



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

Sunday, September 8, 2024 Time of Issue: 1430 hours IST (MID-DAY)

#### ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

#### **Significant Weather Features:**

#### **Weather Systems:**

- ✓ Yesterday's **well-marked low pressure area** over northwest & central Bay of Bengal concentrated into a **depression** at 0530 hours IST of today, the 8th September, 2024 over westcentral and adjoining northwest Bay of Bengal. It moved northnorthwestwards with a speed of 13 kmph during past 3 hours and lay centered at 0830 hours IST of today, the 8th September, 2024 over the same region near latitude 18.2°N and longitude 86.8°E, about 280 km east of Kalingapatnam (Andhra Pradesh), 230 km east-southeast of Gopalpur (Odisha), 260 km south-southeast of Paradip (Odisha) and 390 km south of Digha (West Bengal). It is very likely to move nearly northwards towards north Odisha-West Bengal coasts and intensify into a **deep depression** during next 24 hours. Thereafter, it is very likely to move west-northwestwards and cross Odisha and adjoining West Bengal coasts between Puri and Digha around evening/night of 9th September. Continuing to move further west-northwestwards, it is likely to move across Odisha & adjoining Gangetic West Bengal and Jharkhand & adjoining north Chhattisgarh during subsequent 2 days.
- ✓ The **monsoon trough** is south of its normal position at mean sea level. It is likely to continue so for next 3-4 days.
- ✓ A cyclonic circulation lies over central Rajasthan & neighbourhood and extends upto middle tropospheric levels.

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

#### South Peninsular India:

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Coastal Karnataka, Kerala & Mahe, Lakshadweep; Scattered to Fairly widespread light/moderate rainfall over Coastal Andhra Pradesh & Yanam, Telangana; isolated to scattered rainfall over Rayalaseema, Tamil Nadu, Puducherry & Karaikal and Interior Karnataka during the week.
- ✓ Isolated extremely heavy rainfall very likely over Coastal Andhra Pradesh & Yanam on 08th & 09th September.
- ✓ Isolated **very heavy rainfall** very likely over Coastal Karnataka on 08<sup>th</sup> and Telangana on 08<sup>th</sup> & 09<sup>th</sup> September.
- ✓ Isolated **heavy rainfall** very likely over Telangana, South Interior Karnataka, Kerala & Mahe during 08th–10th; Coastal Andhra Pradesh & Yanam during 08th −12th; Coastal Karnataka during 08th −11th September.

### East & Northeast India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar Islands, West Bengal & Sikkim during the week; Scattered to Fairly widespread light/moderate rainfall very likely over Arunachal Pradesh, Bihar during the week and scattered to widespread light/moderate rainfall over Jharkhand and Odisha during the week.
- ✓ Isolated extremely heavy rainfall very likely over Odisha on 09th September.
- ✓ Isolated very heavy rainfall very likely over Odisha on 08th; Jharkhand on 10th & 11th; Gangetic West Bengal on 09th; Assam & Meghalaya on 11th &12th; Nagaland, Manipur, Mizoram & Tripura during 10th 12th September.
- ✓ Isolated **heavy rainfall** very likely over Nagaland, Manipur, Mizoram & Tripura during next 7 days; Assam & Meghalaya during 09<sup>th</sup>-13<sup>th</sup>; Odisha during 08<sup>th</sup> -10<sup>th</sup>; Arunachal Pradesh during 10<sup>th</sup> -12<sup>th</sup>; Gangetic West Bengal on 09<sup>th</sup> & 10<sup>th</sup>; Sub-Himalayan West Bengal & Sikkim during 09<sup>th</sup>, 11<sup>th</sup> & 12<sup>th</sup>; Bihar during 12<sup>th</sup>-14<sup>th</sup>; Jharkhand during 09<sup>th</sup>-12<sup>th</sup> September.

