

Wednesday, September 25, 2024  
Time of Issue: 1330 hours IST  
(MID-DAY)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

### Significant Weather Features:

#### Weather Systems:

- ✓ Yesterday's **low pressure** area over Westcentral & adjoining Northwest Bay of Bengal off north Andhra Pradesh-south Odisha coasts moved west-northwestwards and has become less marked. However, the associated cyclonic circulation lies over south Chhattisgarh & neighbourhood and extends upto middle tropospheric level, tilting southwards with height.
- ✓ A trough runs from north Konkan to south Bangladesh across the above cyclonic circulation over south Chhattisgarh and extends upto middle tropospheric level tilting southwards with height.

#### Forecast & Warnings (upto 7 days):

##### West India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Konkan & Goa during the week; Fairly widespread to widespread light to moderate rainfall over Madhya Maharashtra, Gujarat Region, Marathwada during next 4 days & Isolated to Scattered light to moderate rainfall during the next subsequent 3 days; Scattered to Fairly widespread light to moderate rainfall over Saurashtra & Kutch during the next 3 days & Isolated to Scattered light to moderate rainfall during the next subsequent 4 days.
- ✓ **Isolated extremely heavy rainfall** very likely over Konkan & Goa & Madhya Maharashtra on 25<sup>th</sup> & 26<sup>th</sup>; Gujarat Region on 26<sup>th</sup> September.
- ✓ **Isolated heavy to very heavy rainfall** very likely over Konkan & Goa, Gujarat Region & Madhya Maharashtra during 25<sup>th</sup> -27<sup>th</sup>; Marathwada on 25<sup>th</sup>; Saurashtra & Kutch on 26<sup>th</sup> & 27<sup>th</sup> September.
- ✓ **Isolated heavy rainfall** very likely over Konkan & Goa & Madhya Maharashtra during 25<sup>th</sup> -27<sup>th</sup>; Marathwada on 25<sup>th</sup> & 26<sup>th</sup>; Gujarat State during 25<sup>th</sup> -28<sup>th</sup> September.

##### Central India:

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Vidarbha, Chhattisgarh during next 2 days & Scattered to Fairly widespread light to moderate rainfall during next subsequent 5 days; Scattered to Fairly widespread light to moderate rainfall over Madhya Pradesh during next 4 days & Isolated to Scattered light to moderate rainfall during the next subsequent 3 days.
- ✓ **Isolated heavy to very heavy rainfall** very likely over East Madhya Pradesh on 25<sup>th</sup> September.
- ✓ **Isolated heavy rainfall** very likely over Vidarbha & Chhattisgarh on 25<sup>th</sup>; West Madhya Pradesh during 25<sup>th</sup> -27<sup>th</sup>; East Madhya Pradesh on 25<sup>th</sup> & 26<sup>th</sup> September.

##### East & Northeast India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Northeast India during the next 7 days; Fairly widespread to widespread light/moderate rainfall very likely over West Bengal & Sikkim, Bihar during next 3 days & Scattered to Fairly widespread light to moderate rainfall during next subsequent 4 days; Fairly widespread to widespread light/moderate rainfall very likely over Jharkhand, Odisha during next 2 days & Isolated to Scattered light to moderate rainfall during the next subsequent 5 days; Scattered to Fairly widespread light to moderate rainfall over Andaman & Nicobar Islands during the week.
- ✓ **Isolated extremely heavy rainfall** very likely over Sub-Himalayan West Bengal & Sikkim on 25<sup>th</sup> & 26<sup>th</sup> September.
- ✓ **Isolated heavy to very heavy rainfall** very likely over Assam & Meghalaya on 25<sup>th</sup> & 26<sup>th</sup>; Nagaland, Manipur & Gangetic West Bengal on 25<sup>th</sup>; Bihar, Sub-Himalayan West Bengal & Sikkim during 25<sup>th</sup> -27<sup>th</sup>; Arunachal Pradesh on 26<sup>th</sup> September.
- ✓ **Isolated heavy rainfall** very likely over Arunachal Pradesh, Assam & Meghalaya during the week; Nagaland, Manipur, Mizoram & Tripura during 25<sup>th</sup> -27<sup>th</sup> September & 01<sup>st</sup> October; Sub-Himalayan West Bengal & Sikkim during 25<sup>th</sup> -27<sup>th</sup>; Jharkhand, Odisha & Gangetic West Bengal on 25<sup>th</sup> & 26<sup>th</sup>; Bihar during 25<sup>th</sup> -28<sup>th</sup> September.

##### Northwest India

- ✓ Scattered to Fairly widespread light to moderate rainfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand & East Uttar Pradesh during next 3 days & Isolated to Scattered light to moderate rainfall during the next subsequent 4 days; Isolated to Scattered light to moderate rainfall over the remaining region during the week.
- ✓ **Isolated heavy to very heavy rainfall** very likely East Uttar Pradesh on 27<sup>th</sup> September.
- ✓ **Isolated heavy rainfall** very likely over Uttarakhand during 25<sup>th</sup> -27<sup>th</sup>; West Uttar Pradesh on 27<sup>th</sup>; East Uttar Pradesh during 26<sup>th</sup> -28<sup>th</sup> September.

##### South Peninsular India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Coastal Karnataka; Scattered to Fairly widespread light to moderate rainfall over Kerala & Mahe, Lakshadweep, South Interior Karnataka, Coastal Andhra Pradesh & Yanam; Isolated to Scattered light to moderate rainfall over North Interior Karnataka, Rayalaseema, Telangana, Tamil Nadu, Puducherry & Karaikal during the week.
- ✓ **Isolated heavy rainfall** very likely over Kerala & Mahe on 25<sup>th</sup>, 29<sup>th</sup> & 30<sup>th</sup>; Rayalaseema, Interior Karnataka, Coastal Andhra Pradesh & Yanam on 25<sup>th</sup>; Telangana & Coastal Karnataka on 25<sup>th</sup> & 26<sup>th</sup> September.

