

Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release

Date: 12<sup>th</sup> October, 2024

Time of Issue: 1230 hours IST

**Subject:(i) The Well marked low pressure area over eastcentral Arabian sea is likely to move west-northwestwards and intensify into a Depression over central Arabian Sea by morning of 13<sup>th</sup> October.**

**(ii) Isolated heavy rainfall activity very likely to continue over South Interior Karnataka, Kerala & Mahe and Tamil Nadu during next 5-6 days; Coastal Andhra Pradesh & Yanam and Rayalaseema during 14<sup>th</sup> -16<sup>th</sup> October, 2024.**

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

**Heavy to very Heavy rainfall** at isolated places over Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal, North Interior Karnataka; **Heavy rainfall** at isolated places over Nagaland, Manipur, Mizoram & Tripura, East Madhya Pradesh, Assam & Meghalaya, West Madhya Pradesh, Madhya Maharashtra, Marathwada, Arunachal Pradesh, South Interior Karnataka.

**On further Withdrawal of Southwest Monsoon**

- ✓ The **line of withdrawal of Southwest Monsoon** continues to pass through 29°N/86°E, Darbhanga, Hazaribagh, Pendra Road, Narsinghpur, Khargone, Nandurbar, Navsari and 20°N/70°E.
- ✓ Conditions are favourable for further **withdrawal of Southwest Monsoon** from remaining parts of Gujarat, Madhya Pradesh, Jharkhand, Bihar, some more parts of Maharashtra, Chhattisgarh and some parts of Odisha, West Bengal & Sikkim during next 2 days.

**Weather Systems:**

- ✓ Yesterday's **Well Marked Low pressure area** over eastcentral Arabian Sea off Maharashtra coast lay over eastcentral Arabian Sea at 0830 hours IST of today, the 12<sup>th</sup> October 2024. It is likely to move west-northwestwards and intensify into a **Depression** over central Arabian Sea by morning of 13<sup>th</sup> October.
- ✓ A **cyclonic circulation** lay over southeast Bay of Bengal & adjoining equatorial Indian Ocean extended up to middle tropospheric levels. Under its influence, a **low pressure area** is likely to form over southwest Bay of Bengal around 14<sup>th</sup> October.
- ✓ An upper air **cyclonic circulation** over central parts of south Bay of Bengal lay over southwest Bay of Bengal in lower tropospheric levels.

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

**South Peninsular India**

- ✓ Fairly widespread to widespread light to moderate rainfall very likely over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep, South Interior Karnataka; Scattered to Fairly widespread light to moderate rainfall over Coastal & North Interior Karnataka, Coastal Andhra Pradesh &

Yanam, Rayalaseema; Isolated to Scattered light to moderate rainfall very likely over Telangana during the week.

- ✓ **Isolated very heavy rainfall** very likely over Tamil Nadu, Puducherry & Karaikal during 14<sup>th</sup>-16<sup>th</sup> October.
- ✓ **Isolated heavy rainfall** very likely over Kerala & Mahe during the week; Tamil Nadu, Puducherry & Karaikal on 12<sup>th</sup>, 13<sup>th</sup> & 17<sup>th</sup>; Coastal Andhra Pradesh & Yanam, Rayalaseema during 14<sup>th</sup>-17<sup>th</sup>; South Interior Karnataka during 12<sup>th</sup>-16<sup>th</sup> October.

### **Northeast & East India**

- ✓ Fairly widespread to widespread light to moderate rainfall very likely over Andaman & Nicobar Islands; Fairly widespread to widespread light to moderate rainfall very likely over Arunachal Pradesh during next 2 days & Scattered to Fairly widespread light to moderate rainfall over Assam & Meghalaya & Nagaland, Manipur, Mizoram & Tripura during 2 days; Isolated to Scattered light to moderate rainfall very likely over same region during subsequent 5 days.
- ✓ **Isolated heavy rainfall** very likely over Arunachal Pradesh, Assam & Andaman & Nicobar Islands on 12<sup>th</sup> October.

### **West & Central India**

- ✓ Scattered to Fairly widespread light to moderate rainfall over Gujarat State during 3 days; Isolated to Scattered light to moderate rainfall very likely over Konkan & Goa, Madhya Maharashtra, Marathwada, East Madhya Pradesh, Vidarbha, Chhattisgarh during the week; West Madhya Pradesh during next 5 days.
- ✓ **Isolated heavy rainfall** very likely over Madhya Maharashtra on 12<sup>th</sup>; Gujarat State on 12<sup>th</sup> & 13<sup>th</sup>; West Madhya Pradesh, Vidarbha on 12<sup>th</sup> October.