#### West & Central India:

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over West and Central India during the week.
- ✓ Isolated very heavy rainfall very likely over West Madhya Pradesh on 11<sup>th</sup> & 12<sup>th</sup>; East Madhya Pradesh on 09<sup>th</sup> & 10<sup>th</sup>, Chhattisgarh during 08<sup>th</sup>-10<sup>th</sup> and Vidarbha on 09<sup>th</sup> September.
- ✓ Isolated **heavy rainfall** very likely over West Madhya Pradesh during 08th-12th & 14th; East Madhya Pradesh during 08th-10th; Gujarat Region, Konkan & Goa, Vidarbha, Chhattisgarh during 08th -11th; Madhya Maharashtra during 08th -12th September.

#### Northwest India

- Scattered to Fairly widespread light/moderate rainfall very likely over Uttarakhand, Uttar Pradesh, East Rajasthan; isolated to scattered rainfall over the remaining region during the week.
- ✓ Isolated **very heavy rainfall** very likely over East Rajasthan on 12<sup>th</sup> & 13<sup>th</sup> September.
- ✓ Isolated **heavy rainfall** very likely over Uttar Pradesh during 10<sup>th</sup>-12<sup>th</sup>; Haryana, West Rajasthan on 08<sup>th</sup> & 09<sup>th</sup>; Uttarakhand during 09<sup>th</sup> -14<sup>th</sup>; East Uttar Pradesh on 10<sup>th</sup> & 11<sup>th</sup>; East Rajasthan during 08<sup>th</sup> -09<sup>th</sup> and on 13<sup>th</sup> September.





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### **Main Weather Observations:**

- Rainfall distribution (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over East Rajasthan, Konkan & Goa, Marathwada, Kerala & Mahe, Lakshadweep, Coastal Andhra Pradesh & Yanam, Telangana; at many places over Himachal Pradesh, Haryana-Chandigarh-Delhi, West Madhya Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Gangetic West Bengal, Odisha; at a few places over Uttarakhand, West Rajasthan, East Madhya Pradesh, Jharkhand, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Gujarat Region, Rayalaseema, Interior Karnataka; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, Arunachal Pradesh, Assam & Meghalaya, 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 Odisha and Telangana; Heavy rainfall at isolated places over Haryana, Madhya Pradesh, East Rajasthan, Coastal Andhra Pradesh, Madhya Maharashtra, Konkan & Goa, Gujarat Region and Chhattisgarh.
- Significant amount of rainfall (from 0830 hours IST of vesterday to 0830 hours IST of today) (in cm): Telangana: Mahabubabad (dist Mahabubabad) 17, Thollada (dist Khammam) 13, Bayyaram (dist Mahabubabad) 12, Dornakal (dist Mahabubabad) 9, Wyra Kvk(agro) (dist Khammam) 9, Konijerla (dist Khammam) 9, Tekulapalle (dist B. Kothagudem) 9, Garla (dist Mahabubabad) 8, Bomraspeta (dist Vikarabad) 8, Aswaraopeta (dist B. Kothagudem) 8, Odisha: Jeypore (Koraput) 12, Tihidi (Bhadrak) 9, Mundali (Cuttack) 7, Begunia (Khurda) 7, Madanpur Rampur (Kalahandi) 7, Borigumma (Koraput) 7, East Rajasthan: Kathumer (dist Alwar) 11, Deoli (dist Tonk) 9, Behror (dist Alwar) 9, Rupbas (dist Bharatpur) 8, Mandawar (dist Alwar) 8, Kaman (dist Bharatpur) 7, Mount Abu Tehsil Sr (dist Sirohi) 7, Patan (dist Bundi) 7, Malakhera Sr (dist Alwar) 7, Baran (dist Baran) 7, Coastal Andhra Pradesh: Vizianagaram (dist Vizianagaram) 11, Tiruvuru (dist Ntr District) 10, Kalingapatnam (dist Srikakulam) 10, Nellimarla (dist Vizianagaram) 9, Denkada (dist Vizianagaram) 9, Bheemunipatnam (dist Vishakhapatnam) 9, Bondapalle (dist Vizianagaram) 8, Gajapathinagaram (dist Vizianagaram) 8, Gantyada (dist Vizianagaram) 7, Visakhapatnam (dist Vishakhapatnam) 7, Garividi (dist Vizianagaram) 7, West Madhya Pradesh: Vijaypur (adp) (dist Sheopur) 11, Khategaon (dist Dewas) 9, Kathiwada (dist Alirajpur) 8, Chhattisgarh: Belargaon (dist Dhamtari) 10, Bijapur (dist Bijapur) 7, Gangalur (dist Bijapur) 7, Gujarat Region: Valia (dist Bharuch) 9, Bharuch (dist Bharuch) 7, Haryana: Nuh (dist Nuh) 9, Babain Rev (dist Kurukshetra) 7, East Madhya Pradesh: Bilaspur (dist Umaria) 8, Madhya Maharashtra: Gaganbawada (dist Kolhapur) 8, Konkan & Goa: Matheran (dist Raigad) 7.
- ❖ Minimum Temperature Departures (as on 08-09-2024): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at isolated places over Nagaland, Manipur, Mizoram & Tripura and Sub-Himalayan West Bengal & Sikkim; above normal (1.6°C to 3.0°C) at many places over Bihar, Arunachal Pradesh, Himachal Pradesh, East Uttar Pradesh; at a few places over Assam & Meghalaya; at isolated places over Gangetic West Bengal, Jharkhand, Odisha, Uttarakhand, West Rajasthan, Madhya Pradesh, Chhattisgarh, Vidarbha, Gujarat state, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. These are markedly below normal (-5.1°C or less) at isolated places over Coastal Andhra Pradesh & Yanam; below normal (-1.6°C to -3.0°C) at isolated places over Telangana and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.4°C is reported at Bulsar (Gujarat Region) over the plains of the country. (Fig.4)
- ❖ Maximum Temperature Departures (as on 07-09-2024): Maximum temperatures were markedly above normal (5.1°C or more) at a few places over Sub-Himalayan West Bengal & Sikkim; at isolated places over Assam & Meghalaya, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura; above normal (1.6°C to 3.0°C) at most places over Bihar; at many places over East Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Jharkhand, Gangetic West Bengal and Odisha; at a few places over Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal; at isolated places over Konkan & Goa and Vidarbha. These were below normal (-1.6°C to -3.0°C) at many places over Haryana-Chandigarh-Delhi and at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Rajasthan and Telangana and near normal over rest parts of the country. Yesterday, the highest Maximum Temperature of 39.2°C is reported at Madurai (Tamil Nadu) over the country. (Fig. 2)



