

Thursday, September 5, 2024  
Time of Issue: 1945 hours IST  
(NIGHT)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

### Significant Weather Features:

#### Weather Systems:

- ✓ The monsoon trough is active and its western end is near its normal position and eastern end is south of its normal position at mean sea level. It is likely to continue so for next 2-3 days.
- ✓ The **low pressure area** lay over westcentral and adjoining northwest Bay of Bengal off north Andhra Pradesh-south Odisha coasts and associated cyclonic circulation extending upto 7.6 km above mean sea level tilting southwestwards with height persists. It is likely to move slowly northwards and intensify into **Depression** over northwest Bay of Bengal adjoining Gangetic West Bengal - north Odisha coasts during next 2-3 days.
- ✓ The cyclonic circulation over northwest Uttar Pradesh & adjoining Haryana tilting southwestwards with height upto mid tropospheric level.

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

##### ❖ West & Central India:

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over West India & Chhattisgarh; Scattered to Fairly widespread light/moderate rainfall very likely over Central India during the week.
- ✓ Isolated **very heavy rainfall** also very likely over Madhya Maharashtra, Gujarat Region, Konkan & Goa on 05<sup>th</sup> September.
- ✓ Isolated **heavy rainfall** very likely over Chhattisgarh during next 7 days; Madhya Maharashtra during 06<sup>th</sup> -10<sup>th</sup>, Konkan & Goa during 05<sup>th</sup> -10<sup>th</sup>; Saurashtra & Kutch on 05<sup>th</sup> & 06<sup>th</sup>; Gujarat Region during 05<sup>th</sup> -08<sup>th</sup>; Madhya Pradesh during 06<sup>th</sup> -08<sup>th</sup>; East Madhya Pradesh on 05<sup>th</sup>; Vidarbha during 08<sup>th</sup> -11<sup>th</sup> September.

##### ❖ South Peninsular India:

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Coastal Karnataka; Scattered to Fairly widespread light/moderate rainfall over Lakshadweep, Rayalaseema, Telangana; isolated to scattered rainfall over Tamil Nadu, Puducherry & Karaikal, Interior Karnataka during the week.
- ✓ Isolated **very heavy rainfall** also very likely over Coastal Andhra Pradesh & Yanam on 05<sup>th</sup> September.
- ✓ Isolated **heavy rainfall** very likely over Kerala & Mahe during 08<sup>th</sup> -11<sup>th</sup>; Coastal Andhra Pradesh & Yanam during 06<sup>th</sup> -08<sup>th</sup>; Telangana during 05<sup>th</sup> -08<sup>th</sup>; Coastal Karnataka during 05<sup>th</sup> -09<sup>th</sup> September.

##### ❖ East & Northeast India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Northeast India, Andaman & Nicobar Islands, Odisha, Sub-Himalayan West Bengal & Sikkim; Scattered to Fairly widespread light/moderate rainfall very likely over Gangetic West Bengal, Bihar & Jharkhand during the week.
- ✓ Isolated **very heavy rainfall** also very likely over Arunachal Pradesh on 05<sup>th</sup>; Nagaland, Manipur, Mizoram & Tripura on 11<sup>th</sup>; Assam & Meghalaya on 07<sup>th</sup>; Odisha on 07<sup>th</sup> & 08<sup>th</sup> September.
- ✓ Isolated **heavy rainfall** very likely over Assam & Meghalaya & Nagaland, Manipur, Mizoram & Tripura during next 7 days; Sub-Himalayan West Bengal & Sikkim on 05<sup>th</sup>; Bihar on 05<sup>th</sup> & 06<sup>th</sup>; Jharkhand on 05<sup>th</sup> & during 07<sup>th</sup> -09<sup>th</sup>; Odisha during 05<sup>th</sup> -09<sup>th</sup>; Arunachal Pradesh on 05<sup>th</sup>, 06<sup>th</sup>, 10<sup>th</sup> & 11<sup>th</sup>; September.

##### ❖ Northwest India

- ✓ Scattered to Fairly widespread light/moderate rainfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand, Uttar Pradesh, East Rajasthan; isolated to scattered rainfall over Himachal Pradesh, Punjab, Haryana-Chandigarh-Delhi & West Rajasthan during the week.
- ✓ Isolated **very heavy rainfall** also very likely over Uttarakhand on 05<sup>th</sup> & 06<sup>th</sup>; East Uttar Pradesh on 05<sup>th</sup>; East Rajasthan during 05<sup>th</sup> -07<sup>th</sup> September.
- ✓ Isolated **heavy rainfall** very likely over Himachal Pradesh on 05<sup>th</sup>; Uttarakhand during 05<sup>th</sup> -07<sup>th</sup>, West Uttar Pradesh on 05<sup>th</sup>; East Uttar Pradesh on 06<sup>th</sup>; West Rajasthan during 05<sup>th</sup> -07<sup>th</sup>; East Rajasthan during 05<sup>th</sup> -09<sup>th</sup> September.