### **Northwest India:**

- ✓ No significant rainfall likely over these regions during the week.

### **Fishermen warning**

- ✓ Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph is likely to prevail over Maldives, Lakshadweep Comorin areas, southeast Arabian sea and many parts of southwest Arabian sea, along and off Somalia coast, parts of westcentral Arabian sea, most parts of eastcentral Arabian sea, along and off Kerala, Karnataka, north Gujarat coasts, Gulf of Mannar, along and off south Sri Lanka coast, most parts of southwest Bay of Bengal and adjoining parts of southeast Bay of Bengal. 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\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php)

**For District wise warnings refer:**

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

**For Fishermen warnings, kindly refer:**

[https://rsmcnewdelhi.imd.gov.in/uploads/archive/51/51\\_bdf575\\_GRAPHIC.png](https://rsmcnewdelhi.imd.gov.in/uploads/archive/51/51_bdf575_GRAPHIC.png)

## ANNEXURE I

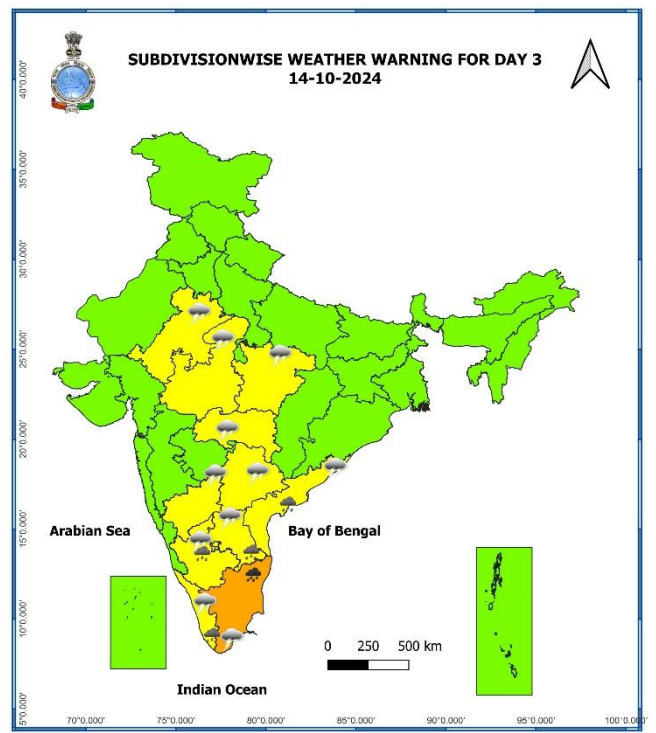
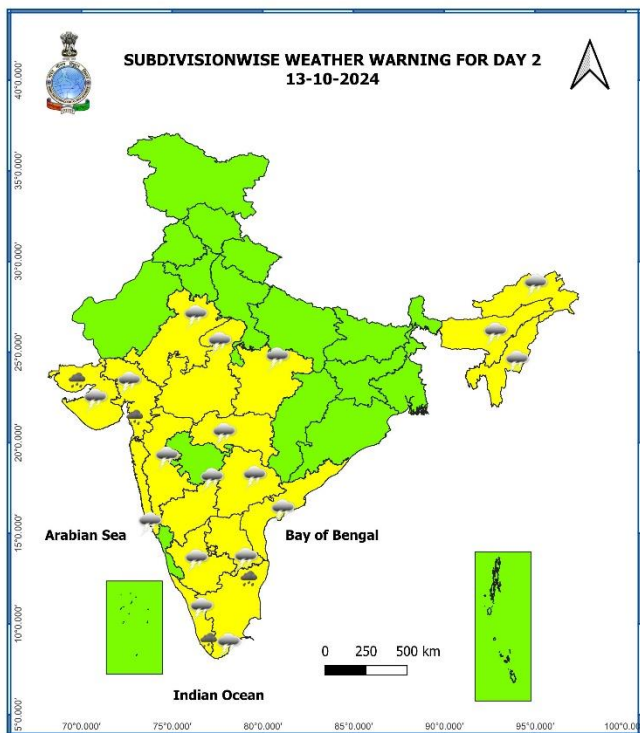
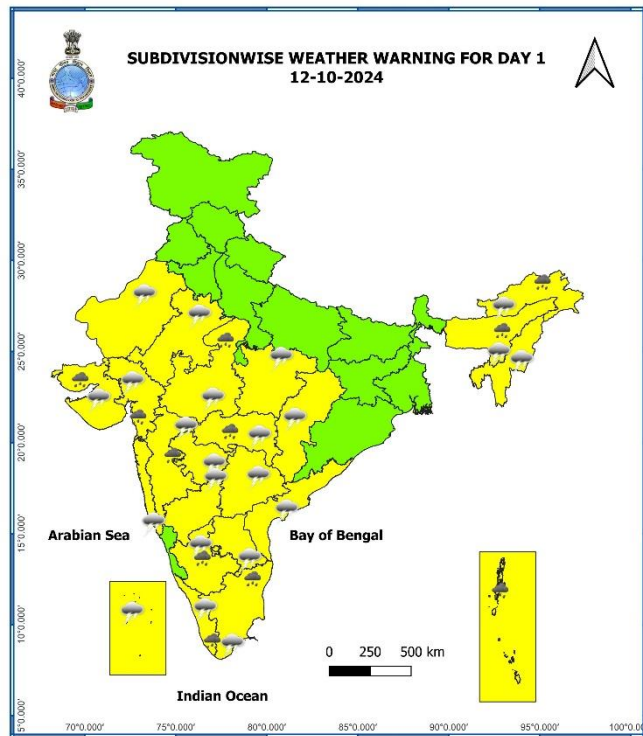
### Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 12.10.2024 (in cm):