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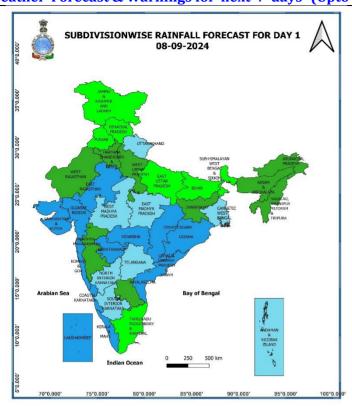
# Meteorological Analysis (Based on 0830 hours IST)

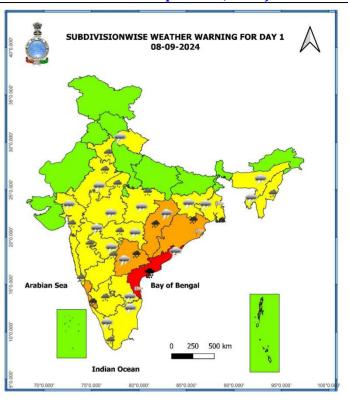
- The **depression** over westcentral and adjoining northwest Bay of Bengal moved northnorthwestwards with a speed of 13 kmph during past 3 hours and lay centered at 0830 hours
  IST of today, the 8th September, 2024 over the same region near latitude 18.2°N and longitude
  86.8°E, about 280 km east of Kalingapatnam (Andhra Pradesh), 230 km east-southeast of
  Gopalpur (Odisha), 260 km south-southeast of Paradip (Odisha) and 390 km south of Digha
  (West Bengal). It is very likely to move nearly northwards towards north Odisha-West Bengal
  coasts and intensify into a **deep depression** during next 24 hours. Thereafter, it is very likely
  to move west-northwestwards and cross Odisha and adjoining West Bengal coasts between
  Puri and Digha around evening/night of 9th September. Continuing to move further westnorthwestwards, it is likely to move across Odisha & adjoining Gangetic West Bengal and
  Iharkhand & adjoining north Chhattisgarh during subsequent 2 days.
- The Monsoon trough at mean sea level now passes through Bikaner, Narnaul, Jhansi, Damoh, Mana, Puri and to the centre of depression over westcentral and adjoining northwest Bay of Bengal.
- A fresh **Western Disturbance** lay as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 72°E to the north of Lat. 32°N.
- ❖ An **off-share trough** lies off north Karnataka to Kerala coasts.
- The **cyclonic circulation** over central Rajasthan & neighbourhood extending upto 5.8 km above mean sea level tilting southwestwards with height persists.
- The **cyclonic circulation** over Westcentral Arabian Sea off Oman coast persists and now extends upto 1.5 km above mean sea level.
- ❖ The **cyclonic circulation** over central Pakistan & neighbourhood extending upto 1.5 km above mean sea level has become less marked.





# Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 15th September, 2024)



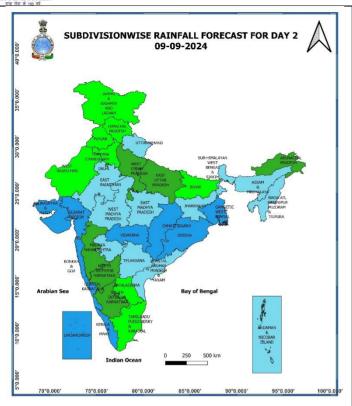


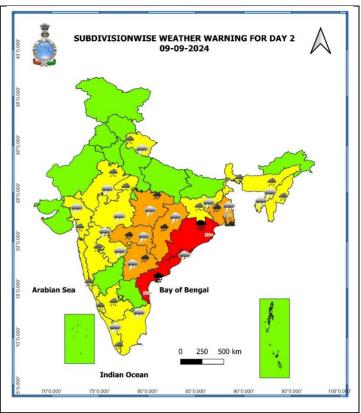
# 08 September (Day 1):

- ❖ Heavy to very heavy rainfall (≥ 12 cm) with extremely heavy falls (>20 cm) very likely at isolated places over Coastal Andhra Pradesh & Yanam; Heavy to very heavy rainfall (≥ 12 cm) at isolated places over Odisha, Chhattisgarh, Telangana, Coastal Karnataka; Heavy rainfall (≥ 7 cm) at isolated places over Haryana-Chandigarh, East Rajasthan, Madhya Pradesh, Vidarbha, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Gujarat Region, Kerala & Mahe, Interior Karnataka.
- ❖ Thunderstorm accompanied with lighting and gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Telangana; with lightning very likely at isolated places over Uttarakhand, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal. Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Gujarat Region, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema.
- ❖ Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph is likely to prevail over Sri Lanka coast, and few parts along and off south Andhra Pradesh, 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, many parts of south and central Bay of Bengal, adjoining north 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. Squally winds with speed reaching 50 kmph to 60 kmph gusting to 70 kmph likely to prevail along and off Andhra Pradesh-Odisha-West Bengal coasts adjoining northwest and west central Bay of Bengal. Fishermen are advised not to venture into these areas.



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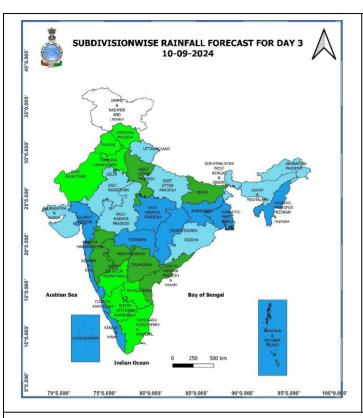


