailstorm
 ☁ Dust Storm
 🌪 Strong Surface Winds
 🔥 Heat Wave
 ❄ Cold wave
 🌫 Fog

Subdivision color
 🟢 NO WARNING
 🟡 WATCH (BE UPDATED)
 🟠 ALERT (BE PREPARED)
 🔴 WARNING (TAKE ACTION)



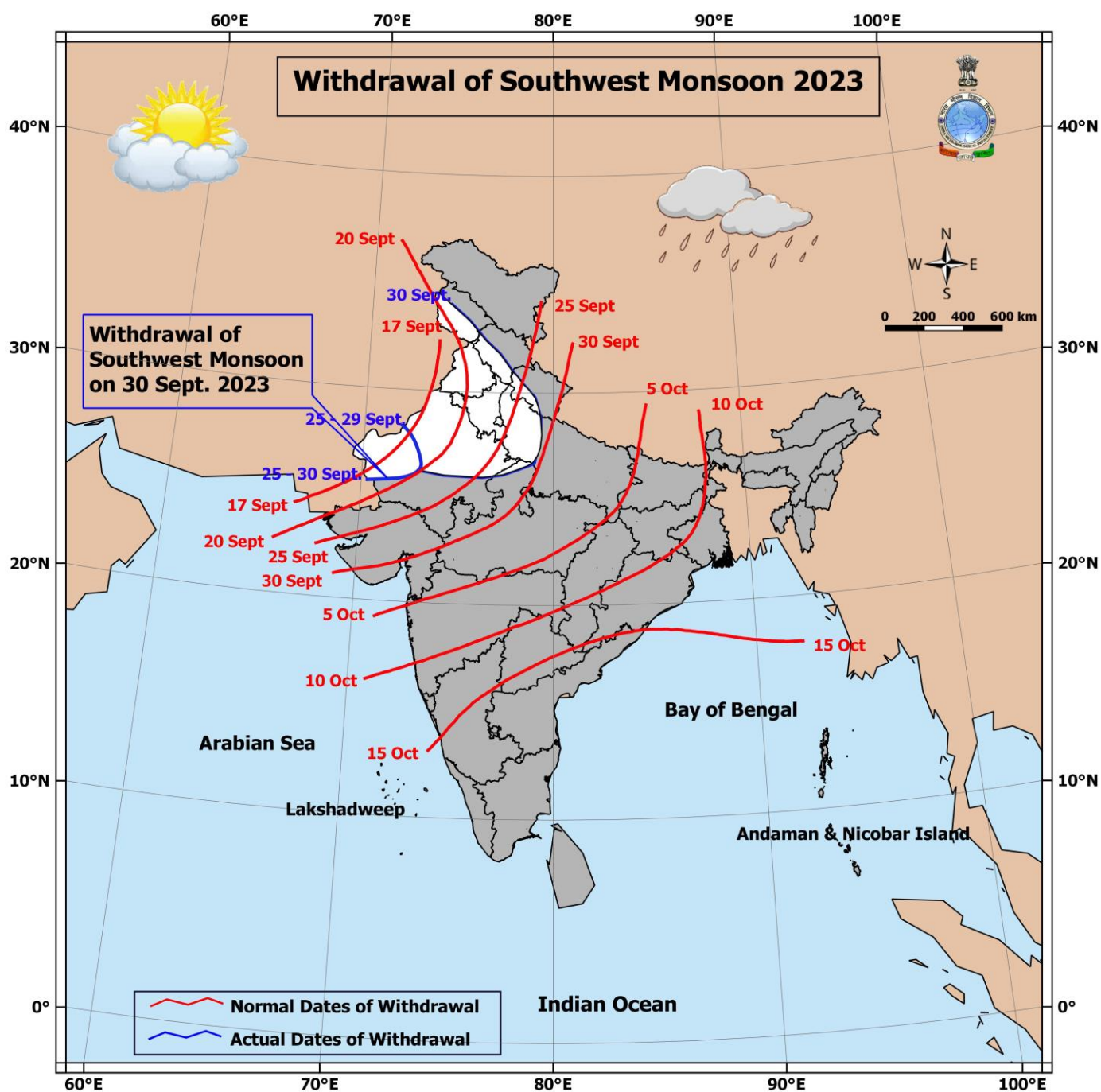
Impact & Action Suggested due to very heavy rainfall/extremely heavy falls over south Konkan & Goa, south Madhya Maharashtra, Jharkhand on 30th September & 01st October; over Coastal Karnataka, Kerala, Gangetic West Bengal on 30th; Bihar, Sub-Himalayan West Bengal & Sikkim on 01st October and over Odisha during 30th September-02nd October.

