

# Government of India Ministry of Earth Sciences India Meteorological Department



Press Release
Date: 06th October, 2024

Time of Issue: 1300 hours IST

Subject: Heavy to very heavy rainfall activity very likely over North Tamil Nadu, Puducherry & Karaikal today and over Kerala during next 5 days.

#### Realised weather during past 24 hours till 0830 hours IST of today (Annexure I)

**Heavy to very Heavy rainfall** realized at isolated places over Assam & Meghalaya and Tamil Nadu, Puducherry & Karaikal; **Heavy rainfall** at isolated places over Uttarakhand, Gangetic West Bengal, Madhya Maharashtra, Rayalaseema, South Interior Karnataka, Kerala & Mahe.

#### On further Withdrawal of Southwest Monsoon

- ✓ The **line of withdrawal of Southwest Monsoon** passes through 29°N/84°E, Nautanwa, Sultanpur, Panna, Narmadapuram, Khargaon, Nandurbar, Navsari and 20°N/70°E.
- ✓ Conditions are favourable for further **withdrawal of Southwest Monsoon** from remaining parts of Gujarat, Madhya Pradesh and some more parts of Maharashtra during next 2-3 days.

#### **Weather Systems:**

✓ An **upper air cyclonic circulation** lies over southwest & adjoining westcentral Bay of Bengal off North Tamil Nadu-south Andhra Pradesh coasts in lower and middle tropospheric levels.

#### Forecast & Warnings (upto 7 days) (Annexure II & III):

#### **South Peninsular India**

- ✓ Fairly widespread to widespread light to moderate rainfall very likely over Kerala & Mahe, Lakshadweep, Karnataka, Tamil Nadu during the week; Isolated to Scattered light to moderate rainfall very likely over Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana during the week.
- ✓ **Isolated heavy to very heavy rainfall** very likely over Kerala & Mahe during 06<sup>th</sup>-12<sup>th</sup> October.
- ✓ **Isolated heavy to very heavy rainfall** very likely over North Tamil Nadu, Puducherry & Karaikal on 06<sup>th</sup> and **heavy rainfall** over Tamil Nadu, Puducherry & Karaikal during 07<sup>th</sup>-11<sup>th</sup> October.
- ✓ **Isolated heavy rainfall** also very likely over South Interior Karnataka during 06<sup>th</sup>-08<sup>th</sup>; Rayalaseema and Coastal Karnataka on 06<sup>th</sup>; Lakshadweep during 08<sup>th</sup> -12<sup>th</sup> October.

#### East & Northeast India

✓ Fairly widespread to widespread light to moderate rainfall very likely over Northeast India, Andaman & Nicobar Islands during the week and isolated to Scattered light to moderate rainfall over East India during the week.

✓ **Isolated heavy rainfall** very likely over Arunachal Pradesh during next 6 days; Assam & Meghalaya during next 5 days; Nagaland, Manipur, Mizoram & Tripura on 06<sup>th</sup> & 07<sup>th</sup> October.

#### **Northwest, West & Central India:**

✓ No significant rainfall likely over these regions during next one week.

### **Fishermen warning**

✓ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** is prevailing over Southeast Arabian Sea, along & off Kerala coast, Lakshadweep area, Gulf of Mannar during 06<sup>th</sup>-10<sup>th</sup> October; along & off Karnataka coast on 09<sup>th</sup> & 10<sup>th</sup> October; southwest Bay of Bengal, along & off north Tamil Nadu coast on 06<sup>th</sup> & 07<sup>th</sup> October. Fishermen are advised not to venture into these areas during the period.