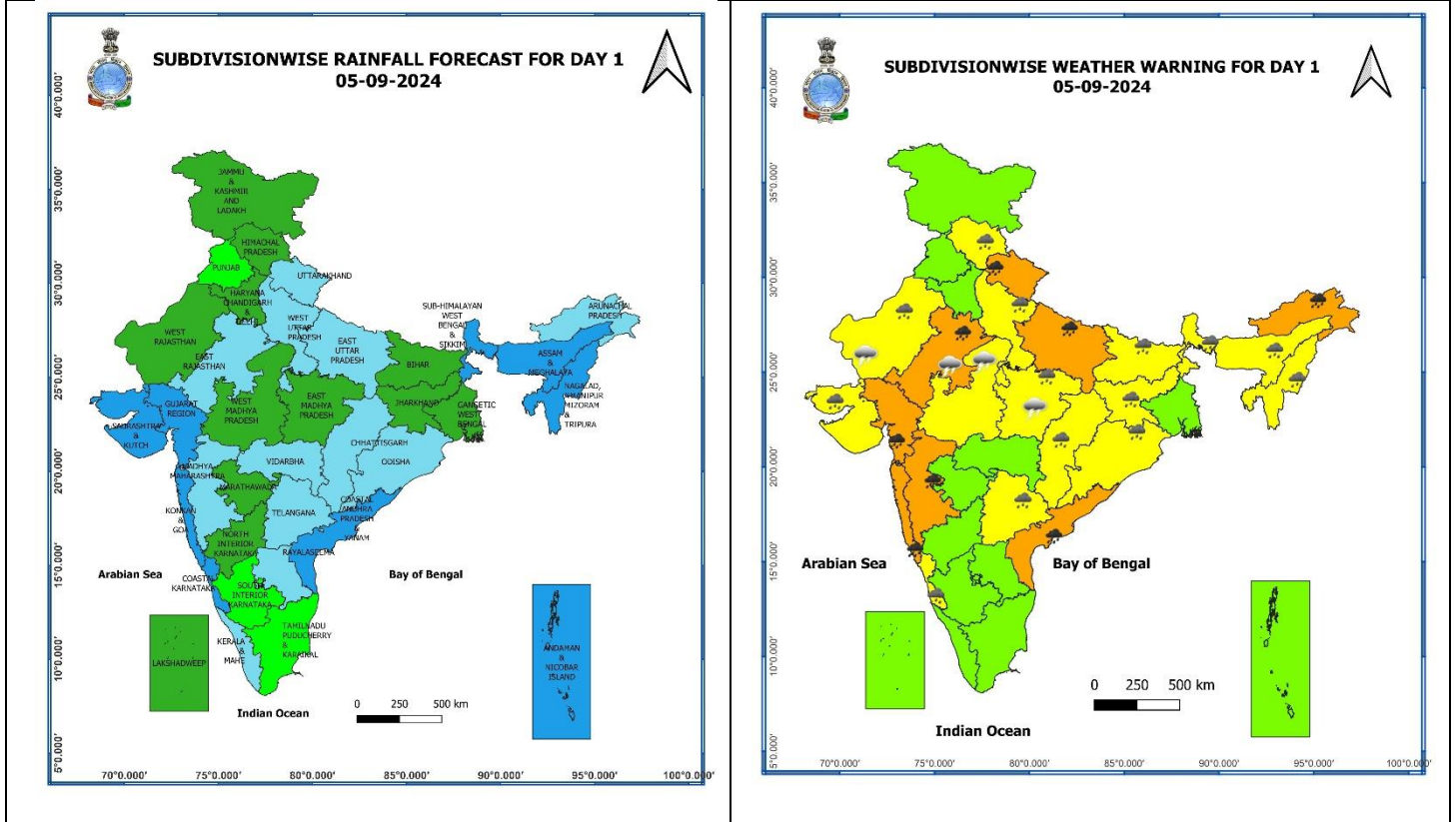
## Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of today): **at a few places** over Konkan & Goa, Saurashtra & Kutch; **at isolated places** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, Chhattisgarh, Odisha, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Vidarbha, Coastal Andhra Pradesh & Yanam, Telangana, Coastal & North Interior Karnataka and Kerala & Mahe.
- ❖ **Heavy rainfall recorded** (from 0830 hours IST to 1730 hours IST of today): **Heavy rainfall** at isolated places over Sub-Himalayan West Bengal & Sikkim, Jharkhand and Gujarat Region.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of today) (in cm): **Sub-Himalayan West Bengal & Sikkim:** Balurghat-8; **Gujarat Region:** Deesa-7; **Jharkhand:** Daltonganj-7, Ranchi-2; **Himachal Pradesh:** Dharamshala-5; **Madhya Maharashtra:** Mahabaleshwar-5; **East Uttar Pradesh:** Churk-5; **Coastal Andhra Pradesh & Yanam:** Vishakhapatnam- 5, Tuni & Nandigama-2; **Nagaland, Manipur, Mizoram & Tripura:** Kohima-4, Agartala-3; **Konkan & Goa:** Dhanu-3, Matheran-2; **Marathwada:** Bir-3; **Chhattisgarh:** Raipur-3; **Saurashtra & Kutch:** Rajkot-3, Amreli-2; **East Rajasthan:** Ajmer-2; **Haryana:** Hissar-2; **Bihar:** Patna-2; **Assam & Meghalaya:** Dhubri & Golaghat-2 each; **Odisha:** Koraput & Bhawanipatna- 2 each; **Telangana:** Mahbubnagar-2; **Vidarbha:** Buldhana-2.
- ❖ **Minimum Temperature Departures (as on 05-09-2024):** Minimum temperatures are **appreciably above normal (3.1°C to 5.0°C)** at isolated places over East Madhya Pradesh; **above normal (1.6°C to 3.0°C)** at a few places over Madhya Maharashtra; at isolated places over Jammu-Kashmir, Punjab, East Uttar Pradesh, West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, West Madhya Pradesh, Saurashtra & Kutch, Marathwada, Konkan & Goa, Odisha, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal. These are **below normal (-1.6°C to -3.0°C)** at isolated places over Haryana, Delhi, Telangana, Coastal Andhra Pradesh & Yanam and **near normal** over rest parts of the country. Today, **the lowest minimum temperature** of 19.0°C is reported at **Bulsar (Gujarat Region)** over the plains of the country. (Fig.4)
- ❖ **Maximum Temperature Departures (as on 05-09-2024):** Maximum temperatures are **appreciably above normal (3.1°C to 5.0°C)** at a few places over Odisha; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Chhattisgarh, Tamil Nadu, Puducherry & Karaikal; **above normal (1.6°C to 3.0°C)** at isolated places over Uttarakhand, Uttar Pradesh, Madhya Pradesh, Nagaland, Manipur, Mizoram & Tripura, Assam & Meghalaya, Jharkhand, Gangetic West Bengal, Vidarbha, Konkan & Goa and Kerala & Mahe. These are **below normal (-1.6°C to -3.0°C)** at isolated places over Bihar, Coastal Andhra Pradesh & Yanam, Saurashtra & Kutch, Rajasthan and Madhya Maharashtra and **near normal** over rest parts of the country. Today, **the highest Maximum Temperature** of 39.1°C is reported at **Nagapattinam (Tamil Nadu)** over the country. (Fig. 2)

## Meteorological Analysis (Based on 1730 hours IST)

- ❖ The **low pressure area** lay over westcentral and adjoining northwest Bay of Bengal off north Andhra Pradesh-south Odisha coasts and associated cyclonic circulation extending upto 7.6 km above mean sea level tilting southwestwards with height persists. It is likely to move slowly northwards and intensify into **Depression** over northwest Bay of Bengal adjoining Gangetic West Bengal - north Odisha coasts during next 2-3 days.
- ❖ The **Monsoon trough** at mean sea level continues to pass through Suratgarh, Rohtak, Orai, Mandla, the centre of above **low pressure area** over westcentral and adjoining northwest Bay of Bengal off north Andhra Pradesh-south Odisha coasts and thence southeastwards to eastcentral Bay of Bengal.
- ❖ The **Western Disturbance** as a cyclonic circulation over Jammu and adjoining Pakistan at 3.1 km above mean sea level with a trough aloft in middle tropospheric westerlies with its axis at 5.8 km above mean sea level persists.
- ❖ The **cyclonic circulation** over northwest Uttar Pradesh & adjoining Haryana tilting southwestwards with height upto 5.8 km above mean sea level persists.
- ❖ The **east-west trough** from above **cyclonic circulation** over northwest Uttar Pradesh & adjoining Haryana to Manipur across East Uttar Pradesh, Bihar, Sub-Himalayan West Bengal at 0.9 km above mean sea level persists.
- ❖ The **cyclonic circulation** over northeast Assam & neighbourhood at 1.5 km above mean sea level persists.
- ❖ The **cyclonic circulation** over Westcentral Arabian Sea off Oman coast extending upto 3.1 km above mean sea level persists.
- ❖ The **cyclonic circulation** over north Andaman Sea & neighbourhood extending upto 3.1 km above mean sea level persists.