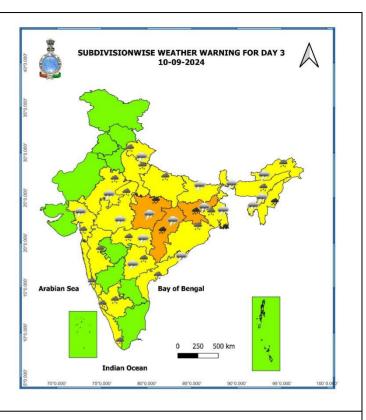
# 09 September (Day 2):

- ❖ Heavy to very heavy rainfall (≥ 12 cm) with extremely heavy falls (>20 cm) very likely at isolated places over Odisha, Coastal Andhra Pradesh & Yanam; Heavy to very heavy rainfall (≥ 12 cm) at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Telangana; Heavy rainfall (≥ 7 cm) at isolated places over Uttarakhand, East Rajasthan, West Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Gujarat Region, Kerala & Mahe, Coastal Karnataka, South Interior Karnataka.
- Thunderstorm accompanied with lighting and gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Telangana; with lightning very likely at isolated places over Uttarakhand, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Gujarat Region, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam.
- Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph is likely to prevail over Sri Lanka coast, and few parts along and off south Andhra Pradesh, 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, many parts of south and central Bay of Bengal, adjoining north 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. Squally winds with speed reaching 50 kmph to 60 kmph gusting to 70 kmph likely to prevail along and off Andhra Pradesh-Odisha-West Bengal coasts adjoining northwest and west central Bay of Bengal. Fishermen are advised not to venture into these areas.







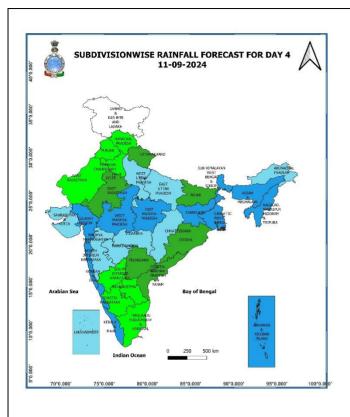


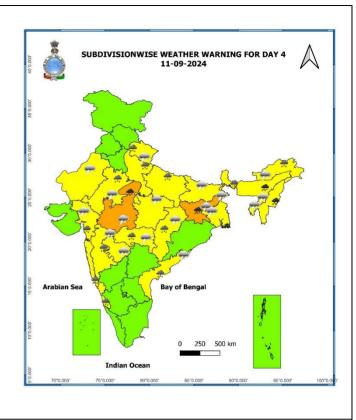
# 10 September (Day 3):

- ❖ Heavy to very heavy rainfall (≥ 12 cm) likely at isolated places over East Madhya Pradesh, Chhattisgarh, Jharkhand, Nagaland, Manipur, Mizoram & Tripura; Heavy rainfall (≥ 7 cm) at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Vidarbha, Gangetic West Bengal, Odisha, Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra, Gujarat Region, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Telangana, Coastal Karnataka, South Interior Karnataka.
- ❖ Thunderstorm accompanied with lighting and gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Telangana; with lightning very likely at isolated places over Uttarakhand, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, West Bengal & Sikkim, Bihar. Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Arunachal Pradesh, Gujarat Region, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam.
- ❖ Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph is likely to prevail over Gulf of Mannar, along and off Sri Lanka coast, most parts of south and central Bay of Bengal, northwest Bay of Bengal, many parts of northeast Bay of Bengal, north 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 westcentral adjoining eastcentral along and off north Andhra Pradesh, Odisha, West Bengal coasts and adjoining northwest 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.







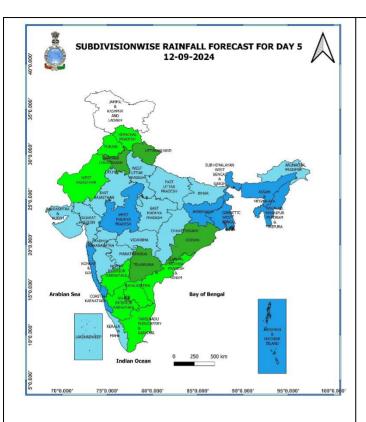


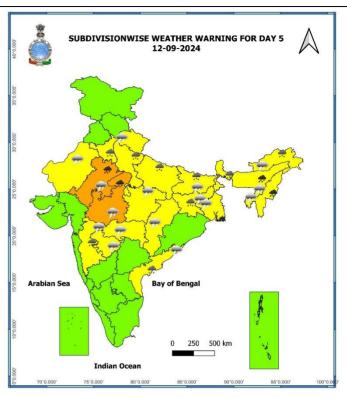
# 11 September (Day 4):