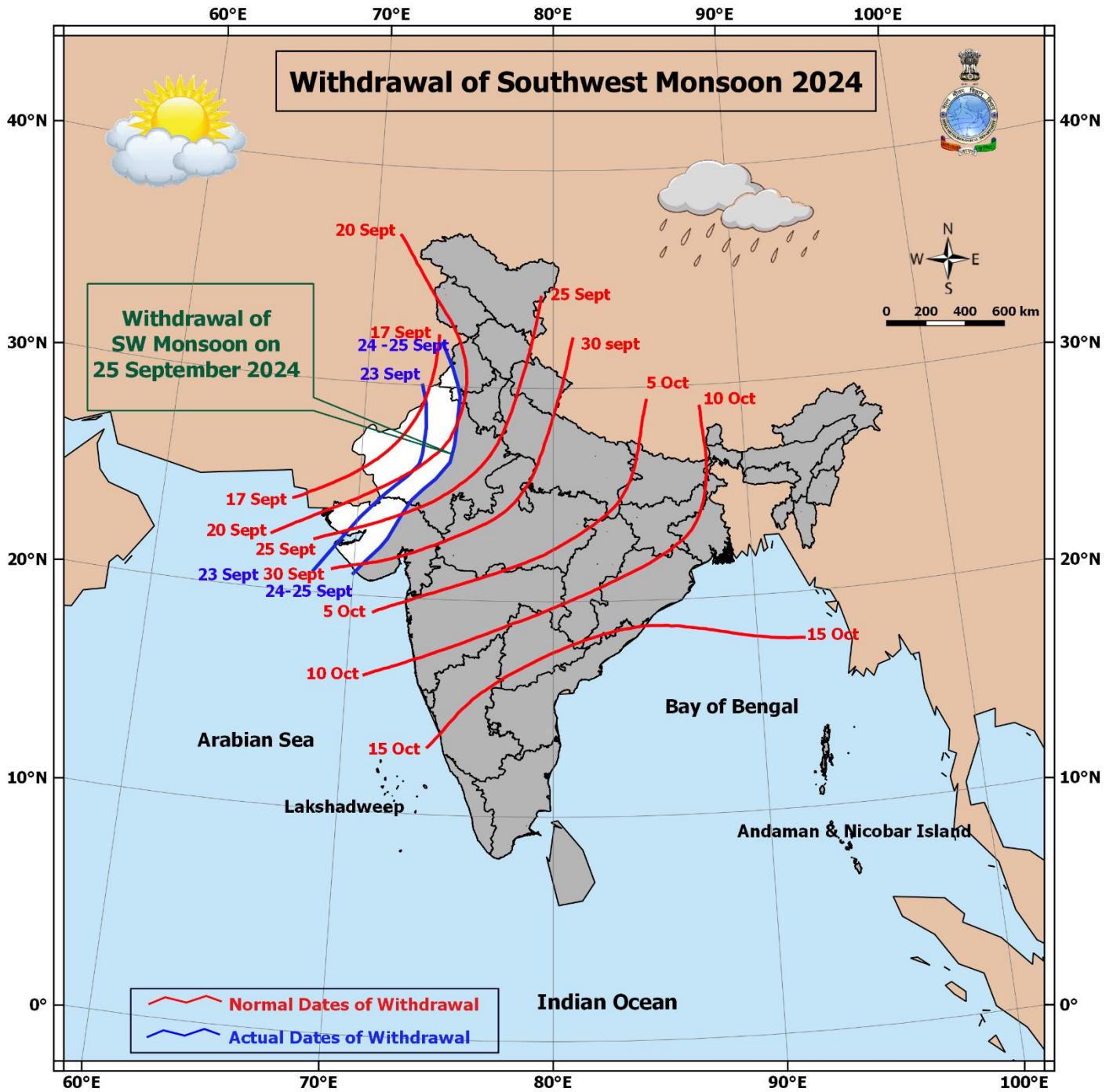
## Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST of yesterday to 0830 hours IST of today): **at most places** over Vidarbha, Chhattisgarh, West Bengal & Sikkim, Odisha, Konkan & Goa, Madhya Maharashtra, Marathwada, Kerala & Mahe, Lakshadweep, Coastal Andhra Pradesh & Yanam, Coastal Karnataka; **at many places** over Bihar, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region, Rayalaseema, Telangana, Interior Karnataka; **at a few places** over Uttarakhand, Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim; **at isolated places** over Himachal Pradesh, Uttar Pradesh, East Rajasthan, Saurashtra & Kutch, Tamil Nadu, Puducherry & Karaikal.
- ❖ **Heavy rainfall** recorded (from 0830 hours IST of yesterday to 0830 hours IST of today): **Heavy to very Heavy rainfall** at isolated places over Konkan & Goa, Coastal Andhra Pradesh & Yanam, East Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Marathwada, Coastal Karnataka, Bihar; **Heavy rainfall** at isolated places over Rayalaseema, Gujarat Region, Chhattisgarh, West Madhya Pradesh, Gangetic West Bengal, Odisha, Madhya Maharashtra, Interior Karnataka & Telangana.
- ❖ **Significant amount of rainfall** (from 0830 hours IST of yesterday to 0830 hours IST of today): (in cm): **Konkan & Goa:** Pernem (dist North Goa) 19, Sawantwadi (dist Sindhudurg) 16, Palghar\_agri (dist Palghar) 15, Malvan (dist Sindhudurg) 14, Devgad (dist Sindhudurg) 14, Panjim - Imd Obsy (dist North Goa) 14, Kudal (dist Sindhudurg) 13, Mulde\_Agri (dist Sindhudurg) 13, Mapusa (dist North Goa) 12; **Sub-Himalayan West Bengal & Sikkim:** Bijonbari (dist Darjeeling) 15, Darjeeling (dist Darjeeling) 14, Bagdogra Iaf (dist Darjeeling) 10; **East Madhya Pradesh:** Bijadandi (dist Mandla) 14, Keolari (dist Seoni) 10; **Coastal Karnataka:** Kundapur (dist Udupi) 13, Shirali Pto (dist Uttara Kannada) 11, Karkala (dist Udupi) 9, Kota (dist Udupi) 9; **Coastal Andhra Pradesh & Yanam:** Yanam (dist Yanam) 12, Podili (dist Prakasam) 11, Anakapalle(a) (dist Anakapalli) 9; **Marathwada:** Washi (dist Dharashiv) 12, Ahmedpur (dist Latur) 7; **Bihar:** Sangrampur (dist Monghyr) 12, Narpatganj (dist Araria) 7, Banka (dist Banka) 7; **Telangana:** Devaruppal (dist Jangaon) 11, Kusumanchi (dist Khammam) 10, Nawabpetmbn (dist Mahabubnagar) 10, Nawabpet (dist Vikarabad) 10; **Gangetic West Bengal:** Digha (dist East Midnapore) 10, Contai (dist East Midnapore) 7; **Gujarat Region:** Silvassa (dist Dadara & Nagar Haveli) 9, Valsad\_Kvk Aws (dist Valsad) 8; **Odisha:** Balasore (Balasore) 10, Talcher (Angul) 9, Tikarpara (Angul) 9, Banki (Cuttack) 9, Rajnagar (Kendrapara) 8, Jaipur (Balasore) 8; **Chhattisgarh:** Baramkela (dist Sarangarh Bilaigarh) 9, Sariya (dist Sarangarh Bilaigarh) 8; **Rayalaseema:** Proddutur (dist Ysr District) 8, Duvvur (dist Ysr District) 8, Kamalapuram (dist Ysr District) 7; **South Interior Karnataka:** Kottigehara (dist Chikkamagaluru) 8, Kalasa (dist Chikkamagaluru) 7; **North Interior Karnataka:** Shahpur (dist Yadgir) 7; **West Madhya Pradesh:** Dahi (dist Dhar) 7, Bagh (dist Dhar) 7; **Madhya Maharashtra:** Akole (dist Ahmednagar) 7;
- ❖ **Minimum Temperature Departures (as on 25-09-2024):** Minimum temperatures are **markedly above normal (5.1°C or more)** at many places over Himachal Pradesh; **at a few places over** Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab; at isolated places over West Rajasthan, Haryana-Chandigarh; **appreciably above normal (3.1°C to 5.0°C)** at most places over Uttarakhand; at isolated places over East Rajasthan, Uttar Pradesh, Madhya Pradesh, Gujarat Region; **above normal (1.6°C to 3.0°C)** at many places over Madhya Maharashtra, Saurashtra & Kutch; at isolated places over Bihar, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Vidarbha, Marathwada, Konkan & Goa, North Interior Karnataka, Odisha, Tamil Nadu, Puducherry & Karaikal and **near normal** over rest parts of the country. Today, **the lowest minimum temperature** of 21.0°C is reported at **Mandla (East Madhya Pradesh)** over the plains of the country. (Fig.4)
- ❖ **Maximum Temperature Departures (as on 24-09-2024):** Maximum temperatures were **markedly above normal (5.1°C or more)** at most place over Himachal Pradesh; at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at isolated places over Punjab, Uttar Pradesh, Bihar; **appreciably above normal (3.1°C to 5.0°C)** at most places over Uttarakhand, at isolated places over Haryana-Chandigarh, West Rajasthan, Sub-Himalayan West Bengal & Sikkim; **above normal (1.6°C to 3.0°C)** at most places over East Rajasthan, Gujarat state, Madhya Pradesh, Chhattisgarh, Odisha, Jharkhand, Gangetic West Bengal, Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Andaman & Nicobar Islands; at isolated places over Madhya Maharashtra, Vidarbha, Coastal Andhra Pradesh & Yanam, South Interior Karnataka and **near normal** over rest parts of the country. Yesterday, **the highest Maximum Temperature** of 40.6°C was reported at **Madurai (Tamil Nadu)** over the country. (Fig. 2)

## Meteorological Analysis (Based on 0830 hours IST)

- ❖ The **line of withdrawal of southwest monsoon** continues to pass through Firozpur, Sirsa, Churu, Ajmer, Mount Abu, Deesa, Surendranagar, Junagarh and 21°N/70°E.
- ❖ The low pressure area over Westcentral & adjoining Northwest Bay of Bengal off north Andhra Pradesh-south Odisha coasts moved west-northwestwards and has become less marked. However, the associated **cyclonic circulation** now lies over south Chhattisgarh & neighbourhood and extends upto 5.8 km above mean sea level tilting southwards with height.
- ❖ A **trough** runs from north Konkan to south Bangladesh across the above cyclonic circulation over south Chhattisgarh and extends upto 5.8 km above mean sea level tilting southwards with height.
- ❖ The **shear zone** roughly along 16°N over north peninsular India between 3.1 km to 7.6 km above mean sea level tilting southwards with height has merged with the above trough.