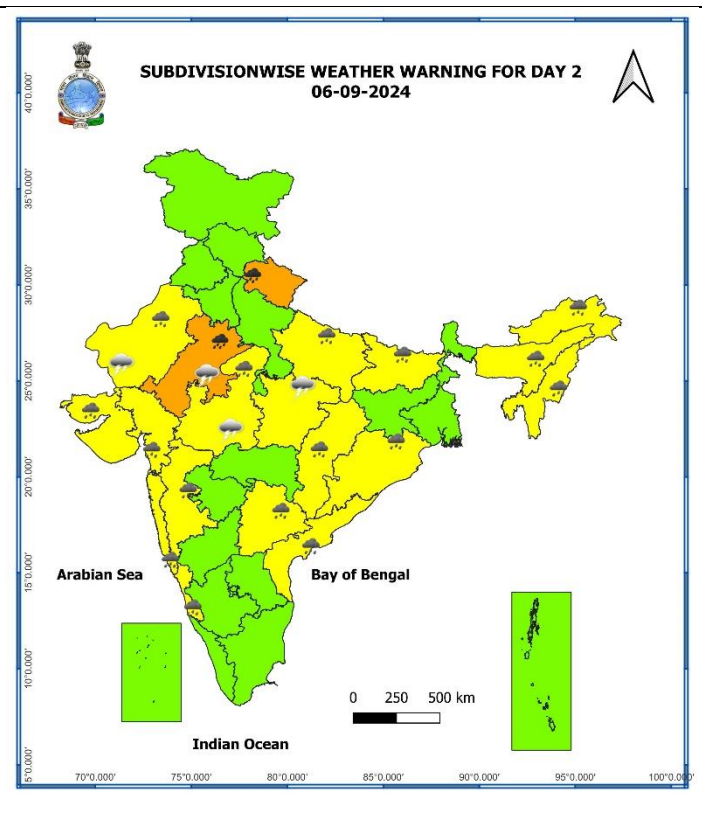
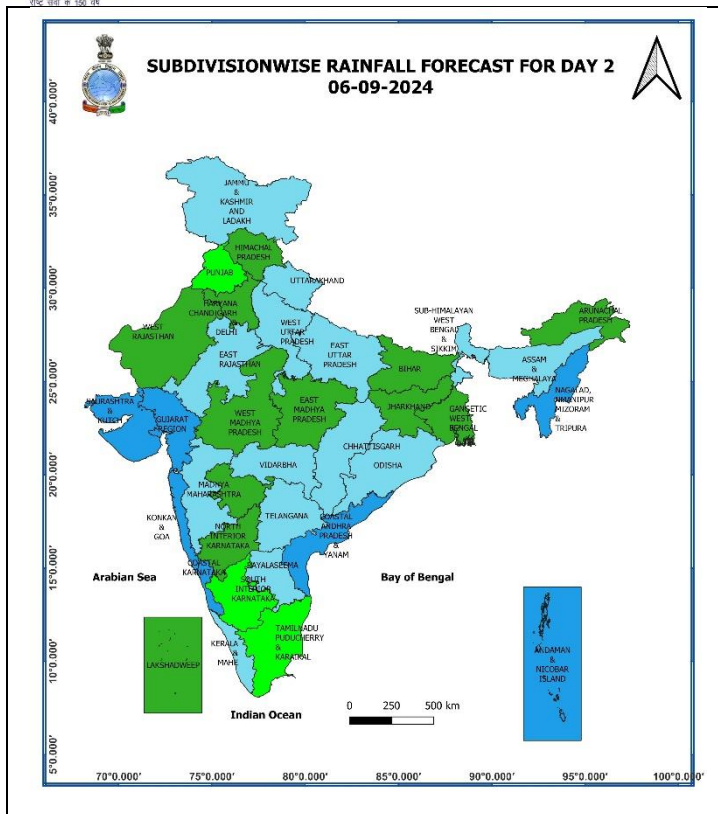
Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 12<sup>th</sup> September, 2024)



05 September (Day 1):

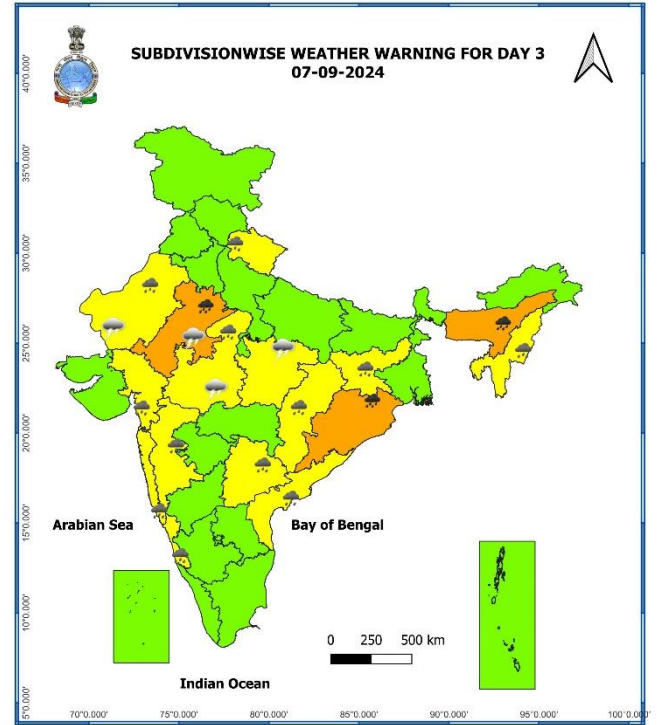
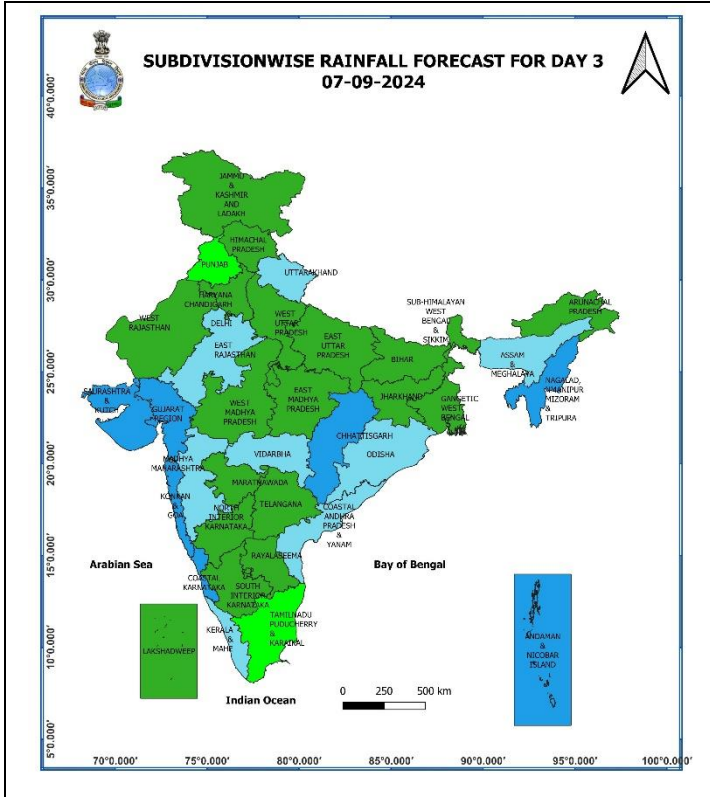
- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** very likely at isolated places over Uttarakhand, East Uttar Pradesh, East Rajasthan, Arunachal Pradesh, Konkan & Goa, Madhya Maharashtra, Gujarat Region, Coastal Andhra Pradesh & Yanam; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over West Uttar Pradesh, Himachal Pradesh, West Rajasthan, East Madhya Pradesh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch, Telangana, Coastal Karnataka.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Rajasthan and Madhya Pradesh.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over many parts of central Arabian sea and north parts of southwest Arabian sea, off Sri Lanka coast, most parts of south and central Bay of Bengal, along and off north Andhra Pradesh coast, Andaman Sea. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** is likely to prevail over gulf of Mannar, some parts of south and 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 westcentral, southwest Arabian sea, along and off Somalia, north Yemen, south Oman coasts. 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)