- ❖ **Kerala & Mahe:** Vadakara (dist Kozhikode) 18, Alapuzha (dist Alapuzha) 16, Poonjar(dist Kottayam) 11, Trivandrum (dist Thiruvananthapuram) 11, Airport Chakka(dist Thiruvananthapuram) 11, Mancompu (dist Alapuzha) 11, Mahe (dist Mahe) 10, Peringalkuthu(dist Thrissur) 10, Neyyattinkara (dist Thiruvananthapuram) 10, Varkala (dist Thiruvananthapuram) 9, Kanjirapuzha(dist Palakkad) 9, Perumkadavila (dist Thiruvananthapuram) 8, Anakayam(dist Malappuram) 7, Thiruvananthapuram (dist Thiruvananthapuram) 7, Kollam (dist Kollam) 7, Kanjirappally (dist Kottayam) 7,
- ❖ **North Interior Karnataka:** Haveri Pto (dist Haveri) 17, Ilkal (dist Bagalkote) 7, Kudalasangama (dist Bagalkote) 7,
- ❖ **Tamil Nadu, Puducherry & Karaikal:** Karaikudi (dist Sivagangai) 15, Tiruchirappalli Airport (dist Thiruchirappalli) 13, Kurunthancode (dist Kanniyakumari) 10, Colachel (dist Kanniyakumari) 9, Neyyoor AWS (dist Kanniyakumari) 9, Erode (dist Erode) 8, Varattupallam (dist Erode) 7,
- ❖ **South Interior Karnataka:** Shivamogga Pto (dist Shivamogga) 10, Nagamangala (dist Mandya) 7, Hagaribommanahalli (dist Vijayanagara) 7,
- ❖ **Nagaland, Manipur, Mizoram & Tripura:** Kadamtala CWC (dist North Tripura) 9, Kailashahar Aero (dist Unakoti) 8, Kamalpur (dist Dhalai) 7, Dharmanagar/ Panisagar (dist North Tripura) 7,
- ❖ **East Madhya Pradesh:** Lakhnadon (dist Seoni) 8,
- ❖ **Assam & Meghalaya:** Silchar (dist Cachar) 8, Beki Mathungari (dist Barpeta) 8, Matijuri (dist Hailakandi) 7, Lala Arg (dist Hailakandi) 7, Sonari\_arg (dist Sibsagar) 7,
- ❖ **West Madhya Pradesh:** Pandhana (dist Khandwa) 7, Bhagwanpura (dist Khargone) 7,
- ❖ **Madhya Maharashtra:** Bhusawal (dist Jalgaon) 7,
- ❖ **Marathwada:** Soegaon (dist Chh. Sambhajinagar) 7,
- ❖ **Arunachal Pradesh:** Roing (dist Lower Dibang Valley) 7,