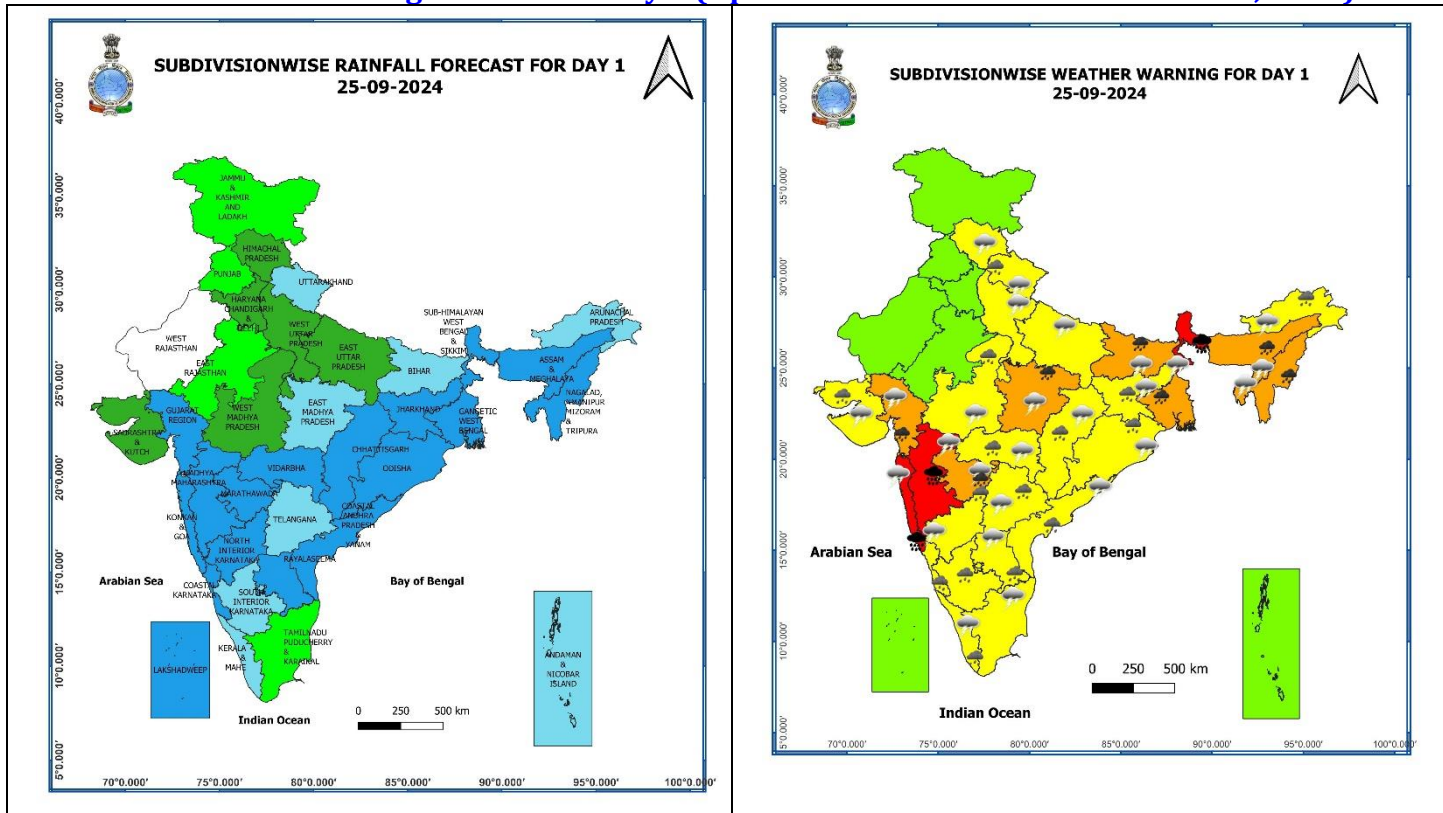
### Withdrawal of Southwest Monsoon 2024



\* 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)



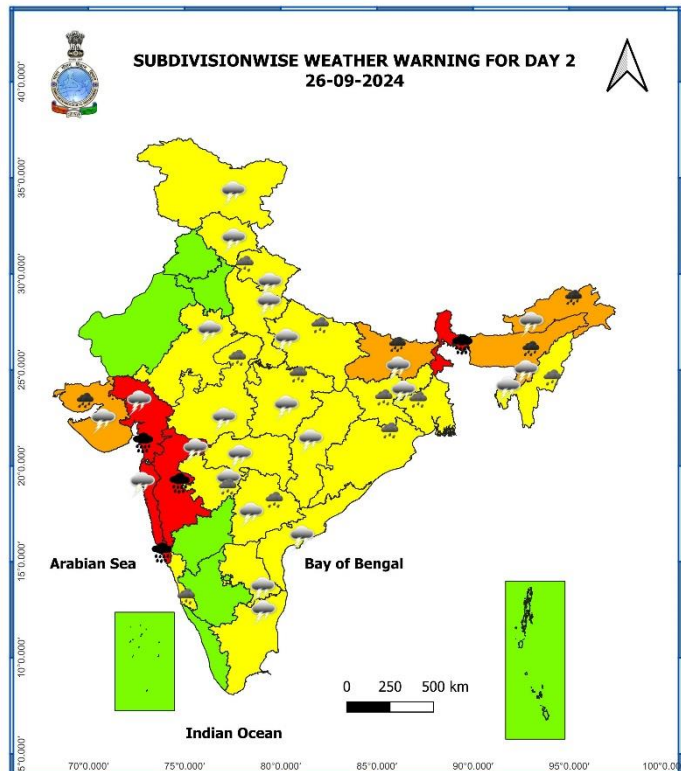
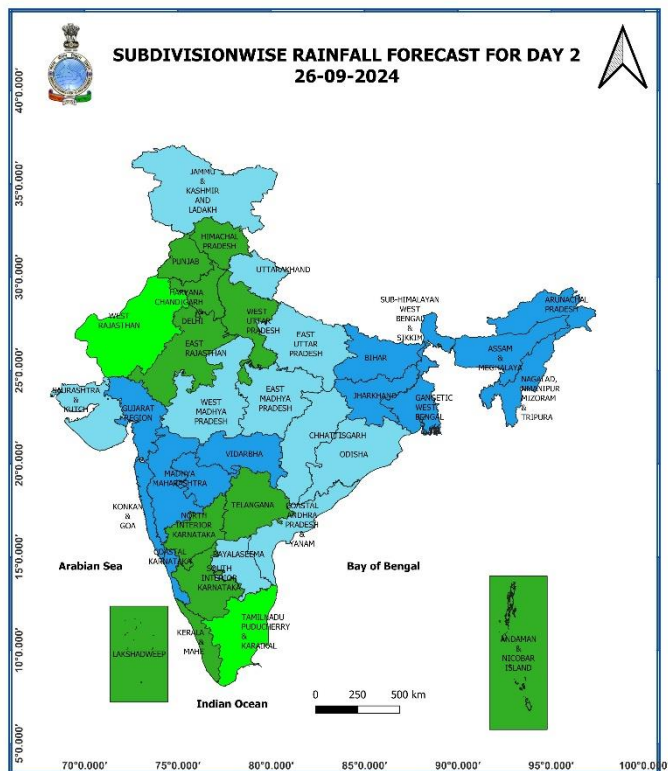
Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 01<sup>st</sup> October, 2024)