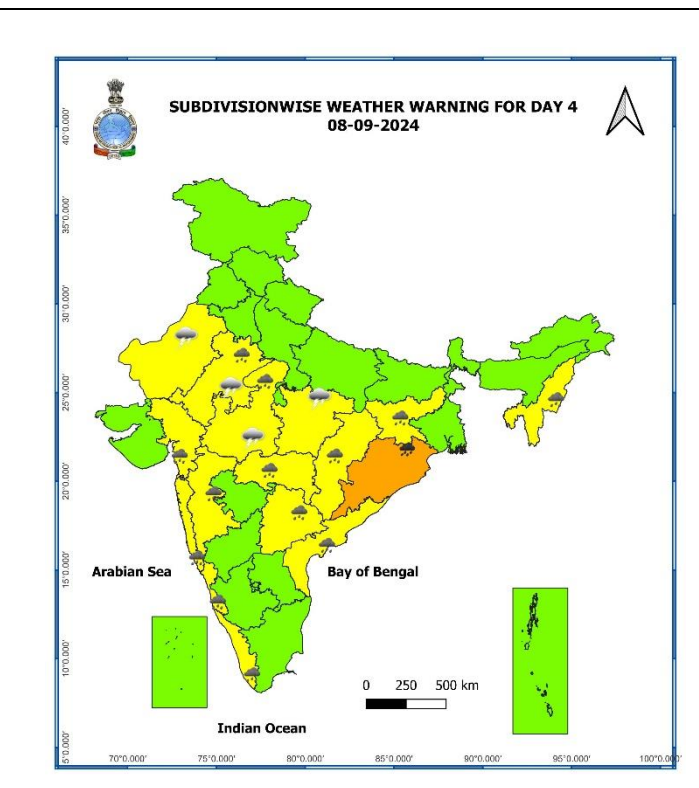
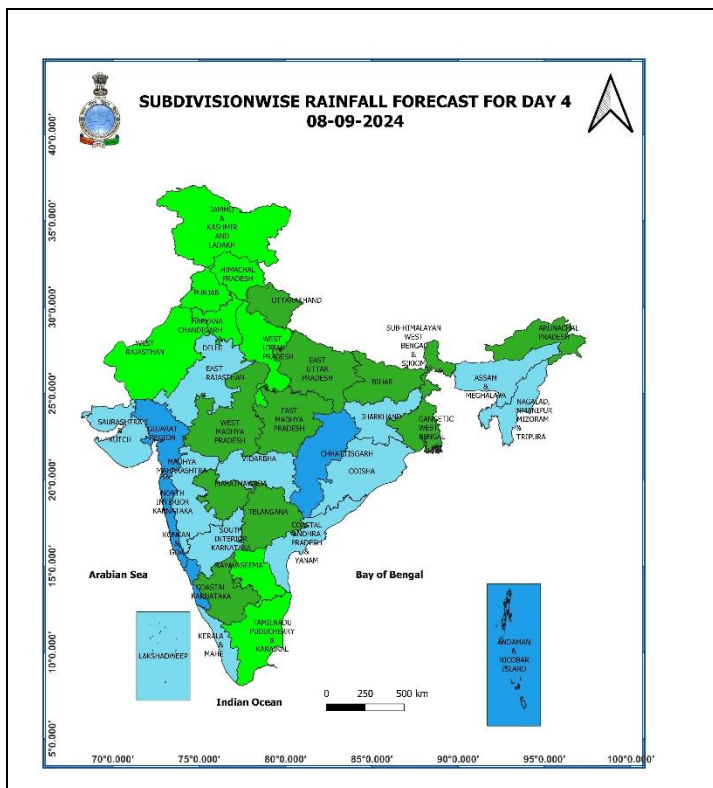
**06 September (Day 2):**

- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** very likely at isolated places over Uttarakhand, East Rajasthan; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over East Uttar Pradesh, West Rajasthan, Chhattisgarh, Bihar, Odisha, West Madhya Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Gujarat state, Coastal Andhra Pradesh & Yanam, Telangana, Coastal Karnataka.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Rajasthan and Madhya Pradesh.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over many parts of westcentral Arabian sea & adjoining areas of eastcentral Arabian sea, northern parts of southwest Arabian sea, off Sri Lanka coast, most parts of south and central Bay of Bengal, along and off north Andhra Pradesh coast, Andaman Sea. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** is likely to prevail over many parts of central & south Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over western parts of westcentral, southwest Arabian sea, along and off Somalia, north Yemen, south Oman coasts. Fishermen are advised not to venture into these areas.



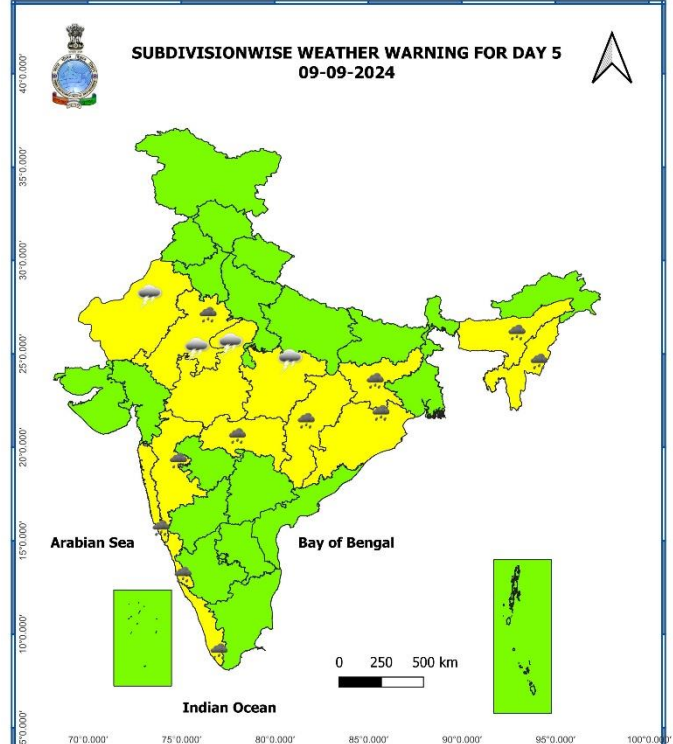
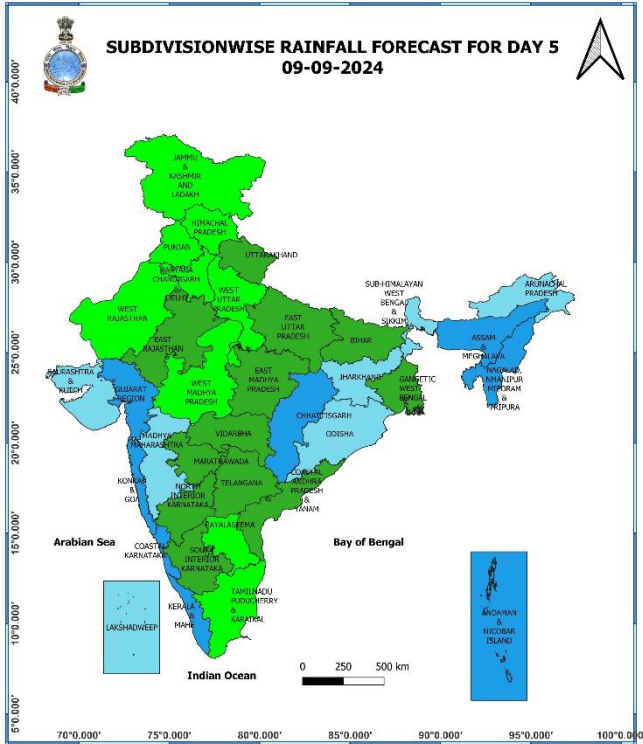
### 07 September (Day 3):

- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** very likely at isolated places over East Rajasthan, Odisha, Assam & Meghalaya; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Uttarakhand, West Rajasthan, West Madhya Pradesh, Chhattisgarh, Jharkhand, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Gujarat Region, Coastal Andhra Pradesh & Yanam, Telangana, Coastal Karnataka.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Rajasthan and Madhya Pradesh.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** is very likely to prevail over many parts of westcentral Arabian sea & adjoining areas of eastcentral Arabian sea, northern parts of southwest Arabian sea, off Sri Lanka coast, most parts of south and central Bay of Bengal, along and off north Andhra Pradesh coast, Andaman Sea. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** is likely to prevail over many parts of central Bay of Bengal and adjoining parts of south Bay of Bengal. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over western parts of westcentral, southwest Arabian sea, along and off Somalia, north Yemen, south Oman coasts. Fishermen are advised not to venture into these areas.