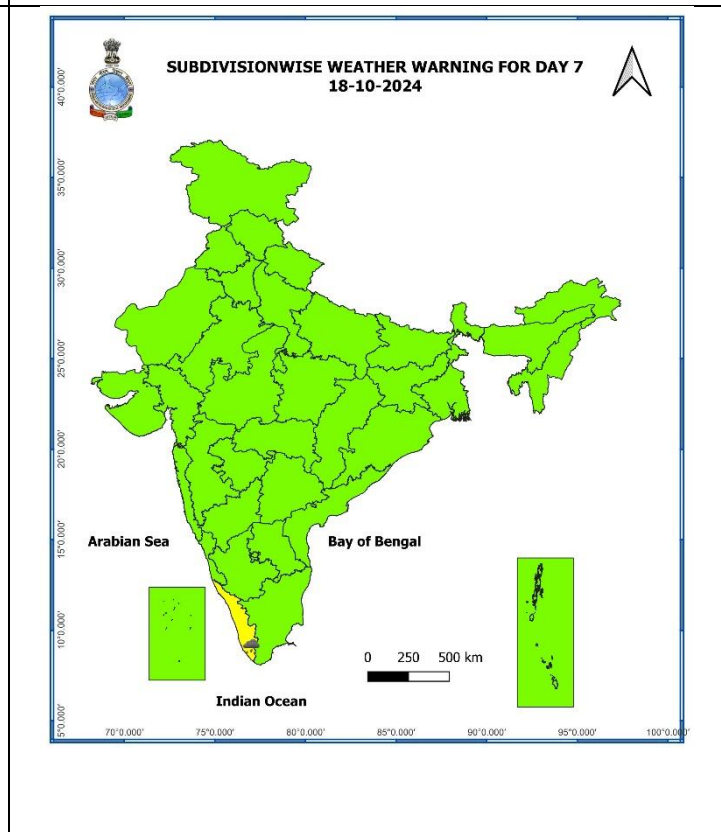
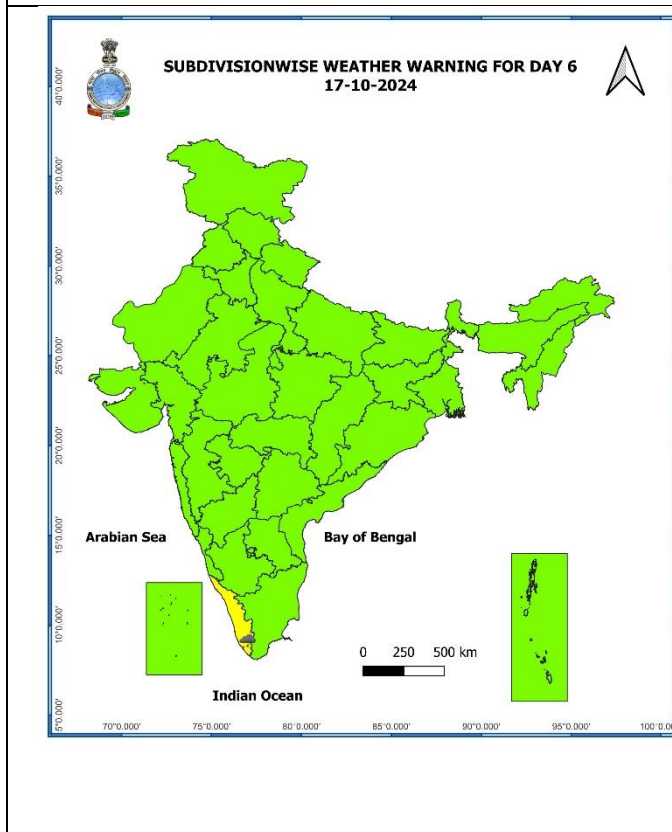