25 September (Day 1):

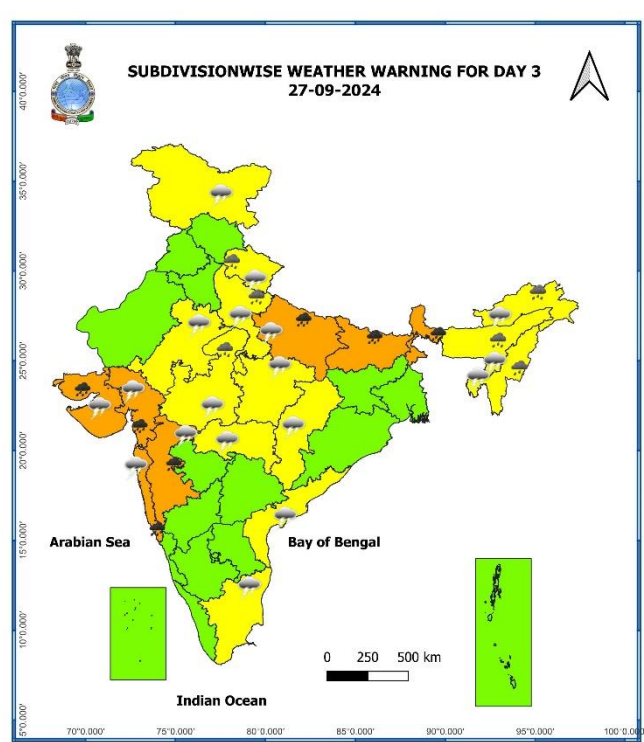
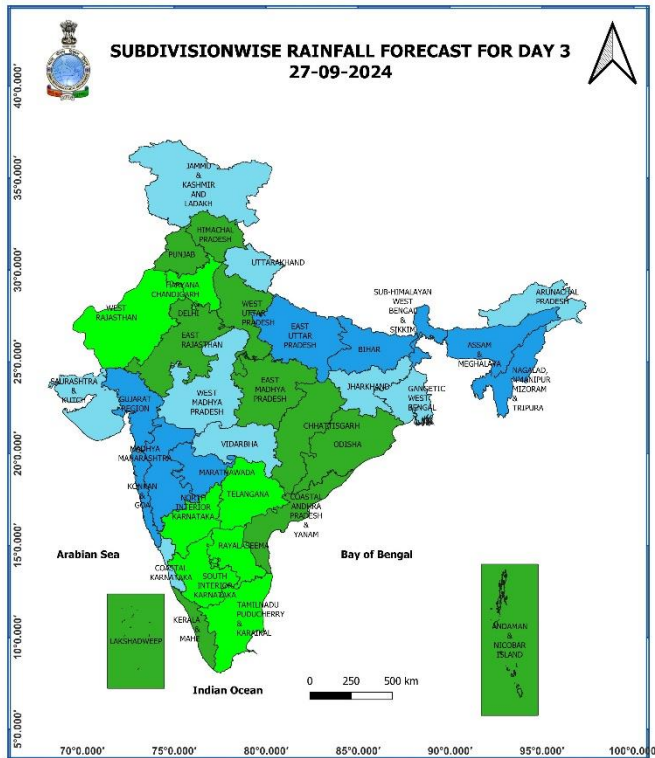
- ❖ **Heavy to very heavy rainfall with extremely heavy falls (> 20 cm)** very likely at isolated places over Konkan & Goa, Madhya Maharashtra, Sub-Himalayan West Bengal & Sikkim; **Heavy to very Heavy rainfall (≥12 cm)** very likely at isolated places over East Madhya Pradesh, Gangetic West Bengal, Bihar, Assam & Meghalaya, Nagaland, Manipur, Marathwada, Gujarat Region; **Heavy rainfall (≥7 cm)** very likely at isolated places over Uttarakhand, West Uttar Pradesh, West Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Odisha, Arunachal Pradesh, Saurashtra & Kutch, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Karnataka.
- ❖ **Thunderstorm accompanied gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Uttarakhand, Telangana; **with lightning** very likely at isolated places over Himachal Pradesh, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Marathwada, Saurashtra & Kutch, Gujarat state, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema, North Interior Karnataka.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail along and off Maharashtra coasts, Karnataka, Konkan & goa, Kerala, coasts, over gulf of manner, Comorin and Lakshadweep area, off Sri Lanka coast, many parts of south and few parts of west central Bay of Bengal and adjoining north west Bay of Bengal, along and off north Andhra Pradesh and adjoining Odisha coasts. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over western parts of southwest Arabian sea along and off Somalia coast. Fishermen are advised not to venture into these areas.

\* 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)



## 26 September (Day 2):

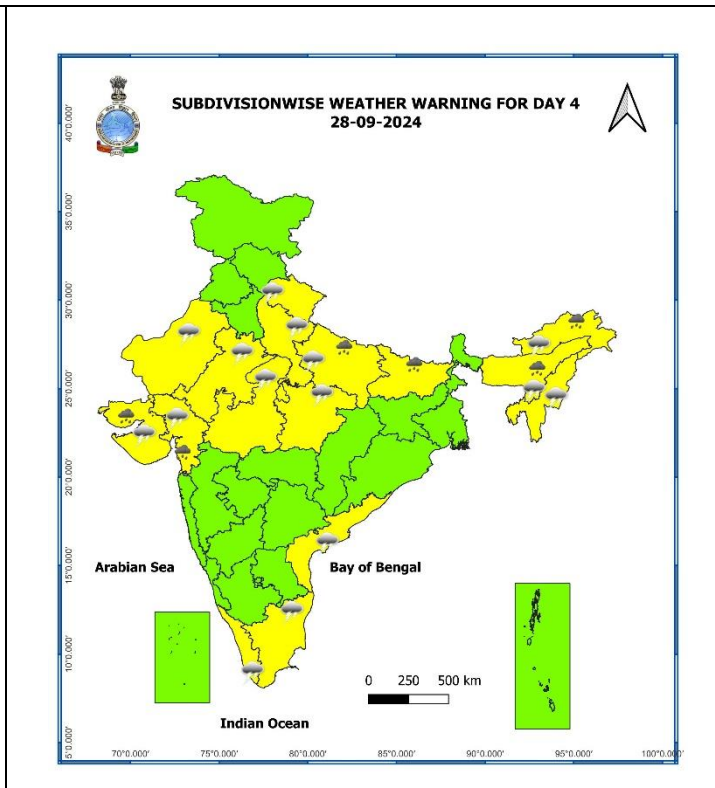
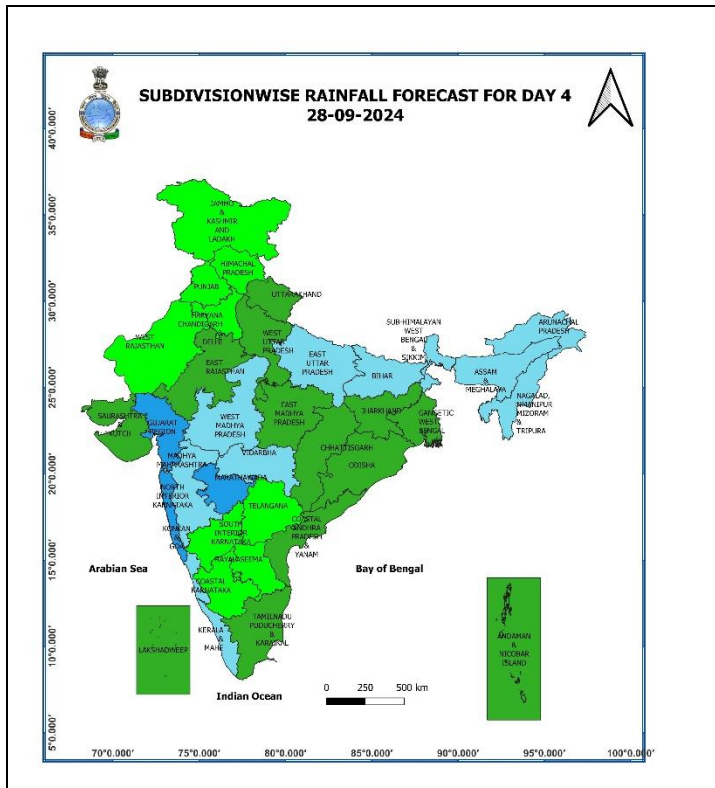
- ❖ **Heavy to very heavy rainfall with extremely heavy falls (> 20 cm)** very likely at isolated places over Konkan & Goa, Madhya Maharashtra, Sub-Himalayan West Bengal & Sikkim, Gujarat Region; **Heavy to very Heavy rainfall ( $\geq 12$  cm)** very likely at isolated places over Bihar, Assam & Meghalaya, Arunachal Pradesh, Saurashtra & Kutch; **Heavy rainfall ( $\geq 7$  cm)** very likely at isolated places over Uttarakhand, Uttar Pradesh Madhya Pradesh, Gangetic West Bengal, Jharkhand, Odisha, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Telangana, Coastal Karnataka.
- ❖ **Thunderstorm accompanied gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Telangana; **with lightning** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Marathwada, Gujarat state, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over north Maharashtra, south Gujarat coasts, gulf of manner, along and off Sri Lanka coast, many parts of south and Westcentral Bay of Bengal, along and off north Andhra Pradesh and adjoining Odisha coasts. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over western parts of southwest Arabian sea adjoining few parts of Westcentral Arabian sea along and off Somalia coast. Fishermen are advised not to venture into these areas.