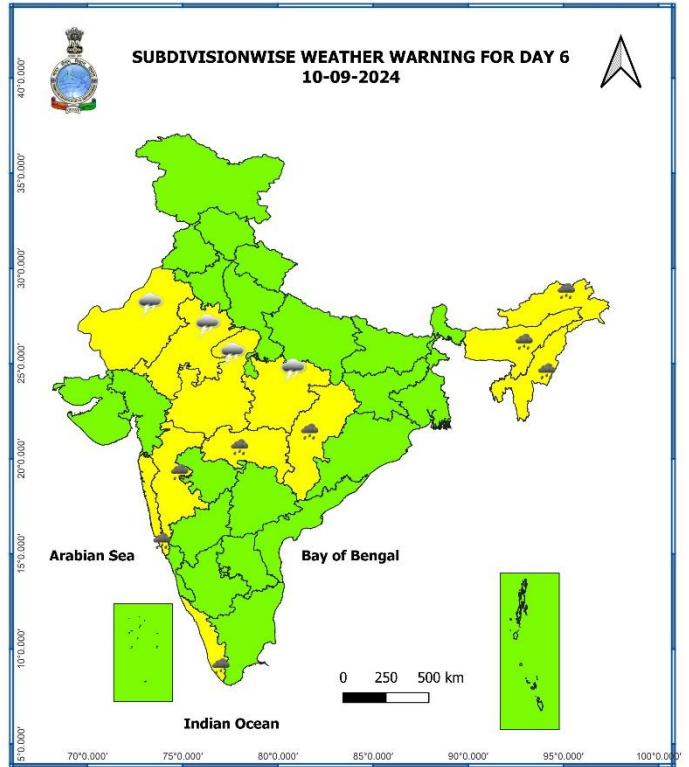
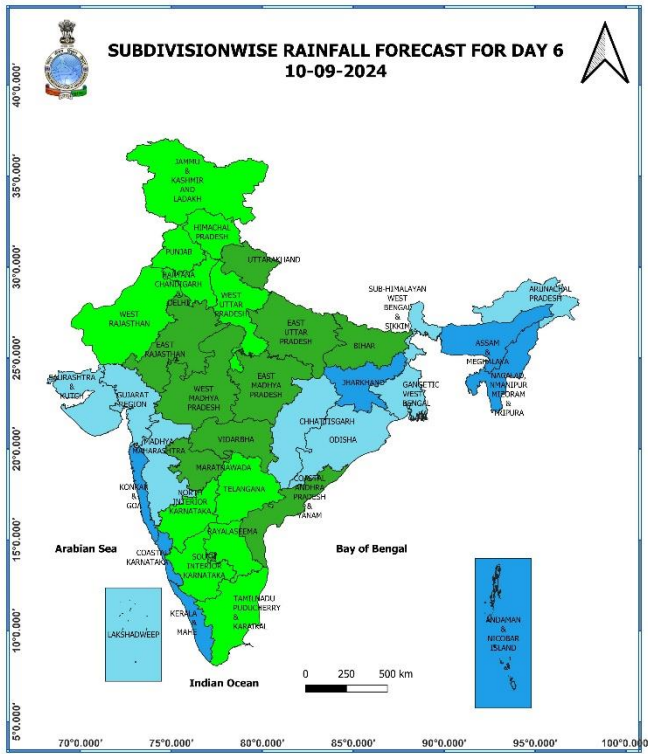
### 08 September (Day 4):

- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** likely at isolated places over Odisha; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over East Rajasthan, West Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Gujarat Region, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Telangana, Coastal Karnataka.
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Rajasthan and Madhya Pradesh.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevail over many parts of westcentral Arabian sea & few western parts of eastcentral Arabian sea, northern parts of southwest Arabian sea, off Sri Lanka coast, most parts of south and central Bay of Bengal, along and off north Andhra Pradesh coast, Andaman Sea. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** is likely to prevail over some parts of central Bay of Bengal & southeast 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 parts of westcentral Arabian sea, along and off Somalia coast. Fishermen are advised not to venture into these areas.



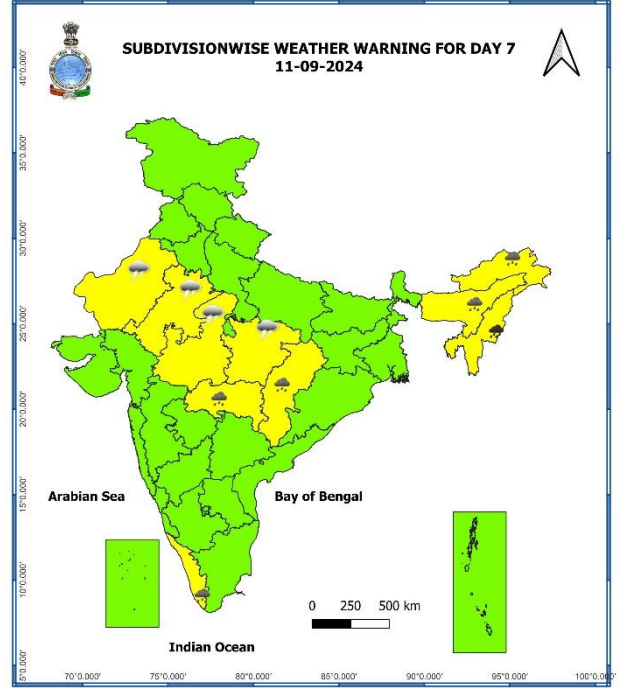
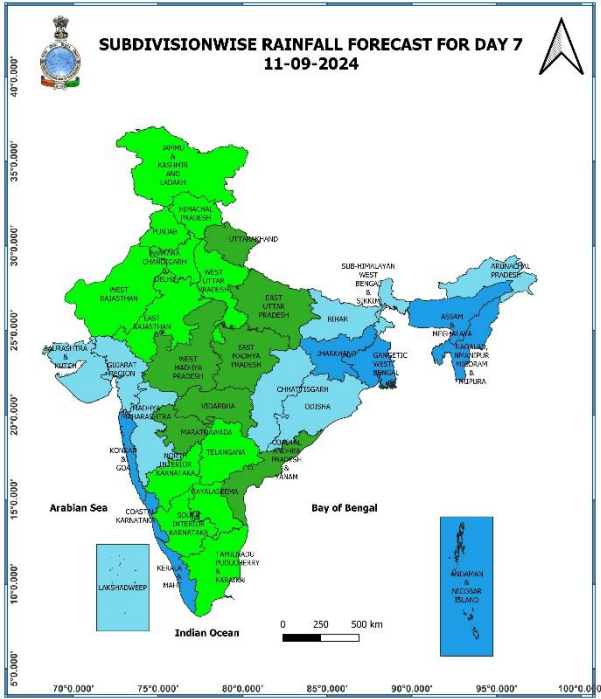
### 09 September (Day 5):

- ❖ **Heavy rainfall ( $\geq 7$  cm)** likely at isolated places over East Rajasthan, Vidarbha, Chhattisgarh, Jharkhand, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Kerala & Mahe, Coastal Karnataka.
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Rajasthan and Madhya Pradesh.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevail over many parts of westcentral Arabian sea & few western parts of eastcentral Arabian sea, northern parts of southwest Arabian sea, off Sri Lanka coast, most parts of south and central Bay of Bengal, along and off north Andhra Pradesh coast, Andaman Sea. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** is likely to prevail over many parts of central Bay of Bengal & southeast 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 parts of westcentral Arabian sea, along and off Somalia coast. Fishermen are advised not to venture into these areas.



### 10 September (Day 6):

- ❖ **Heavy rainfall ( $\geq 7$  cm)** likely at isolated places over Vidarbha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Kerala & Mahe.
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Rajasthan and Madhya Pradesh.



### 11 September (Day 7):

- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** likely at isolated places over Nagaland, Manipur, Mizoram & Tripura; **Heavy rainfall ( $\geq 7$  cm)** likely at isolated places over Vidarbha, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Kerala & Mahe.
- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Rajasthan and Madhya Pradesh.