- ❖ Heavy to very heavy rainfall (≥ 12 cm) likely at isolated places over West Madhya Pradesh, Jharkhand, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; Heavy rainfall (≥ 7 cm) likely at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Konkan & Goa, Madhya Maharashtra, Gujarat Region, Coastal Andhra Pradesh & Yanam, Coastal Karnataka.
- \* Thunderstorm accompanied with lighting very likely at isolated places over Uttarakhand, Rajasthan. Madhya Pradesh, Vidarbha, Chhattisgarh, West Bengal & Sikkim, Bihar, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Gujarat Region, Coastal Andhra Pradesh & Yanam.
- ❖ Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph is likely to prevail over Gulf of Mannar, along and off Sri Lanka coast, most parts of south and central Bay of Bengal, northwest Bay of Bengal, few parts of northeast Bay of Bengal, along and off north Andhra Pradesh-Odisha 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. 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.







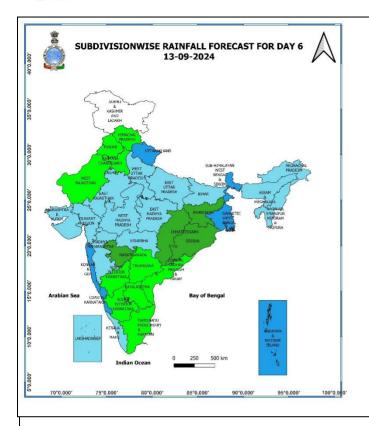


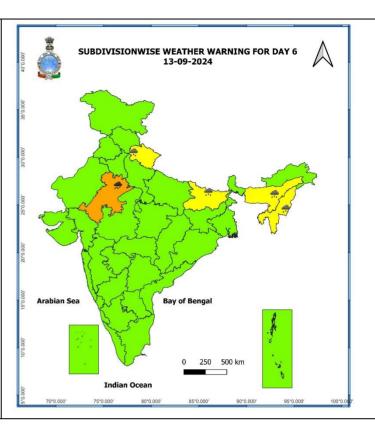
# 12 September (Day 5):

- ❖ Heavy to very heavy rainfall (≥ 12 cm) likely at isolated places over East Rajasthan, West Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; Heavy rainfall (≥ 7 cm) likely at isolated places over Haryana-Chandigarh-Delhi, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Arunachal Pradesh, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam.
- ❖ Thunderstorm accompanied with lighting likely at isolated places over Uttarakhand, Rajasthan. Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Bihar, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam.
- ❖ Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph is likely to prevail Gulf of Mannar, along and off Sri Lanka coast, most parts of south and central Bay of Bengal, along and off north Andhra Pradesh coast. Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph is likely to prevail over southeast and eastcentral adjoining westcentral 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.



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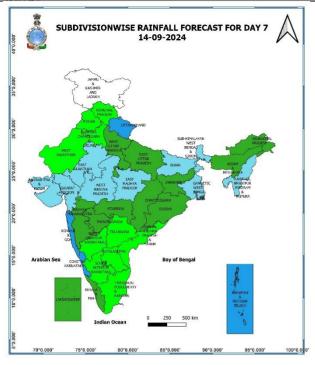
# 13 September (Day 6):

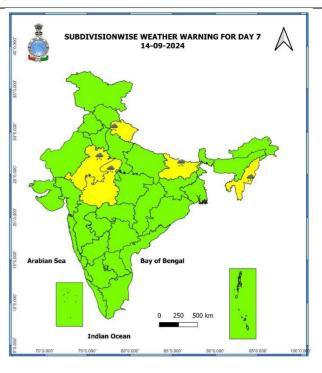
❖ Heavy to very heavy rainfall (≥ 12 cm) likely at isolated places over East Rajasthan; Heavy rainfall (≥ 7 cm) likely at isolated places Uttarakhand, Bihar, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura.