**27 September (Day 3):**

- ❖ **Heavy to very Heavy rainfall ( $\geq 12$  cm)** very likely at isolated places over East Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, Konkan & Goa, Madhya Maharashtra, Gujarat state; **Heavy rainfall ( $\geq 7$  cm)** very likely at isolated places over Uttarakhand, West Uttar Pradesh, West Madhya Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Gujarat state, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over south Gujarat and gulf of manner, off Sri Lanka coast, few parts of southwest Bay of Bengal and many parts of west central Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over western parts of southwest Arabian sea adjoining few parts of Westcentral Arabian sea along and off Somalia coast. Fishermen are advised not to venture into these areas.



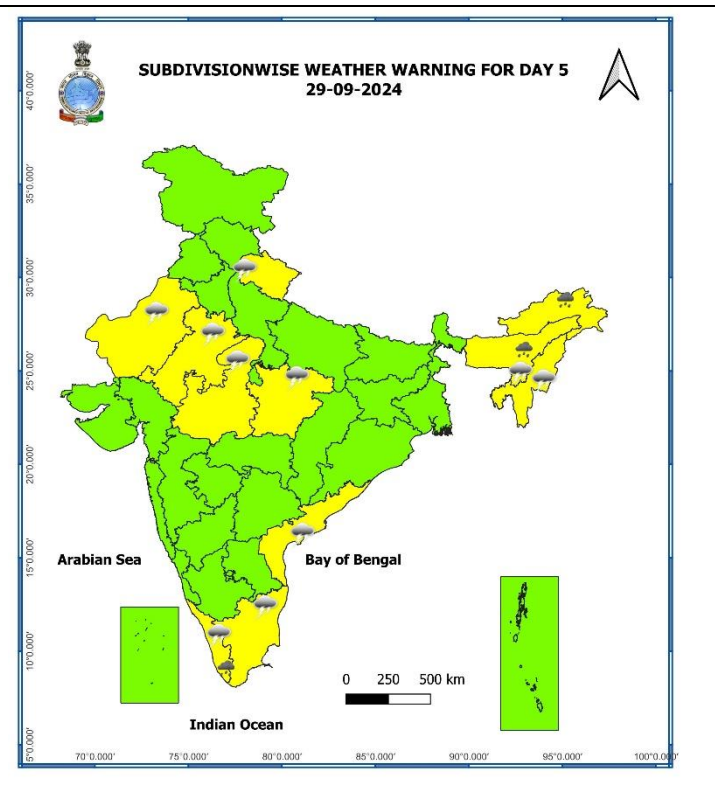
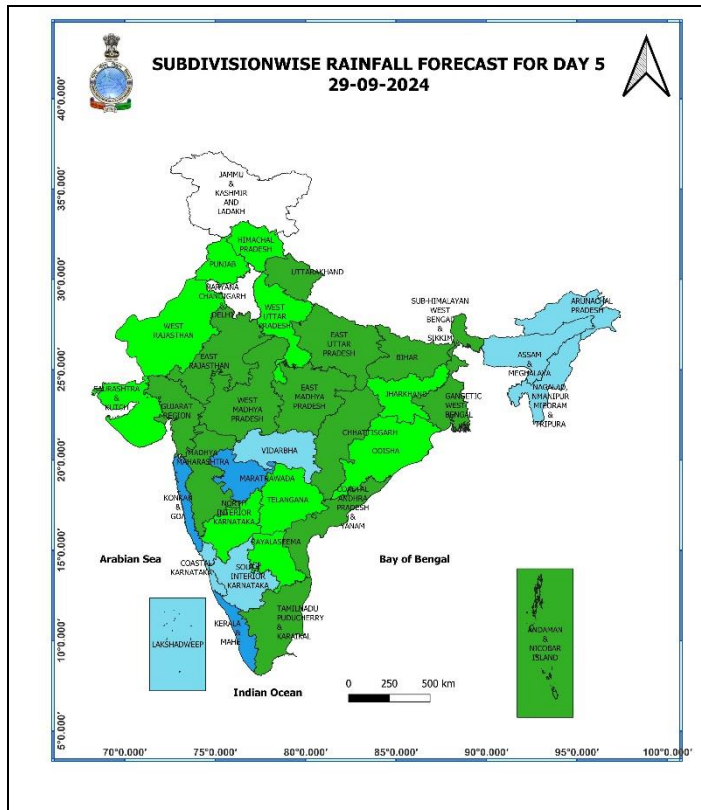


**28 September (Day 4):**

- ❖ **Heavy rainfall (≥7 cm)** very likely at isolated places over Uttar Pradesh, Bihar, Arunachal Pradesh, Assam & Meghalaya, Gujarat state.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Uttarakhand, Uttar Pradesh, Rajasthan, Madhya Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam.
- ❖ **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over gulf of Manner. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over western parts of southwest Arabian sea adjoining few parts of Westcentral Arabian sea along and off Somalia coast. Fishermen are advised not to venture into these areas.

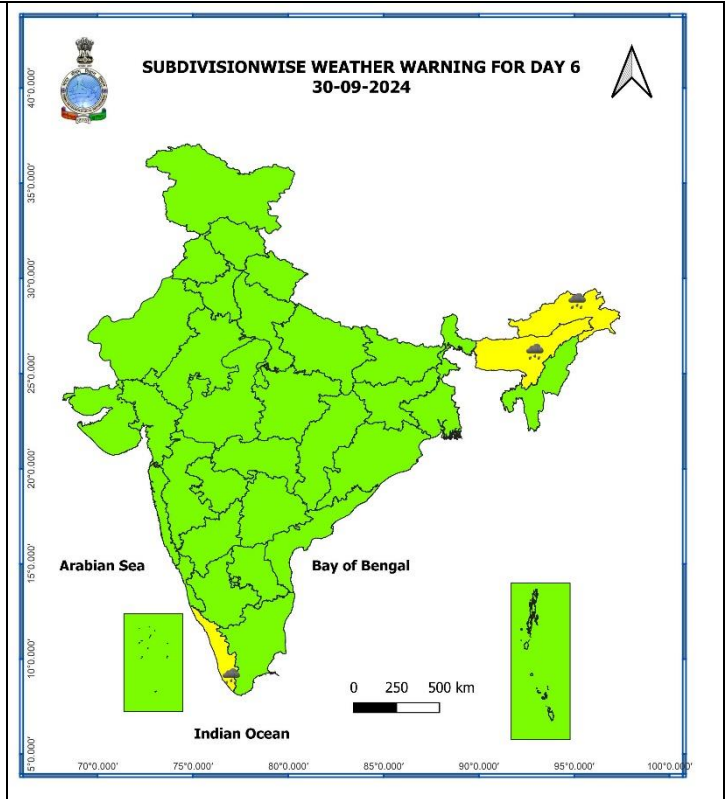
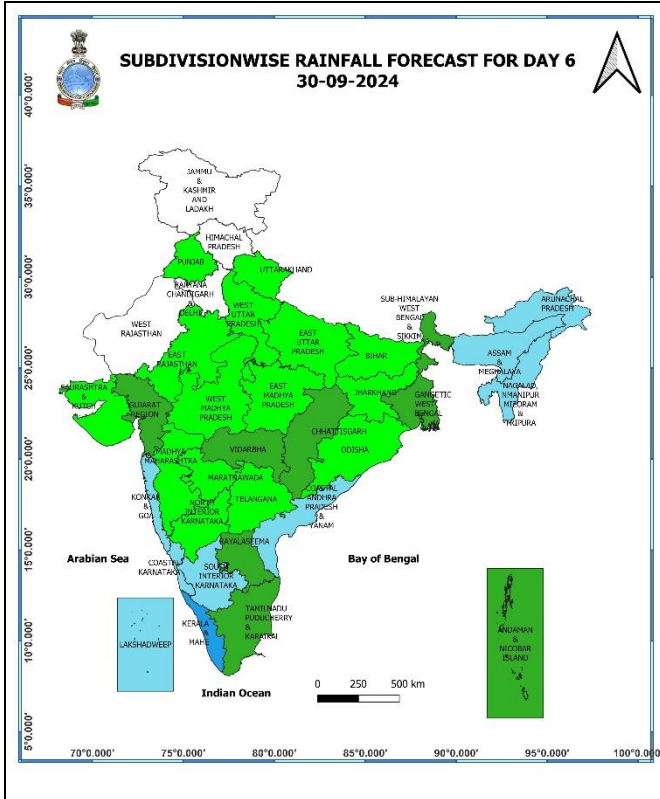
\* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".  
Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day.  
For more details, kindly visit <https://mausam.imd.gov.in> or contact: 011-2434-4599  
(Service to the Nation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