### Weather Outlook for subsequent 3 days (During 12<sup>th</sup> September- 14<sup>th</sup> September, 2024)

- ❖ Fairly widespread to widespread rainfall likely over most parts of the country except Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, West Rajasthan, Punjab, Tamil Nadu, Puducherry & Karaikal where isolated to scattered rainfall likely.

- 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

- ✓ **Very heavy rainfall** at isolated over East Uttar Pradesh, Coastal Andhra Pradesh & Yanam, Arunachal Pradesh, Konkan & Goa, Madhya Maharashtra & Gujarat Region on 05<sup>th</sup>; Odisha on 07<sup>th</sup> & 08<sup>th</sup>; Assam & Meghalaya on 07<sup>th</sup>; Nagaland, Manipur, Mizoram & Tripura on 11<sup>th</sup>; Uttarakhand on 05<sup>th</sup> & 06<sup>th</sup>; East Rajasthan during 05<sup>th</sup> -07<sup>th</sup> September.
- ✓ **Low to Moderate flash flood risk** likely over few watersheds & neighbourhoods of Uttarakhand, Himachal Pradesh, West Madhya Pradesh, East Rajasthan and Gujarat Region on 05<sup>th</sup> & 06<sup>th</sup> September. **(ANNEXURE IV)**

## 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.
- ✓ Reduction of visibility over sea area due to sea spray induced by strong wind and 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/landslips/mud slips/land sinks/mud sinks.
- ✓ 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)

## Action Suggested

- ✓ Judicious regulation of offshore/onshore Operations
- ✓ 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

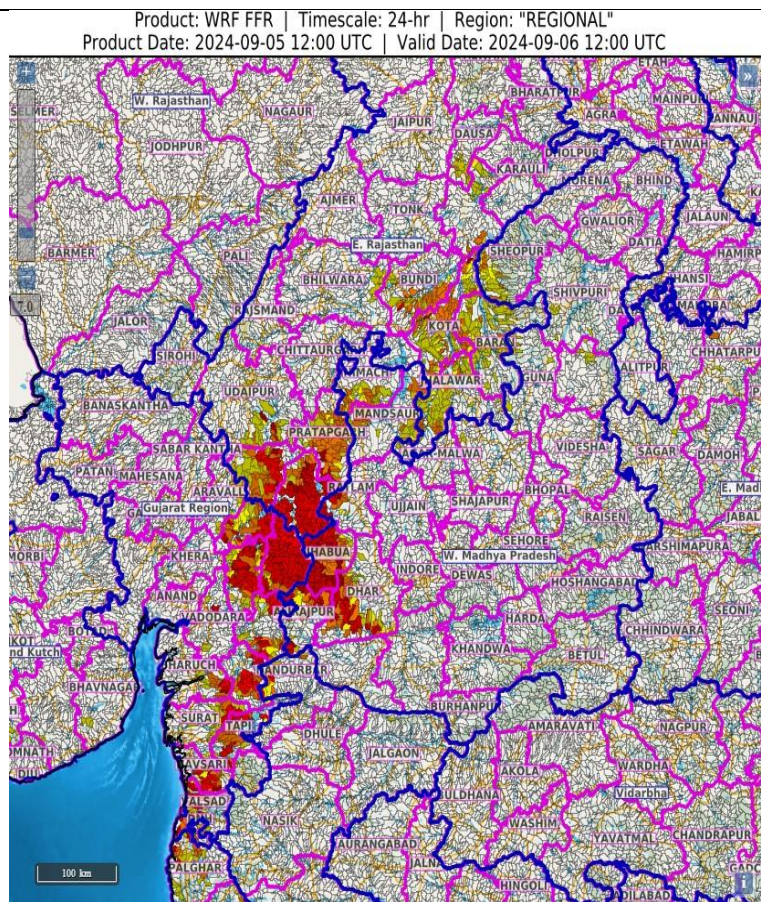
- ✓ Drain out excess water from field crops and horticultural crops in Assam & Meghalaya, Sub Himalayan West Bengal & Sikkim, Odisha, Jharkhand, Bihar, Himachal Pradesh, Punjab, Haryana, West Uttar Pradesh, Rajasthan, East Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, Coastal Andhra Pradesh and Telangana.
- ✓ Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Arunachal Pradesh, NMMT, Uttarakhand, East Uttar Pradesh, Chhattisgarh, Gujrat and Coastal Karnataka.
- ✓ Drain out excess water from rice, soybean, red gram, maize, cotton and Turmeric in **Telangana** to prevent water logging.
- ✓ Provide mechanical support to horticultural crops & staking to vegetables.

**Flash Flood Guidance:**

**ANNEXURE I**

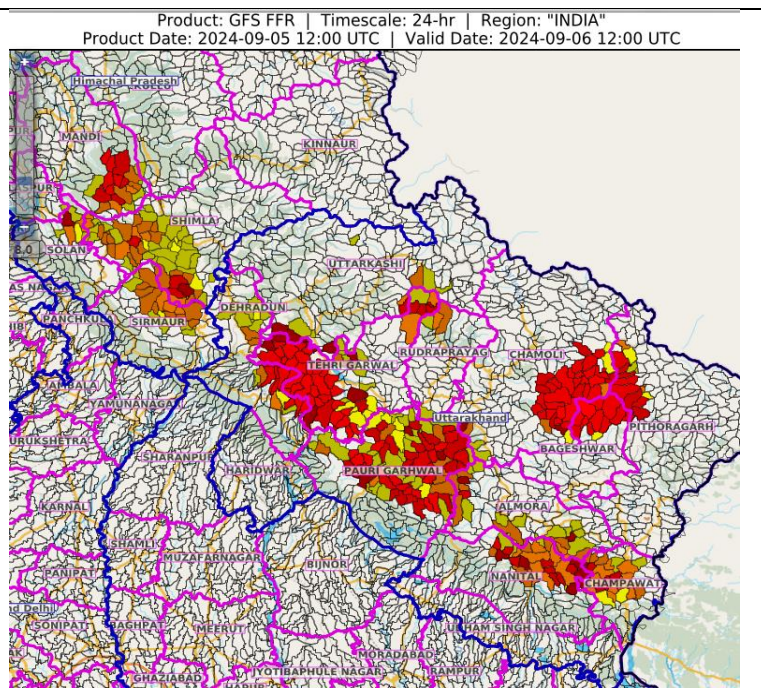
**24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 06-09-2024 :**

**Low to Moderate flash flood risk** likely over few watersheds & neighbourhoods of **South Eastern parts of East Rajasthan** - Banswara, Baran, Bhilwara, Bundi, Dausa, Dungarpur, Jhalawar, Kota, Pratapgarh, Swaimadhapur and Udaipur districts adjoining **West Madhya Pradesh** - Agar-Malwa, Alirajpur, Ashoknagar, Dhar, Guna, Jhabua, Mandasaur, Nimach, Rajgarh, Ratlam, Sheopur and Shivpuri districts. **South and Eastern parts of Gujarat Region** - Dadar & Nagar Haveli, Daman, Aravalli, Bharuch, Chhota Udepur, Dahod, Mahisagar, Narmada, Navsari, Panchmahal, Surat, Tapi, Vadodara and Valsad 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.