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# 14 September (Day 7):

❖ Heavy rainfall (≥ 7 cm) likely at isolated places over Uttarakhand, East Rajasthan, West Madhya Pradesh, Bihar, Nagaland, Manipur, Mizoram & Tripura.

# Weather Outlook for subsequent 3 days (During 15th September - 17th 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.



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### Impact due to

- ✓ Isolated **extremely heavy rainfall** very likely over Coastal Andhra Pradesh & Yanam on 08<sup>th</sup> & 09<sup>th</sup>; Odisha on 09<sup>th</sup> September.
- ✓ **Very heavy rainfall** at isolated over East Rajasthan on 12<sup>th</sup> & 13<sup>th</sup>; Chhattisgarh during 08<sup>th</sup>-10<sup>th</sup>; Vidarbha, Gangetic West Bengal on 09<sup>th</sup>; Telangana on 08<sup>th</sup> & 09<sup>th</sup>; Odisha, Coastal Karnataka on 08<sup>th</sup>; East Madhya Pradesh on 09<sup>th</sup> & 10<sup>th</sup>; Jharkhand on 10<sup>th</sup> & 11<sup>th</sup>; Assam & Meghalaya, West Madhya Pradesh during 11<sup>th</sup> 12<sup>th</sup>; Nagaland, Manipur, Mizoram & Tripura during 10<sup>th</sup> -12<sup>th</sup> September.
- ✓ **Low to moderate flash flood risk** likely over few watersheds & neighbourhoods of Coastal Andhra Pradesh & Yanam, Telangana, Chhattisgarh, Odisha on 08th & 09th 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

- ✓ Postpone transplanting of rice in North Coastal **Andhra Pradesh**.
- Drain out excess water from rice, soybean, red gram, maize, cotton and turmeric in **Telangana**; from rice, finger millet, maize and groundnut in **Odisha**; from rice, maize, sugarcane, black gram, horse gram and niger crops in **Chhattisgarh** to prevent water logging.
- ✓ Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Uttarakhand, Haryana, East Rajasthan, Gangetic West Bengal, Sub Himalayan West Bengal, Jharkhand, Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, Vidarbha, Gujrat region, Kerala, and Karnataka.
- ✓ Provide mechanical support to horticultural crops & staking to vegetables.
- ✓ Keep the harvested produce at safer place.







# **ANNEXURE I**

#### Flash Flood Guidance:

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

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of following Met **Sub-divisions** during next 24 hours. Coastal AP & Yanam - East Godavari, Krishna, Srikakulam, Vishakhapatnam, Vizianagaram and West Godavari districts. Telangana Khammam district. **Chhattisgarh** - Bastar. Bijapur, Dantewara. Gariaband, Mahasamund and Sukma districts. Odisha - Anugul, Baragarh, Bauda, Cuttack, Dhenkanal, Gajapathi, Ganjam, Kalahandi, Khordha, Malkangiri, Nayagarh, Nuaparha, Puri, Rayagarha Subarnapur 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.