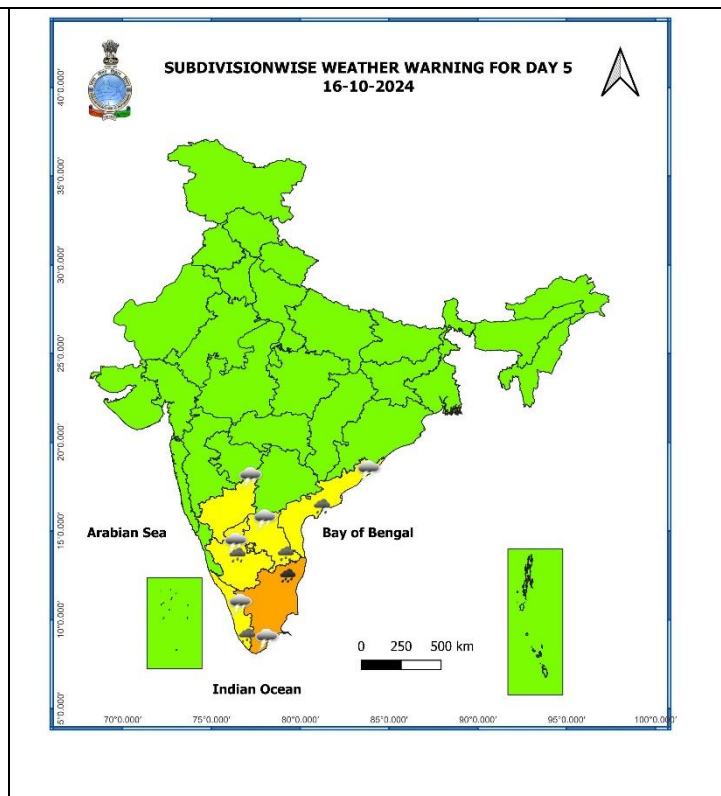
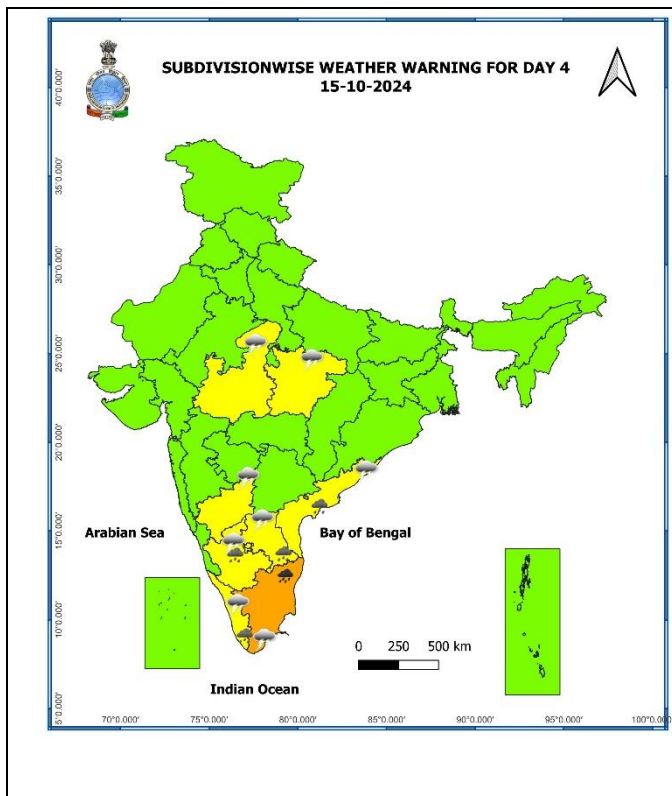
## ANNEXURE II