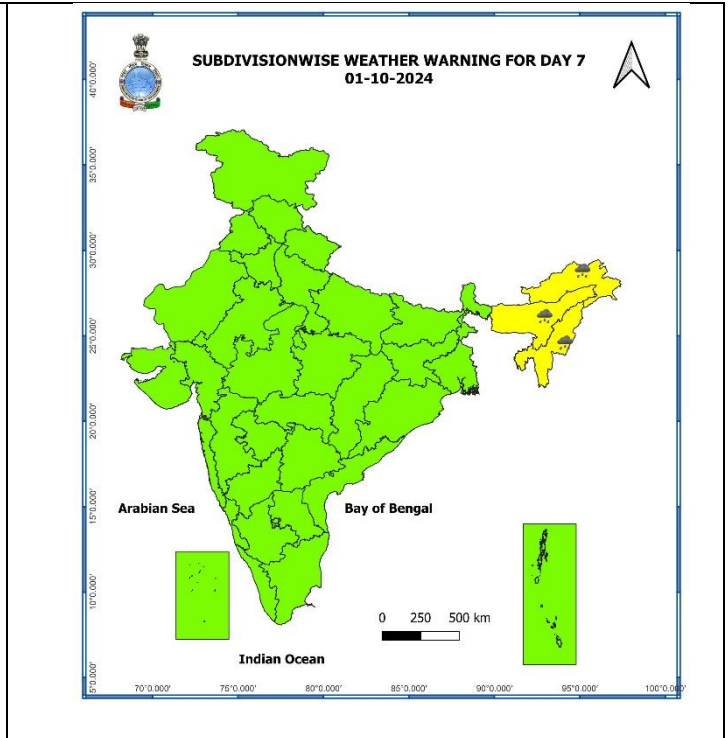
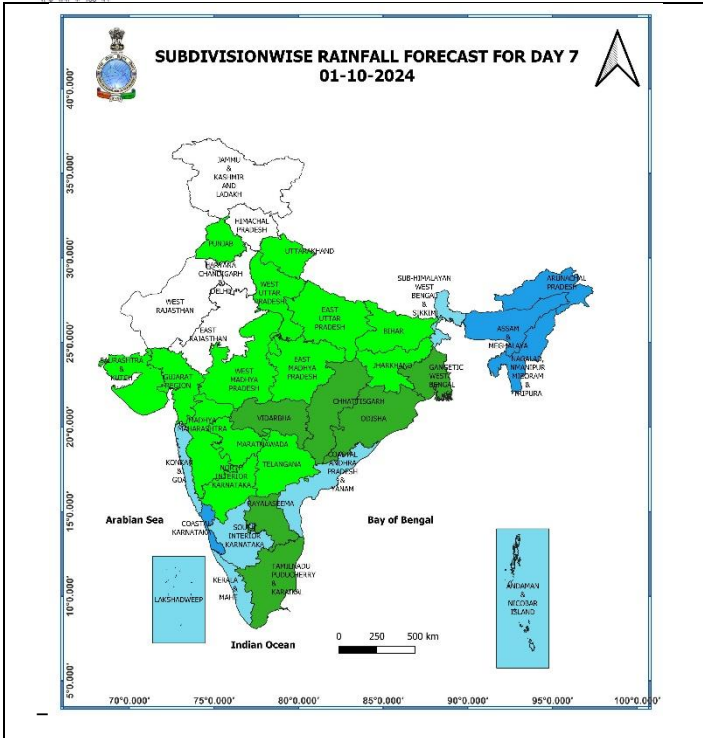
### 29 September (Day 5):

- ❖ **Heavy rainfall ( $\geq 7$  cm)** likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Kerala & Mahe.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Uttarakhand, Rajasthan, Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam.
- ❖ **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over western parts of southwest Arabian sea adjoining few parts of Westcentral Arabian sea along and off Somalia coast. Fishermen are advised not to venture into these areas.



**30 September (Day 6):**

❖ **Heavy rainfall ( $\geq 7$  cm)** likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Kerala & Mahe.



**01 October (Day 7):**

- ❖ **Heavy rainfall ( $\geq 7$  cm)** likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura.

**Weather Outlook for subsequent 3 days (During 02<sup>nd</sup> October- 04<sup>th</sup> October, 2024)**

- ❖ Dry weather likely to prevail over West Rajasthan, north Gujarat, Punjab, Haryana-Chandigarh-Delhi, and Isolated rainfall activity likely over Himachal Pradesh, Uttarakhand, East Rajasthan and Uttar Pradesh.
- ❖ Isolated to Scattered rainfall likely over Central, Eastern, North Eastern and Peninsular India.

- 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.

\* 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)



## Impact due to

- **Isolated extremely heavy rainfall** very likely over Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Madhya Maharashtra on 25<sup>th</sup> & 26<sup>th</sup>; Gujarat Region on 26<sup>th</sup> September.
- **Isolated heavy to very heavy rainfall** very likely over Nagaland, Manipur, Gangetic West Bengal, Marathwada, East Madhya Pradesh on 25<sup>th</sup>; Assam & Meghalaya on 25<sup>th</sup> & 26<sup>th</sup>; Bihar, Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Gujarat Region & Madhya Maharashtra during 25<sup>th</sup> -27<sup>th</sup>; Saurashtra & Kutch on 26<sup>th</sup> & 27<sup>th</sup>; Arunachal Pradesh on 26<sup>th</sup>; East Uttar Pradesh on 27<sup>th</sup> September.
- **Moderate flash flood** risk likely over few watersheds & neighbourhoods of South Gujarat Region, Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Madhya Maharashtra on 25<sup>th</sup> & 26<sup>th</sup> September. **(Annexure I)**.

## 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 Madhya Maharashtra, Marathwada and Vidarbha regions of Maharashtra, postpone harvesting of matured soybean, groundnut, maize and pearl millet. Immediately move the harvested produce to safer places and cover them with plastic sheets or tarpaulin.
- ✓ In Konkan region of Maharashtra, make arrangements to drain out excess water from rice, finger millet, turmeric, groundnut, vegetables and orchards.
- ✓ Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Kerala, Karnataka, Andhra Pradesh, Telangana, Madhya Pradesh, Chhattisgarh, Gujarat, Maharashtra, Goa, West Bengal, Odisha, and North Eastern States.
- ✓ Keep the harvested produce at safer places.
- ✓ Provide mechanical support to horticultural crops & staking to vegetables.

**ANNEXURE I**

**Flash Flood Guidance:**

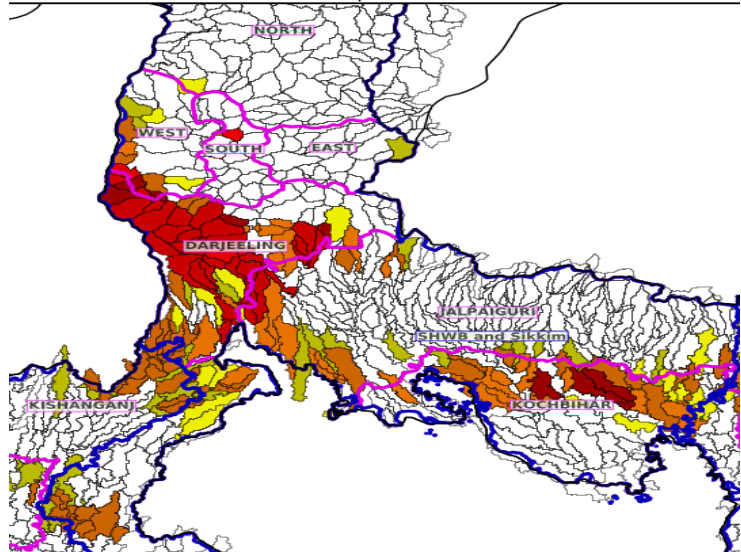
**24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 26-09-2024 :**

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

**SHWB & Sikkim** - North Sikkim, South Sikkim, West Sikkim, Darjeeling, Jalpaiguri, Kochbihar and Uttar\_Dinajpur 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.