#### Southwest Monsoon withdrawal Map (ANNEXURE IV)

#### For more details, kindly refer:

https://mausam.imd.gov.in/responsive/all\_india\_forcast\_bulletin.php

For District wise warnings refer:

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

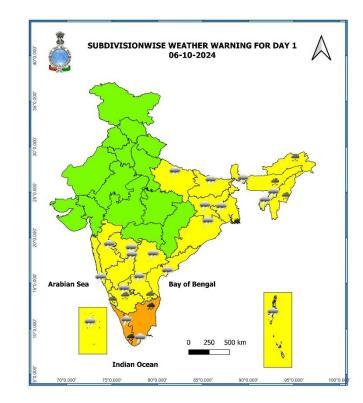
**ANNEXURE I** 

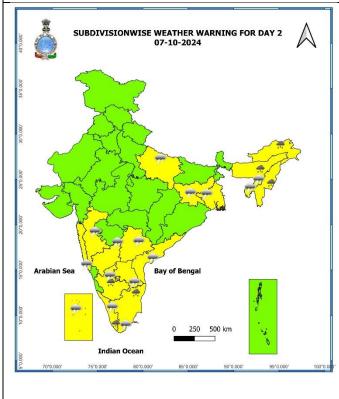
# Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 06.10.2024 (in cm):

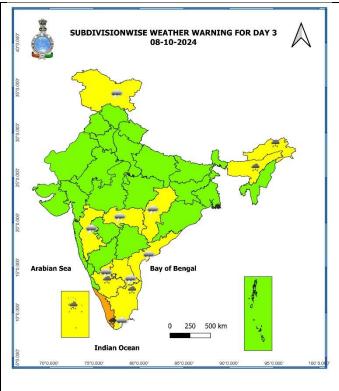
- ❖ Assam & Meghalaya: Nongstein (dist West Khasi Hills) 14, Resubelpara (dist North Garo Hills) 12, Williamnagar (dist East Garo Hills) 12, Mawkyrwat (dist South West Khasi Hills) 12, Dhupdhara Arg (dist Goalpara) 10, Mawsynram (dist East Khasi Hills) 9;
- ❖ Tamil Nadu: Vadakuthu (dist Cuddalore), Sivagangai PWD TB (dist Sivagangai) 13 each; Rasipuram (dist Namakkal) 12; Salem (dist Salem) 11; Tirumayam (dist Pudukkottai), Alangudi (dist Pudukkottai) 9 each; Pudukottai (dist Pudukkottai), Vanamadevi (dist Cuddalore), Anaimaduvu Dam (dist Salem) 8 each; Udalur Bazar (dist The Nilgiris), Upper Gudalur (dist The Nilgiris), Pamban (dist Ramanathapuram), Vazhapadi ARG (dist Salem), Perungalur (dist Pudukkottai), Avudayarkoil (dist Pudukkottai), Tirupathur (dist Sivagangai) 7 each;
- **❖ Kerala & Mahe:** Peermade To (dist Idukki) 11, Munderi(dist Malappuram) 7, Irikkur (dist Cannur) 7;
- ❖ South Interior Karnataka: Napoklu (dist Kodagu) 9;
- **❖ Gangetic West Bengal:** Bankura(cwc) (dist Bankura) 9;
- \* Rayalaseema: Gudur (dist Kurnool) 8;
- **Uttarakhand:** Loharkhet 7;
- **❖ Madhya Maharashtra:** Pimpalgaonbaswant\_agri (dist Nashik) 7.