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

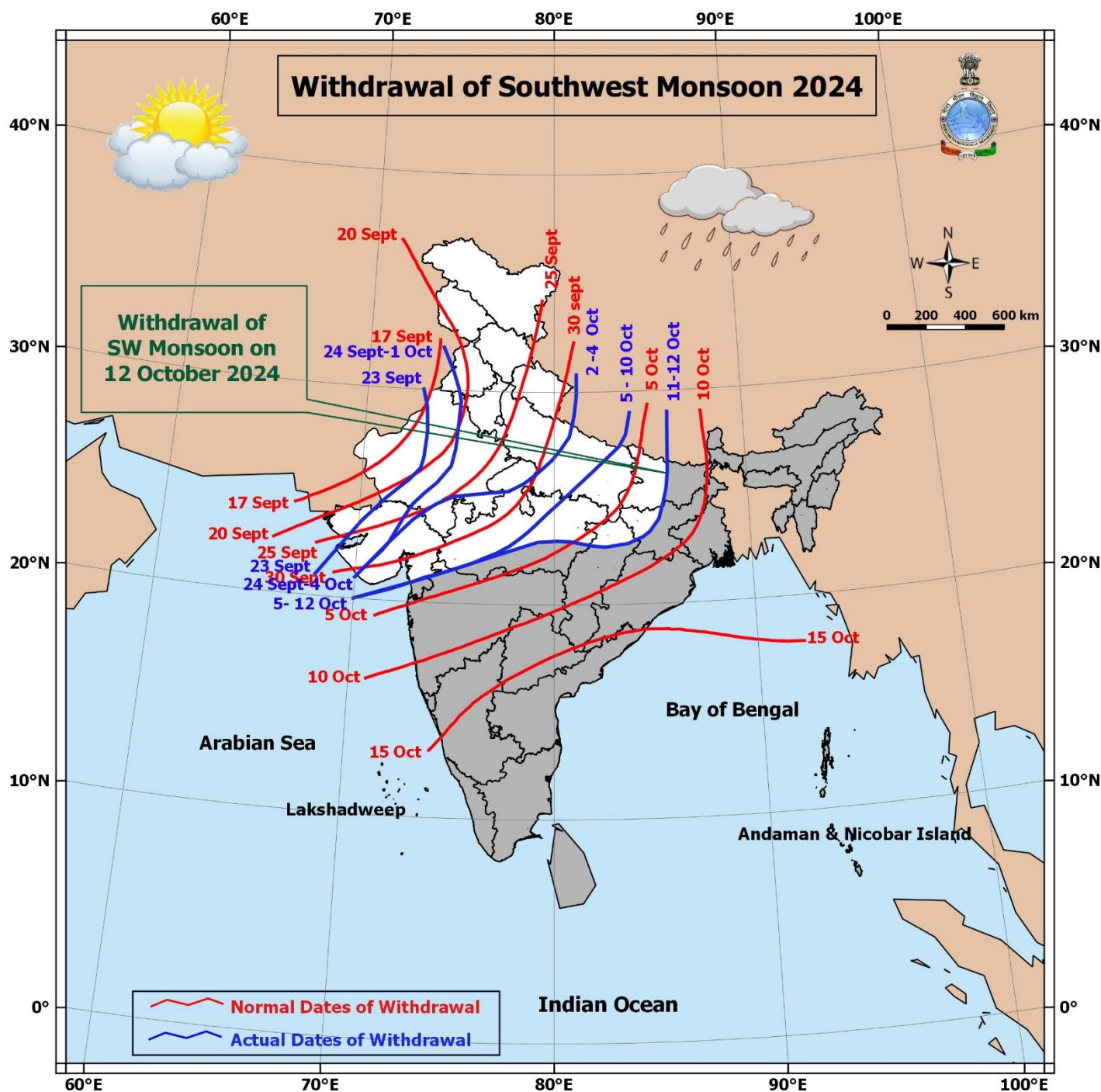
- As the lead period increases forecast accuracy decreases.







- 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 during 14<sup>th</sup>-16<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

- ✓ In **Tamil Nadu**, drain out excess water from rice nurseries and fields of rice, maize, pepper and newly planted turmeric. Provide support to banana plantations.
- ✓ Make necessary arrangements for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in West Madhya Pradesh, Vidarbha, Madhya Maharashtra, Gujarat region, Kerala, South Interior Karnataka, Arunachal Pradesh and Assam.
- ✓ Keep the harvested produce at safer places.
- ✓ Provide mechanical support to horticultural crops & staking to vegetables.

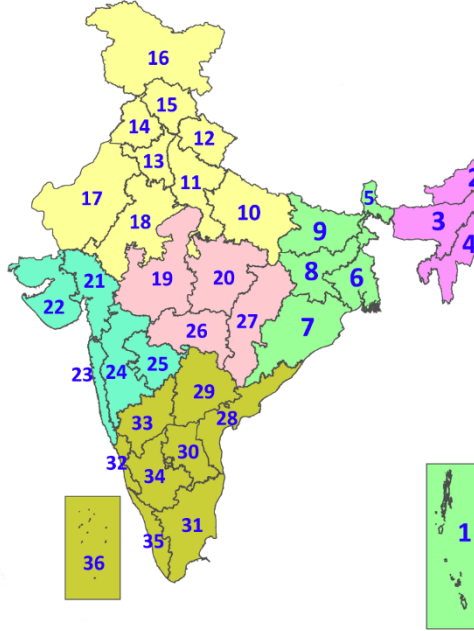


## Legends & abbreviations:

- ❖ **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.