A. Impact Expected

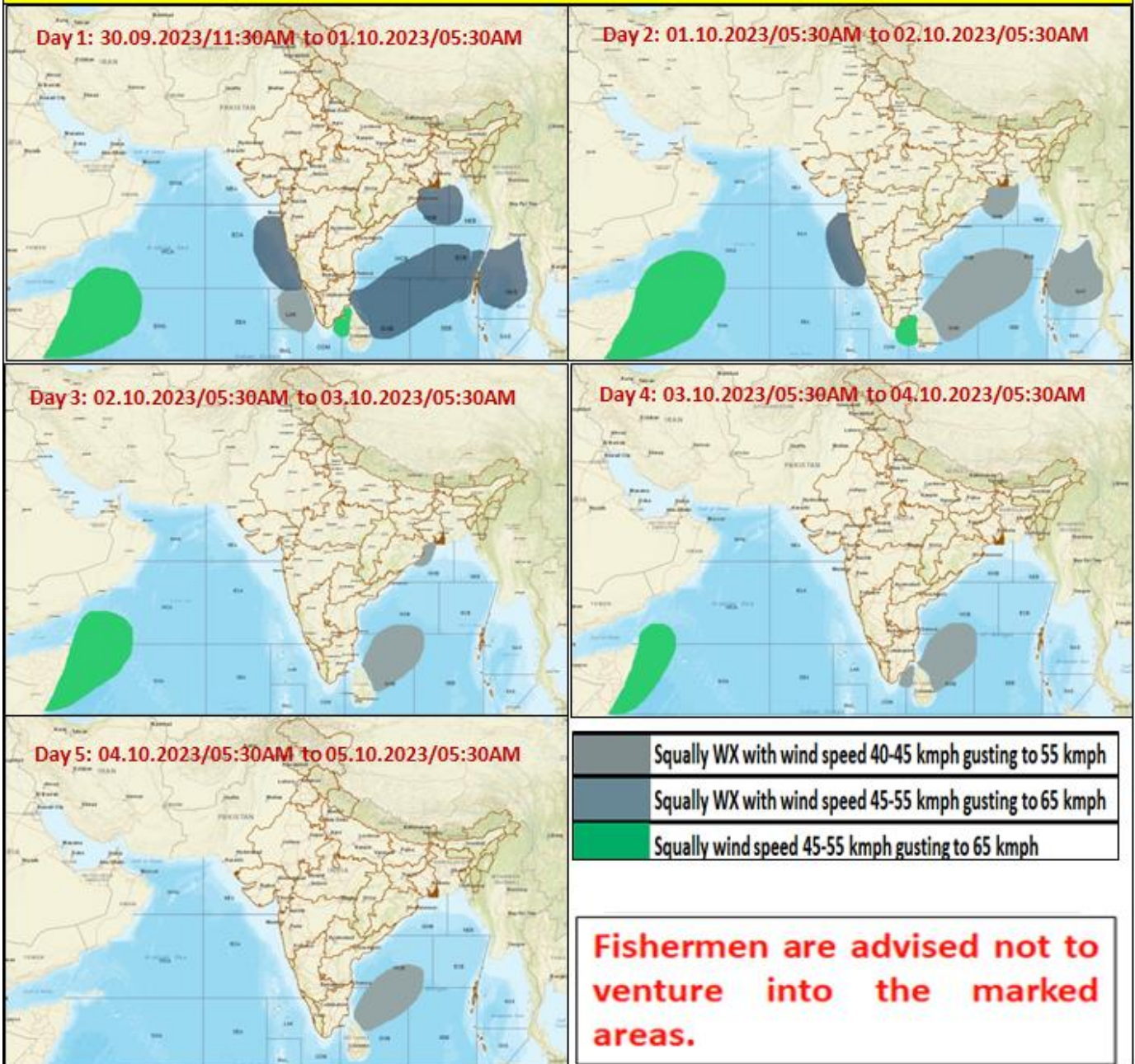
- ❖ Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- ❖ Occasional reduction in visibility due to heavy rainfall.
- ❖ Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- ❖ Minor damage to kutcha roads.
- ❖ Possibilities of damage to vulnerable structure.
- ❖ Localized Landslides/Mudslides in the hilly areas.
- ❖ 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).