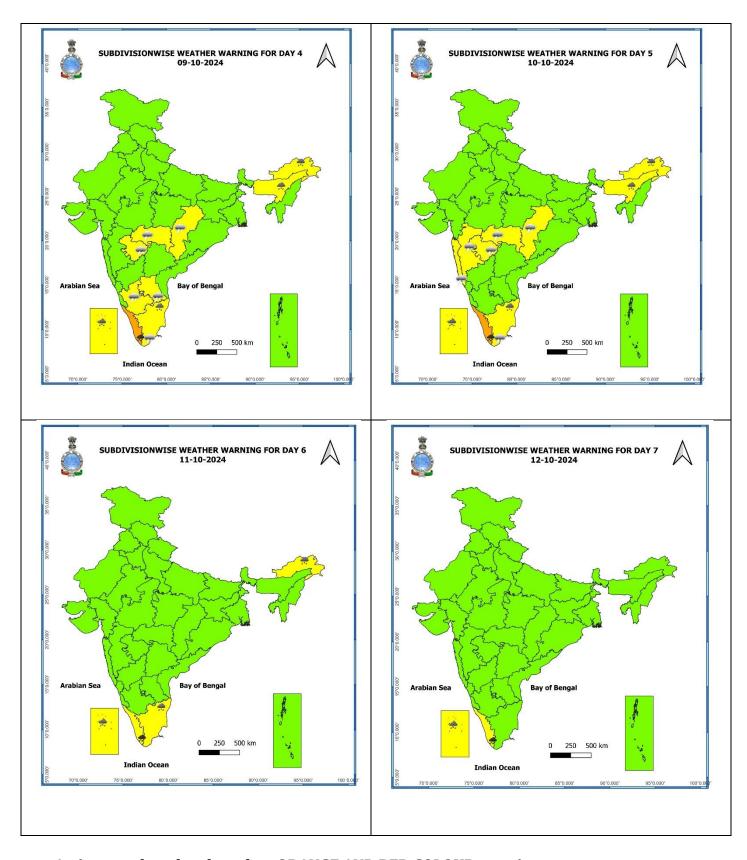
7 Days Rainfall Forecast										
S. No.	Subdivision	06-Oct	07-Oct	08-Oct	09-Oct	10-Oct	11-Oct	12-Oct		
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7		
1	ANDAMAN & NICOBAR ISLANDS	WS	WS	FWS	FWS	FWS	FWS	FWS		
2	ARUNACHAL PRADESH	WS	WS	FWS	FWS	FWS	FWS	FWS		
3	ASSAM & MEGHALAYA	WS	WS	FWS	FWS	FWS	FWS	FWS		
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	FWS								
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	SCT	SCT	SCT	FWS	SCT	SCT	SCT		
6	GANGETIC WEST BENGAL	FWS	SCT	SCT	SCT	SCT	SCT	ISOL		
7	ODISHA	ISOL								
8	JHARKHAND	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	DRY		
9	BIHAR	SCT	ISOL	ISOL	ISOL	ISOL	DRY	DRY		
10	EAST UTTAR PRADESH	ISOL	SCT	ISOL	ISOL	DRY	DRY	DRY		
11	WEST UTTAR PRADESH	DRY	ISOL	DRY	DRY	DRY	DRY	DRY		
12	UTTARAKHAND	ISOL	DRY	DRY	DRY	DRY	DRY	DRY		
13	HARYANA CHANDIGARH & DELHI	DRY	DRY	ISOL	ISOL	DRY	DRY	DRY		
14	PUNJAB	DRY	DRY	ISOL	ISOL	DRY	DRY	DRY		
15	HIMACHAL PRADESH	ISOL	DRY	DRY	ISOL	ISOL	DRY	DRY		
16	JAMMU & KASHMIR AND LADAKH	ISOL	ISOL	SCT	ISOL	DRY	DRY	DRY		
17	WEST RAJASTHAN	DRY	DRY	ISOL	ISOL	ISOL	DRY	DRY		
18	EAST RAJASTHAN	DRY	DRY	DRY	ISOL	DRY	DRY	DRY		
19	WEST MADHYA PRADESH	ISOL	DRY	DRY	DRY	DRY	ISOL	ISOL		
20	EAST MADHYA PRADESH	ISOL								
21	GUJARAT REGION	ISOL	DRY	DRY	DRY	DRY	DRY	DRY		
22	SAURASHTRA & KUTCH	DRY								
23	KONKAN & GOA	ISOL								
24	MADHYA MAHARASHTRA	ISOL								
25	MARATHAWADA	ISOL	ISOL	ISOL	ISOL	SCT	SCT	ISOL		
26	VIDARBHA	ISOL	ISOL	ISOL	ISOL	ISOL	SCT	ISOL		
27	CHHATTISGARH	ISOL								
28	COASTAL ANDHRA PRADESH & YANAM	SCT	SCT	SCT	SCT	SCT	SCT	ISOL		
29	TELANGANA	ISOL	ISOL	SCT	SCT	ISOL	ISOL	ISOL		
30	RAYALASEEMA	SCT	ISOL	SCT	SCT	SCT	SCT	ISOL		
31	TAMILNADU PUDUCHERRY & KARAIKAL	FWS	FWS	WS	WS	FWS	FWS	FWS		
32	COASTAL KARNATAKA	FWS								
33	NORTH INTERIOR KARNATAKA	FWS	SCT	FWS	FWS	SCT	SCT	SCT		
34	SOUTH INTERIOR KARNATAKA	FWS	FWS	WS	FWS	FWS	FWS	FWS		
35	KERALA & MAHE	WS								
36	LAKSHADWEEP	WS								