Product: WRF FFR | Timescale: 24-hr | Region: "INDIA"  
Date: 2024-09-25 06:00 UTC | Valid Date: 2024-09-26 06:00 UTC



**24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 26-09-2024 :**

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

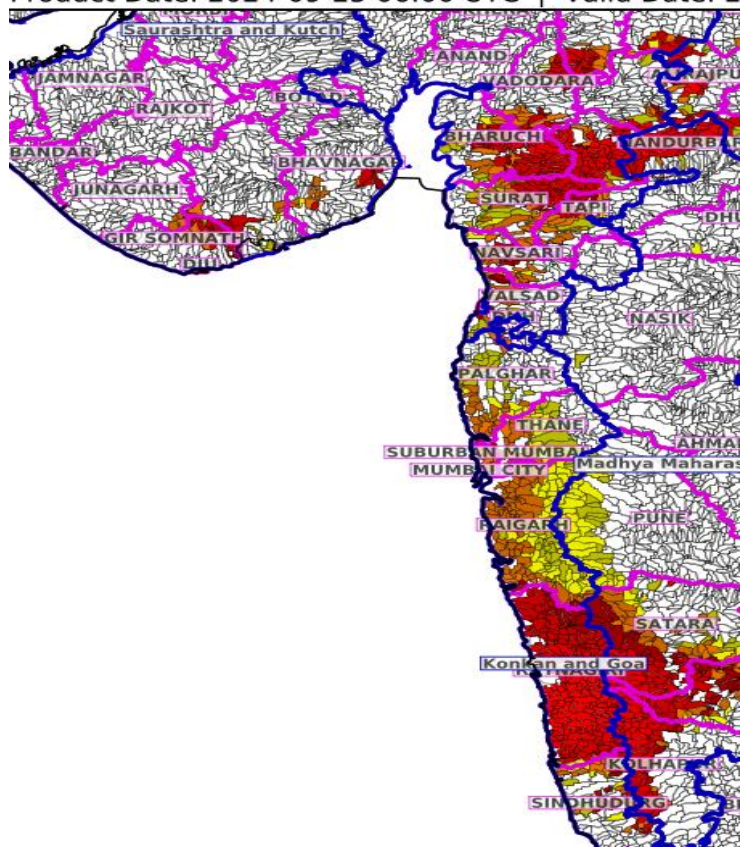
**South Gujarat Region** - Dadar & Nagar Haveli, Daman, Bharuch, Dahod, Narmada, Navsari, Panchmahal, Surat, Tapi, Vadodara and Valsad districts.

**Konkan & Goa** - Mumbai City, Palghar, Raigarh, Ratnagiri, Sindhudurg, Suburban Mumbai and Thane districts.

**Madhya Maharashtra** - Kolhapur, Nandurbar, Pune, Sangli and Satara districts.

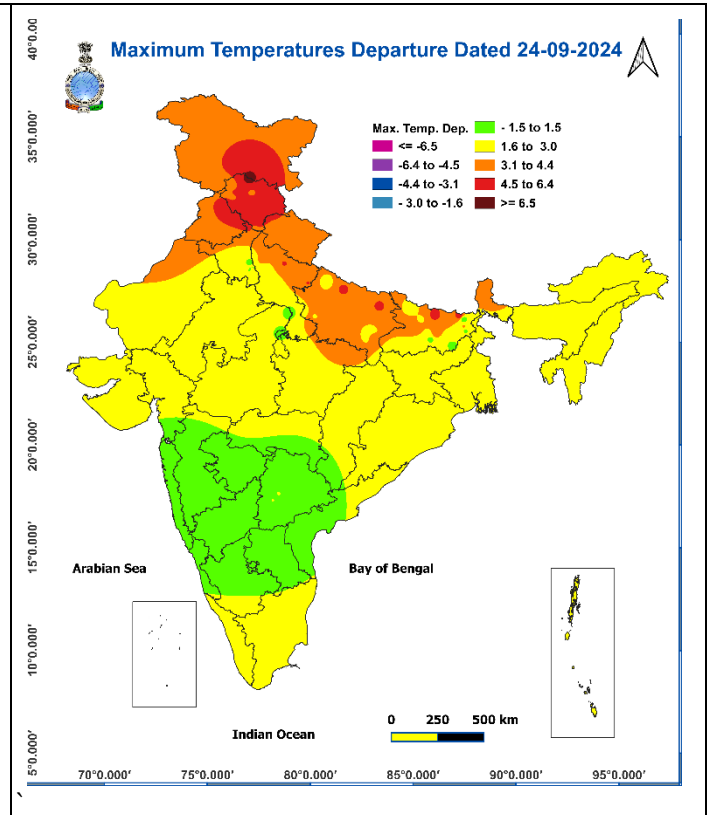
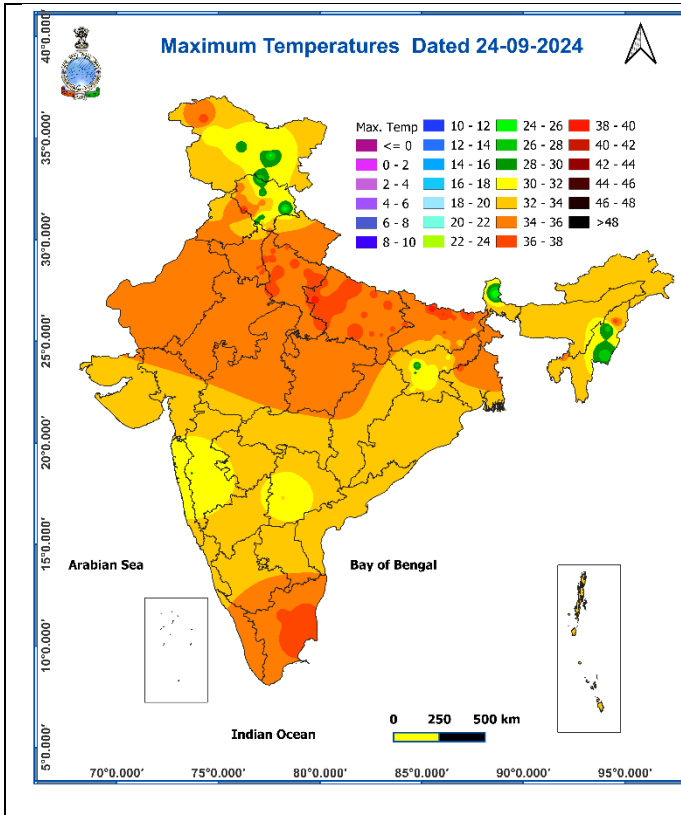
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.