## LEGENDS

1. अंडमान और निकोबार द्वीपसमूह
2. अरुणाचल प्रदेश
3. असम और मेघालय
4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
5. उप-हिमालयी पश्चिम बंगाल और सिक्किम
6. गंगीय पश्चिम बंगाल
7. ओडिशा
8. झारखंड
9. बिहार
10. पूर्वी उत्तर प्रदेश
11. पश्चिम उत्तर प्रदेश
12. उत्तराखंड
13. हरियाणा, चंडीगढ़ और दिल्ली
14. पंजाब
15. हिमाचल प्रदेश
16. जम्मू और कश्मीर और लद्दाख
17. पश्चिम राजस्थान
18. पूर्वी राजस्थान
19. पश्चिम मध्य प्रदेश
20. पूर्वी मध्य प्रदेश
21. गुजरात
22. सौराष्ट्र
23. कोंकण और गोवा
24. मध्य महाराष्ट्र
25. मराठवाड़ा
26. विदर्भ
27. छत्तीसगढ़
28. तटीय आंध्र प्रदेश और यनम
29. तेलंगाना
30. रायलसेमा
31. तमिलनाडु, पुडुचेरी और कराईकल
32. तटीय कर्नाटक
33. आंतरिक उत्तरी कर्नाटक
34. आंतरिक दक्षिणी कर्नाटक
35. केरल और माहे
36. लक्षद्वीप



1. Andaman & Nicobar Islands
2. Arunachal Pradesh
3. Assam & Meghalaya
4. Nagaland, Manipur, Mizoram & Tripura
5. Sub-Himalayan West Bengal & Sikkim
6. Gangetic West Bengal
7. Odisha
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chandigarh & Delhi
14. Punjab
15. Himachal Pradesh
16. Jammu & Kashmir and Ladakh
17. West Rajasthan
18. East Rajasthan
19. West Madhya Pradesh
20. East Madhya Pradesh
21. Gujarat
22. Saurashtra
23. Konkan & Goa
24. Madhya Maharashtra
25. Marathwada
26. Vidarbha
27. Chhattisgarh
28. Coastal Andhra Pradesh & Yanam
29. Telangana
30. Rayalaseema
31. Tamilnadu, Puducherry & Karaikal
32. Coastal Karnataka
33. North Interior Karnataka
34. South Interior Karnataka
35. Kerala & Mahe
36. 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)

- |                      |                      |              |
|----------------------|----------------------|--------------|
| Fog                  | Heavy Snow           | Cold Wave    |
| Heavy Rain           | Dust Storm           | Cold Day     |
| Very Heavy Rain      | Heat Wave            | Ground Frost |
| Extremely Heavy Rain | Warm Night           |              |
| Thunder & Lightning  | Hot Day              |              |
| Hailstorm            | Hot & Humid          |              |
| Dust Raising Winds   | Strong Surface Winds |              |

### COLOUR CODED WARNING

- No Warning (No Action)
- Watch (Be Aware)
- Alert (Be Prepared To Take Action)
- Warning (Take Action)

### Probabilistic Forecast

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

\* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".  
Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day.  
For more details, kindly visit <https://mausam.imd.gov.in> or contact: 011-2434-4599  
(Service to the Nation since 1875)