• As the lead period increases forecast accuracy decreases.

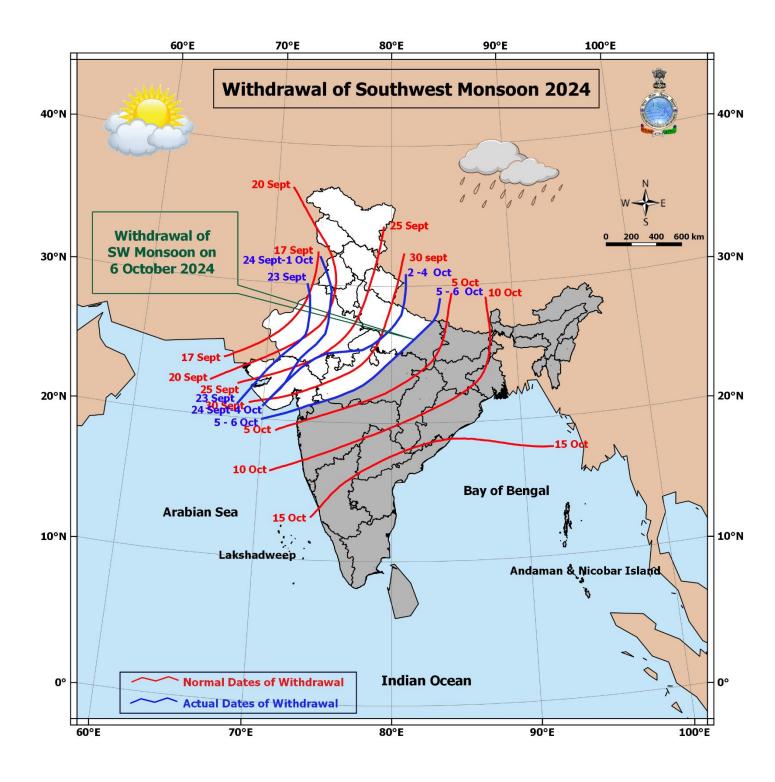








- Action may be taken based on ORANGE AND RED COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.



#### Impact due to

✓ **Isolated heavy to very heavy rainfall** very likely over Tamil Nadu, Puducherry & Karaikal on 06<sup>th</sup>; Kerala & Mahe on 06<sup>th</sup> & during 08<sup>th</sup> -12<sup>th</sup> October.

#### **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 and roadways 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 and wind.
- ✓ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

#### **Action Suggested**

- ✓ 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

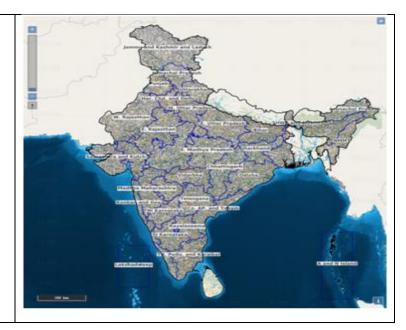
### Agromet advisories for Heavy Rainfall likely over various parts of the country

- > Drain out excess water from rice, millets, cowpea, French bean, vegetable crops and orchards in Meghalaya.
- > Drain out excess water from standing crop fields and fruit orchards to avoid water stagnation in Tamil Nadu, Kerala, Coastal Karnataka, South Interior Karnataka, Rayalaseema and North Eastern States.
- ➤ Keep the harvested produce at safer places.
- > Provide mechanical support to horticultural crops & staking to vegetables.