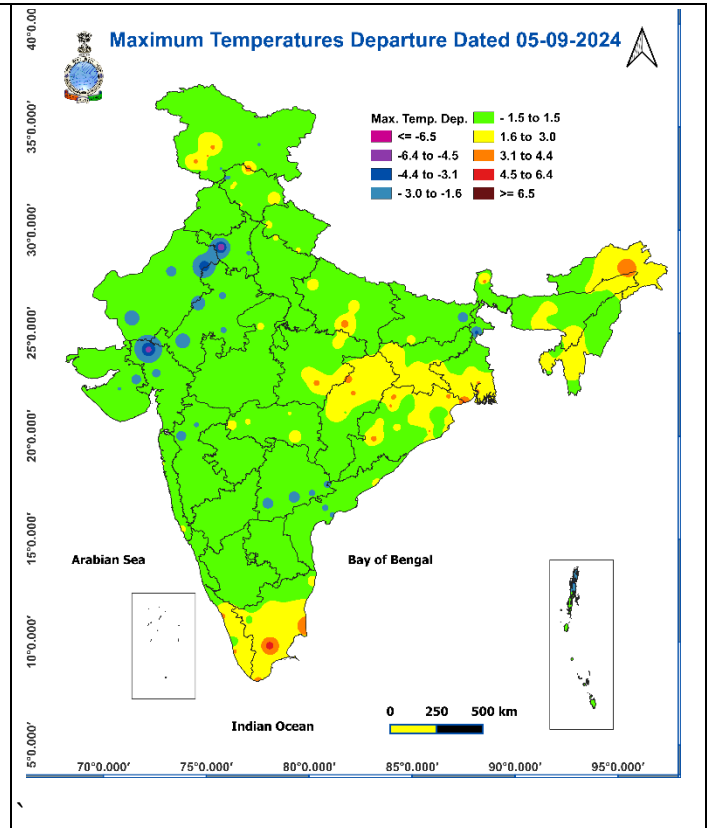
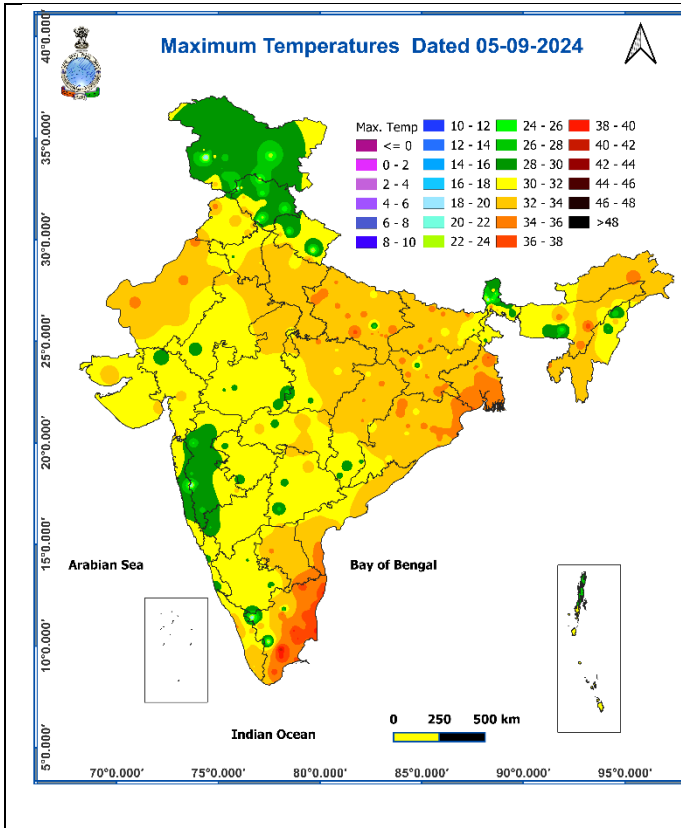
**24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 06-09-2024 :**

**Low to Moderate flash flood risk** likely over few watersheds & neighbourhoods of **Himachal Pradesh** - Bilaspur, Mandi, Shimla, Sirmaur and Solan districts. **Uttarakhand** - Almora, Bageshwar, Chamoli, Champawat, Dehradun, Nanital, Pauri Garhwal, Pithoragarh, Rudraprayag, Tehri Garwal and Uttarkashi 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.



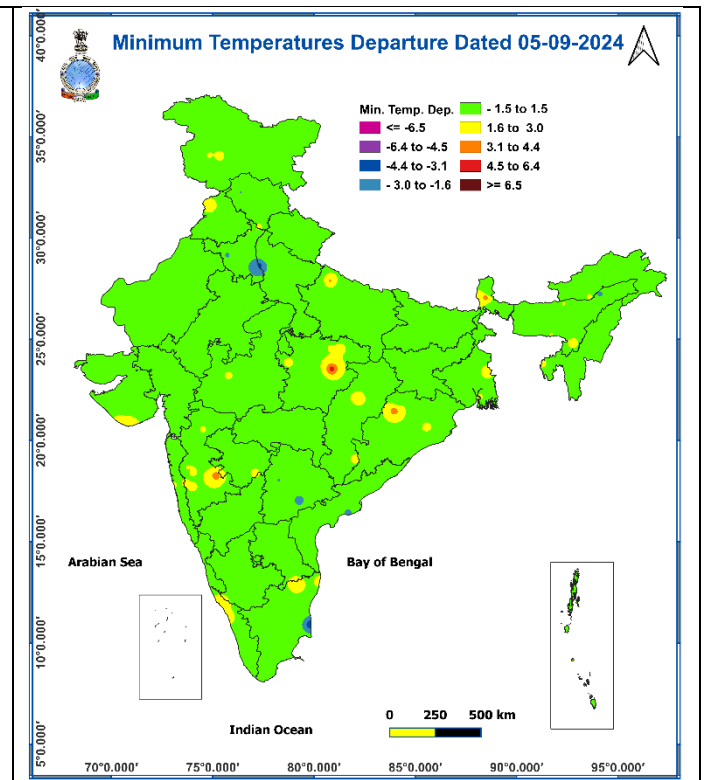
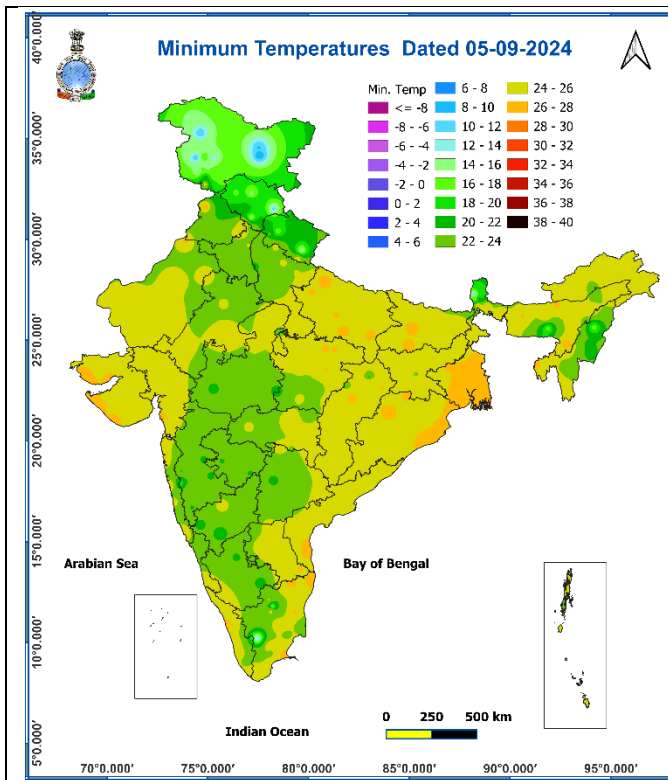
**Fig. 1: Maximum Temperatures**