B. Action Suggested

- ❖ 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



Fishermen warning graphics





OBSERVED AND FORECAST TRACK OF DEPRESSION OVER EASTCENTRAL ARABIAN SEA AND LOCATION OF WELL MARKED LOW PRESSURE AREA OVER NORTH WEST BAY OF BENGAL BASED ON 0300 UTC (0830 IST) OF 30TH SEPTEMBER, 2023.



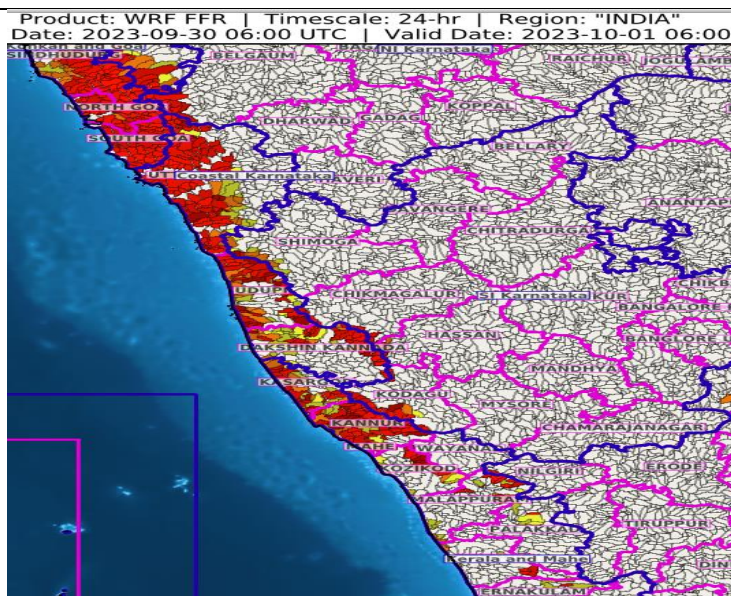
DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM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

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 01-10-2023 :

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Coastal Karnataka, North Kerala & Mahe and Southern Parts of Konkan & Goa Met Sub-divisions during next 24 hours.

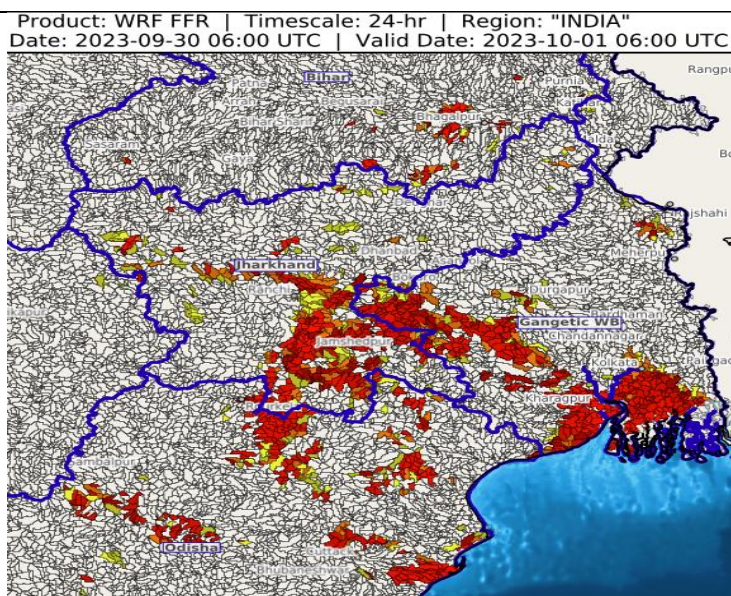
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 01-10-2023 :

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of North Odisha, Gangetic West Bengal, Jharkhand & adjoining Bihar Met Sub-divisions during next 24 hours.














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.




Legends:

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **AWS:** Automatic Weather Station
- ❖ **Region wise classification of meteorological Sub-Divisions:**
 - **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
 - **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
 - **East India:** Bihar, Jharkhand, Sub-Himalaya West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
 - **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
 - **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
 - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

SPATIAL DISTRIBUTION (% of Stations reporting)			
% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)

Subdivision Warning	 Dust Storm	Subdivision color
 Heavy Rain	 Strong Surface Winds	 NO WARNING
 Heavy Snow	 Heat Wave	 WATCH(BE UPDATED)
 Thunderstorms & Lightning	 Cold wave	 ALERT (BE PREPARED)
 Hailstorm	 Fog	 WARNING (TAKE ACTION)

Probabilistic Forecast	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

Flash Flood Risk	
	High Risk (Take Action)
	Moderate Risk (Be Prepared)
	Low Risk (Be Updated)