Product: GFS FFR | Timescale: 24-hr | Region: "INDIA"  
Date: 2024-09-25 06:00 UTC | Valid Date: 2024-09-26 06:00 UTC



**Fig. 1: Maximum Temperatures**

**Fig. 2: Departure of Maximum Temperatures**



**Fig. 3: Minimum Temperatures**

**Fig. 4: Departure of Minimum Temperatures**

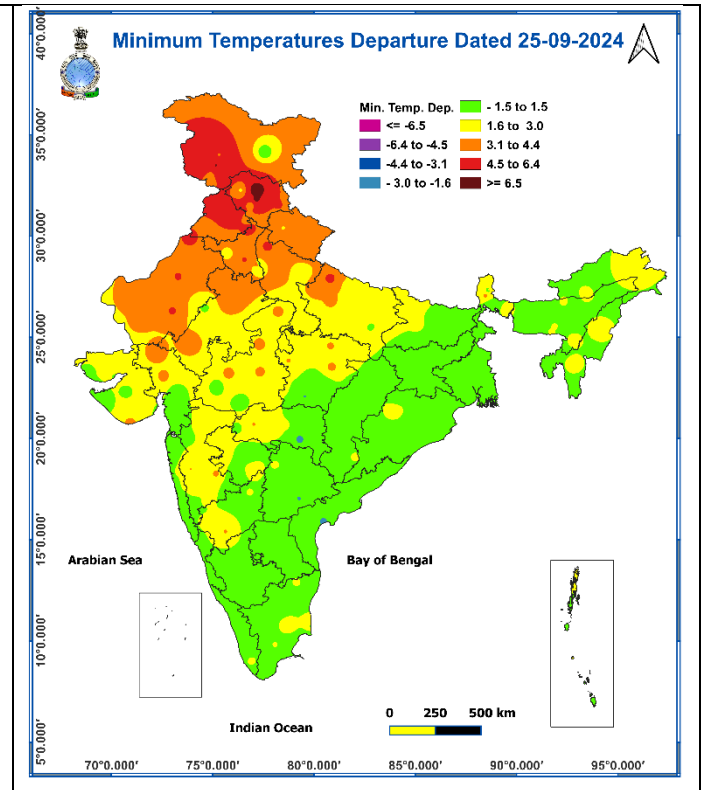
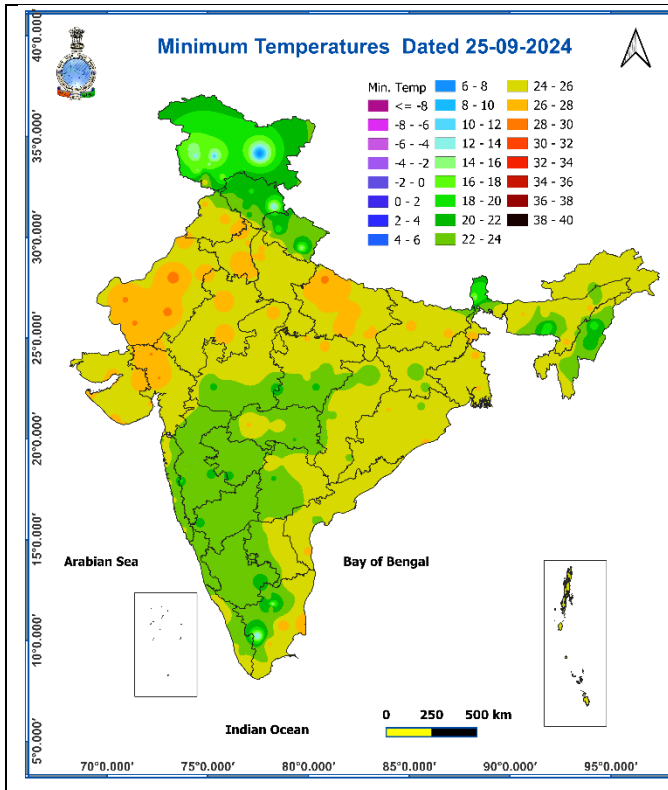
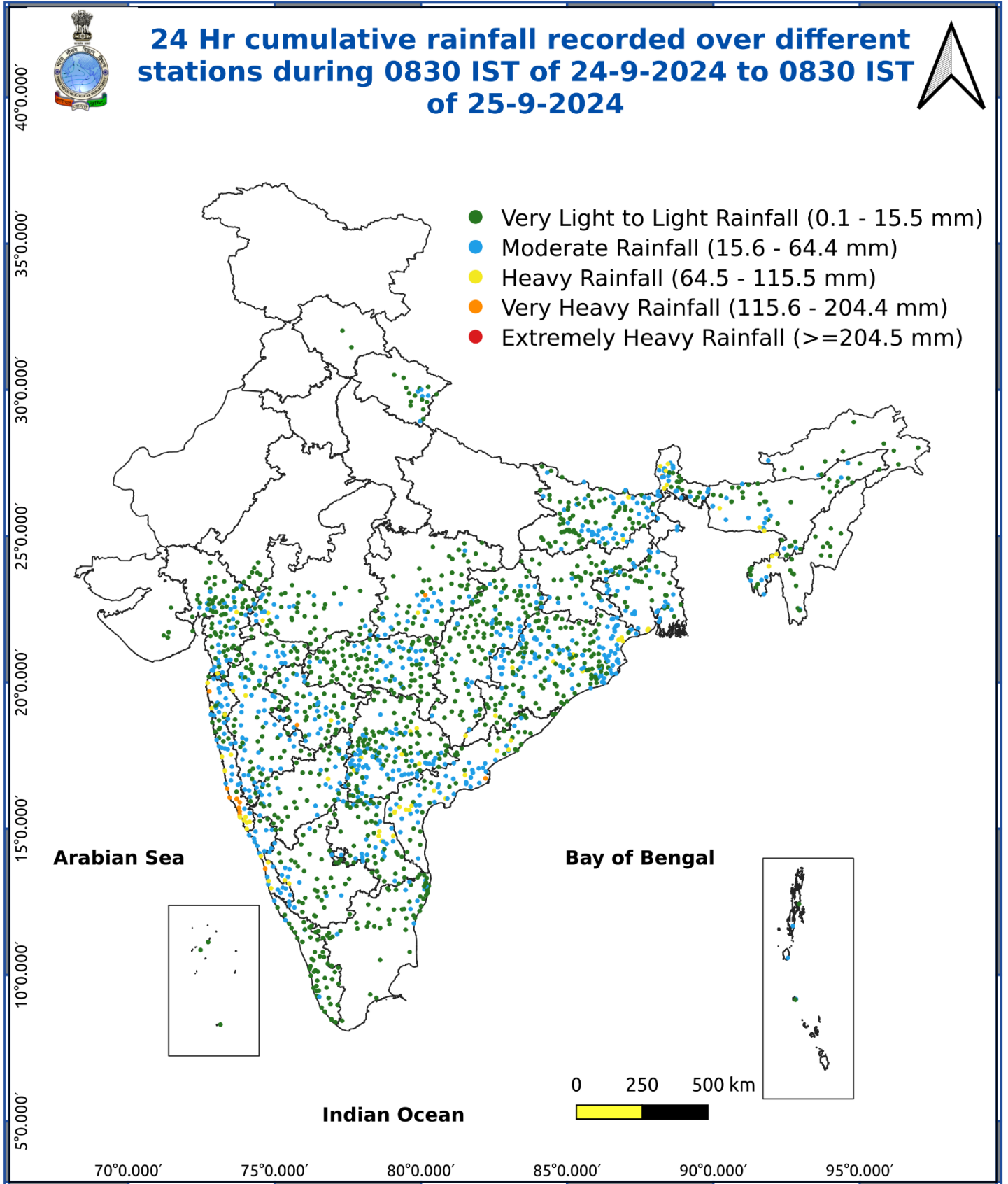




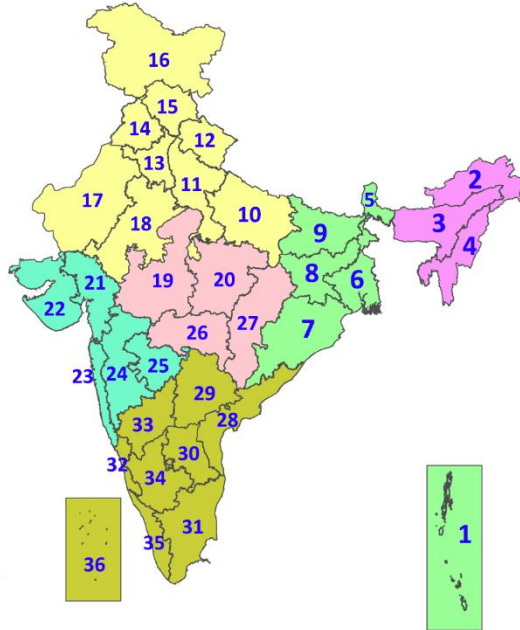
Fig. 5: Accumulated Rainfall (mm) during past 24 hours



\* 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)

## 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. रायलसीमा
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                          |



## 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>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</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>When maximum temperature remains <math>40^{\circ}\text{C}</math></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>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.</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>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</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>Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)</p>   |
| <b>Dust/Sand Storm</b> | <p>An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.</p>   |
| <b>Frost</b>           | <p>Ice deposits on ground</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>   |