Flash Flood Guidance: ANNEXURE V

# 24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 07-10-2024:

No Flash flood risk likely in next 24 hours.



#### Legends & abbreviations:

- **♦ Heavy Rain:**64.5-115.5mm; **Very Heavy Rain:**115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ Obsy: Observatory; AWS: Automatic Weather Station; ARG: Automatic Rain Gauge; dist: District: NH: National Highway; KVK: Krishi Vigyan Kendra; DVC: Damodar Valley Corporation; PTO: Part Time Office, Aero: Aerodrome, IAF: Indian Air Force.
- **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-Himalayan 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 Marathawada.
  - South India: Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.



35. केरल और माहे

36. लक्षद्वीप

#### राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विज्ञान विभाग पृथ्वी विज्ञान मंत्रालय

#### National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

35. Kerala & Mahe

36. Lakshadweep

# **LEGENDS**



## **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)





Sea State

Cyclone



#### **DEFINITION/CRITERIA** Heavy: 64.5 to 115.5 mm/cm \* Very Heavy: 115.6 to 204.4 mm/cm Rain/ Snow \* Extremely Heavy: > 204.4 mm/cm When maximum temperature of a station reaches ≥40° C for plains and ≥30° C for hilly regions (a) Based on Departure from normal Heat Wave: Maximum Temperature Departure from normal 4.5° C to 6.4° C. Severe Heat Wave: Maximum Temperature Departure from normal ≥6.5° C (b). Based on Actual maximum temperature **Heat Wave** Heat Wave: When actual maximum temperature ≥45°C Severe Heat Wave: When actual maximum temperature ≥47°C (c). Criteria for heat wave for coastal stations When maximum temperature departure is >4.5°C from normal. Heat Wave may be described provided maximum temperature ≥37°C When maximum temperature remains 40°C Warm Night: When minimum temperature departure 4.5 °C to 6.4 °C Warm Night Severe Warm Night: When minimum temperature departure >6.4 °C When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions. (a). Based on departure Cold Wave: Minimum Temperature Departure from normal -4.5 °C to -6.4 °C. Severe Cold Wave: Minimum Temperature Departure from normal $\leq$ -6.5 °C **Cold Wave** (b) Based on actual Minimum Temperature (for Plains only) Cold Wave : When Minimum Temperature is ≤ 4.0 °C Severe Cold Wave: When Minimum Temperature is ≤ 2.0 °C (c) For Coastal Stations When Minimum Temperature departure is ≤-4.5 °C & actual Minimum Temperature is ≤ 15 °C When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions Based on departure **Cold Day** Cold Day: Maximum Temperature Departure from normal -4.5 °C to -6.4 °C. Severe Cold Day: Maximum Temperature Departure from normal $\leq$ -6.5 °C Phenomenon of small droplets suspended in air and the horizontal visibility < 1km Moderate Fog: When the visibility between 500-200 metres Fog when the visibility between 50- 200 metres Dense Fog: v Very Dense Fog: when the visibility < 50 metres Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder) Thunderstorm Dust/Sand An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind. Ice deposits on ground Frost Air temperature ≤4°C ( over Plains) A strong wind that rises suddenly, lasts for atleast 1 minute. Moderate: Wind speed 52-61 kmph Squall Severe: Wind speed 62-87 kmph Very Severe: Wind speed >87 kmph

Effect of various waves in the sea over specific area

Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre

High to very high: Wind speed 63-117 kmph ( 34-63 knots) & Wave height 6-14 metre Phenomenal: Wind speed >117 kmph (>63 knots) & Wave height >14 metre

Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)

Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)

Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)
Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)

Super Cyclone Strom: Wind speed >220 kmph (>119 knots)