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

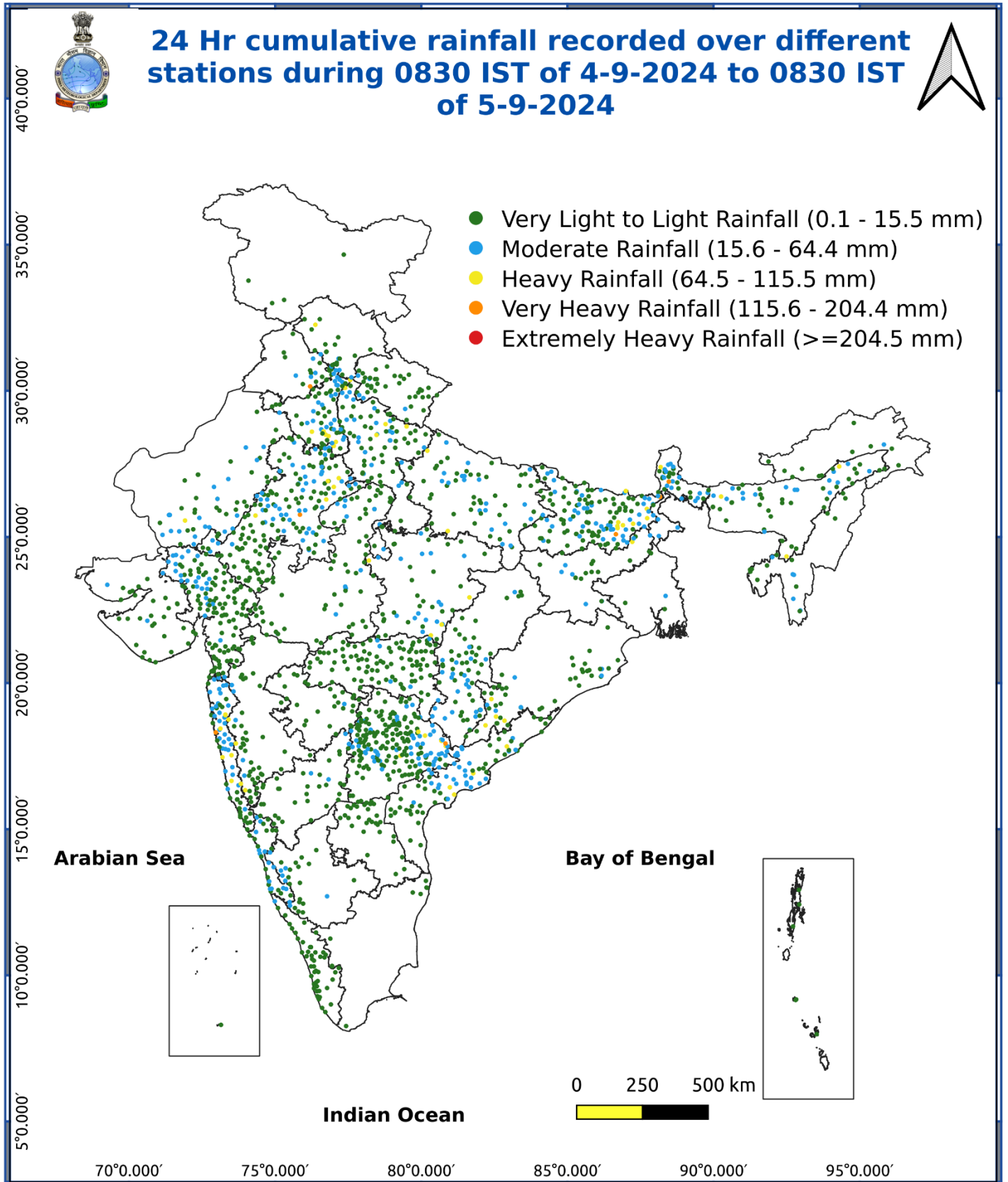


**Fig. 3: Minimum Temperatures**

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



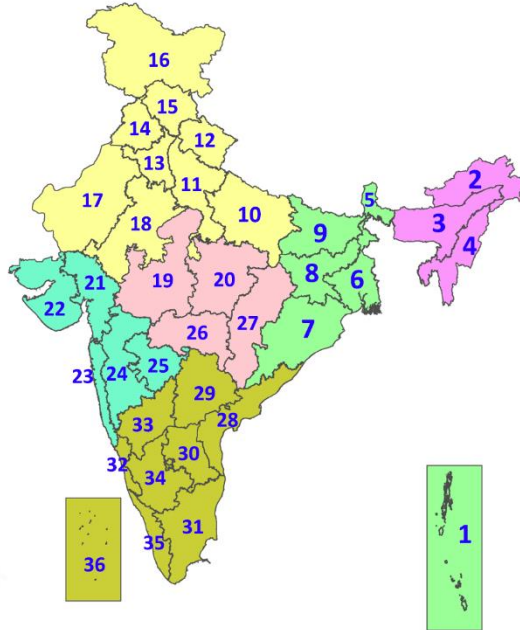
**Fig. 5: Accumulated Rainfall (mm) during past 24 hours**



\* 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

### Rain/ Snow \*

Heavy: 64.5 to 115.5 mm/cm \*  
Very Heavy: 115.6 to 204.4 mm/cm\*  
Extremely Heavy: > 204.4 mm/cm \*

### Heat Wave

When maximum temperature of a station reaches  $\geq 40^\circ\text{C}$  for plains and  $\geq 30^\circ\text{C}$  for hilly regions

(a) Based on Departure from normal

Heat Wave: Maximum Temperature Departure from normal  $4.5^\circ\text{C}$  to  $6.4^\circ\text{C}$ .

Severe Heat Wave: Maximum Temperature Departure from normal  $\geq 6.5^\circ\text{C}$

(b). Based on Actual maximum temperature

Heat Wave: When actual maximum temperature  $\geq 45^\circ\text{C}$ .

Severe Heat Wave: When actual maximum temperature  $\geq 47^\circ\text{C}$

(c) Criteria for heat wave for coastal stations

When maximum temperature departure is  $> 4.5^\circ\text{C}$  from normal. Heat Wave may be described provided maximum temperature  $\geq 37^\circ\text{C}$

### Warm Night

When maximum temperature remains  $40^\circ\text{C}$

Warm Night: When minimum temperature departure  $4.5^\circ\text{C}$  to  $6.4^\circ\text{C}$ .

Severe Warm Night: When minimum temperature departure  $> 6.4^\circ\text{C}$ .

### Cold Wave

When minimum temperature of a station  $\leq 10^\circ\text{C}$  for plains and  $\leq 0^\circ\text{C}$  for hilly regions.

(a). Based on departure

Cold Wave: Minimum Temperature Departure from normal  $-4.5^\circ\text{C}$  to  $-6.4^\circ\text{C}$ .

Severe Cold Wave: Minimum Temperature Departure from normal  $\leq -6.5^\circ\text{C}$

(b) Based on actual Minimum Temperature (for Plains only)

Cold Wave : When Minimum Temperature is  $\leq 4.0^\circ\text{C}$

Severe Cold Wave: When Minimum Temperature is  $\leq 2.0^\circ\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is  $\leq -4.5^\circ\text{C}$  & actual Minimum Temperature is  $\leq 15^\circ\text{C}$

### Cold Day

When minimum temperature of a station  $\leq 10^\circ\text{C}$  for plains and  $\leq 0^\circ\text{C}$  for hilly regions

Based on departure

Cold Day: Maximum Temperature Departure from normal  $-4.5^\circ\text{C}$  to  $-6.4^\circ\text{C}$ .

Severe Cold Day: Maximum Temperature Departure from normal  $\leq -6.5^\circ\text{C}$

### Fog

Phenomenon of small droplets suspended in air and the horizontal visibility  $< 1\text{km}$

Moderate Fog: When the visibility between 500-200 metres

Dense Fog: when the visibility between 50- 200 metres

Very Dense Fog: when the visibility  $< 50$  metres

### Thunderstorm

Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)

### Dust/Sand Storm

An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.

### Frost

Ice deposits on ground

Air temperature  $\leq 4^\circ\text{C}$  ( over Plains)

### Squall

A strong wind that rises suddenly, lasts for atleast 1 minute.

Moderate: Wind speed 52-61 kmph

Severe: Wind speed 62-87 kmph

Very Severe: Wind speed  $> 87$  kmph

### Sea State

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

### Cyclone

Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)

Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)

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

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

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