### DEFINITION/CRITERIA

<b>Rain/ Snow *</b>	<p><b>Heavy:</b> 64.5 to 115.5 mm/cm *</p> <p><b>Very Heavy:</b> 115.6 to 204.4 mm/cm*</p> <p><b>Extremely Heavy:</b> &gt; 204.4 mm/cm *</p>
<b>Heat Wave</b>	<p><b>When maximum temperature of a station reaches <math>\geq 40^{\circ}\text{C}</math> for plains and <math>\geq 30^{\circ}\text{C}</math> for hilly regions</b></p> <p><b>(a) Based on Departure from normal</b></p> <p><b>Heat Wave:</b> Maximum Temperature Departure from normal <math>4.5^{\circ}\text{C}</math> to <math>6.4^{\circ}\text{C}</math>.</p> <p><b>Severe Heat Wave:</b> Maximum Temperature Departure from normal <math>\geq 6.5^{\circ}\text{C}</math></p> <p><b>(b). Based on Actual maximum temperature</b></p> <p><b>Heat Wave:</b> When actual maximum temperature <math>\geq 45^{\circ}\text{C}</math>.</p> <p><b>Severe Heat Wave:</b> When actual maximum temperature <math>\geq 47^{\circ}\text{C}</math></p> <p><b>(c). Criteria for heat wave for coastal stations</b></p> <p>When maximum temperature departure is <math>&gt;4.5^{\circ}\text{C}</math> from normal. Heat Wave may be described provided maximum temperature <math>\geq 37^{\circ}\text{C}</math></p>
<b>Warm Night</b>	<p><b>When maximum temperature remains <math>40^{\circ}\text{C}</math></b></p> <p><b>Warm Night:</b> When minimum temperature departure <math>4.5^{\circ}\text{C}</math> to <math>6.4^{\circ}\text{C}</math>.</p> <p><b>Severe Warm Night:</b> When minimum temperature departure <math>&gt;6.4^{\circ}\text{C}</math>.</p>
<b>Cold Wave</b>	<p><b>When minimum temperature of a station <math>\leq 10^{\circ}\text{C}</math> for plains and <math>\leq 0^{\circ}\text{C}</math> for hilly regions.</b></p> <p><b>(a). Based on departure</b></p> <p><b>Cold Wave:</b> Minimum Temperature Departure from normal <math>-4.5^{\circ}\text{C}</math> to <math>-6.4^{\circ}\text{C}</math>.</p> <p><b>Severe Cold Wave:</b> Minimum Temperature Departure from normal <math>\leq -6.5^{\circ}\text{C}</math></p> <p><b>(b) Based on actual Minimum Temperature (for Plains only)</b></p> <p><b>Cold Wave :</b> When Minimum Temperature is <math>\leq 4.0^{\circ}\text{C}</math></p> <p><b>Severe Cold Wave:</b> When Minimum Temperature is <math>\leq 2.0^{\circ}\text{C}</math></p> <p><b>(c) For Coastal Stations</b></p> <p>When Minimum Temperature departure is <math>\leq -4.5^{\circ}\text{C}</math> &amp; actual Minimum Temperature is <math>\leq 15^{\circ}\text{C}</math></p>
<b>Cold Day</b>	<p><b>When minimum temperature of a station <math>\leq 10^{\circ}\text{C}</math> for plains and <math>\leq 0^{\circ}\text{C}</math> for hilly regions</b></p> <p><b>Based on departure</b></p> <p><b>Cold Day:</b> Maximum Temperature Departure from normal <math>-4.5^{\circ}\text{C}</math> to <math>-6.4^{\circ}\text{C}</math>.</p> <p><b>Severe Cold Day:</b> Maximum Temperature Departure from normal <math>\leq -6.5^{\circ}\text{C}</math></p>
<b>Fog</b>	<p><b>Phenomenon of small droplets suspended in air and the horizontal visibility <math>&lt; 1\text{km}</math></b></p> <p><b>Moderate Fog:</b> When the visibility between 500-200 metres</p> <p><b>Dense Fog:</b> when the visibility between 50- 200 metres</p> <p><b>Very Dense Fog:</b> when the visibility <math>&lt; 50</math> metres</p>
<b>Thunderstorm</b>	<p><b>Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)</b></p>
<b>Dust/Sand Storm</b>	<p><b>An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.</b></p>
<b>Frost</b>	<p><b>Ice deposits on ground</b></p> <p>Air temperature <math>\leq 4^{\circ}\text{C}</math> ( over Plains)</p>
<b>Squall</b>	<p><b>A strong wind that rises suddenly, lasts for atleast 1 minute.</b></p> <p><b>Moderate:</b> Wind speed 52-61 kmph</p> <p><b>Severe:</b> Wind speed 62-87 kmph</p> <p><b>Very Severe:</b> Wind speed <math>&gt;87</math> kmph</p>
<b>Sea State</b>	<p><b>Effect of various waves in the sea over specific area</b></p> <p><b>Rough to very rough:</b> Wind speed 41-62 kmph (22-33 knots) &amp; Wave height 2.5-6 metre</p> <p><b>High to very high:</b> Wind speed 63-117 kmph ( 34-63 knots) &amp; Wave height 6-14 metre</p> <p><b>Phenomenal:</b> Wind speed <math>&gt;117</math> kmph (<math>&gt;63</math> knots) &amp; Wave height <math>&gt;14</math> metre</p>
<b>Cyclone</b>	<p><b>Cyclonic Storm:</b> Wind speed 62-87 kmph (34-47 knots)</p> <p><b>Severe Cyclonic Storm:</b> Wind speed 88-117 kmph (48-63 knots)</p> <p><b>Very Severe Cyclonic Storm:</b> Wind speed 118-165 kmph (64 - 89 knots)</p> <p><b>Extremely Severe Cyclonic Storm:</b> Wind speed 166-220 kmph (90 -119 knots)</p> <p><b>Super Cyclone Strom:</b> Wind speed <math>&gt;220</math> kmph (<math>&gt;119</math> knots)</p>

\* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".  
Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day.  
For more details, kindly visit <https://mausam.imd.gov.in> or contact: 011-2434-4599  
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