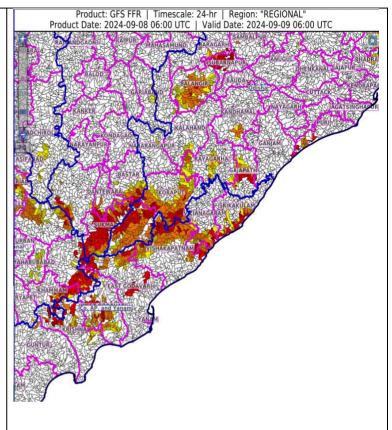




Fig. 1: Maximum Temperatures

# Fig. 2: Departure of Maximum Temperatures

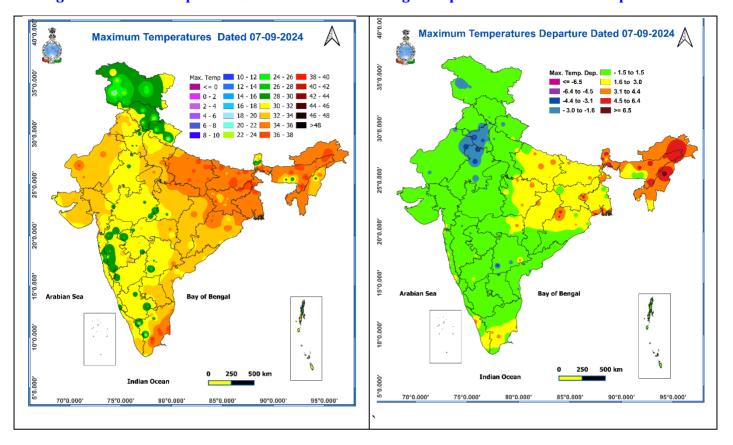


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

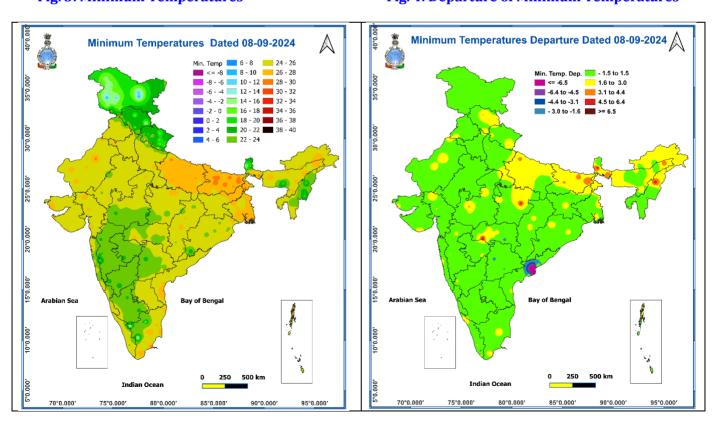
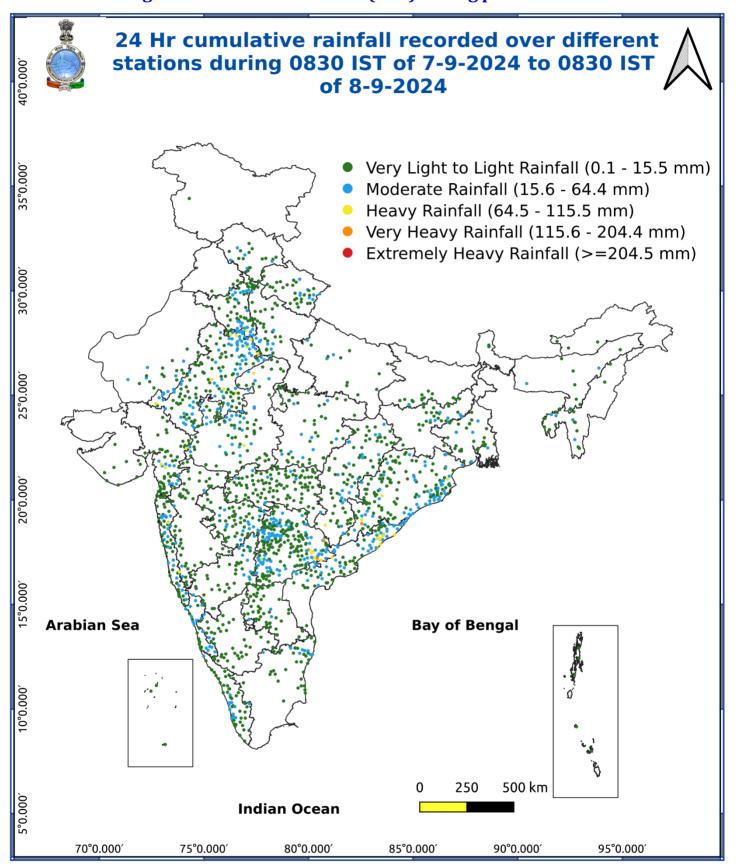






Fig. 5: Accumulated Rainfall (mm) during past 24 hours



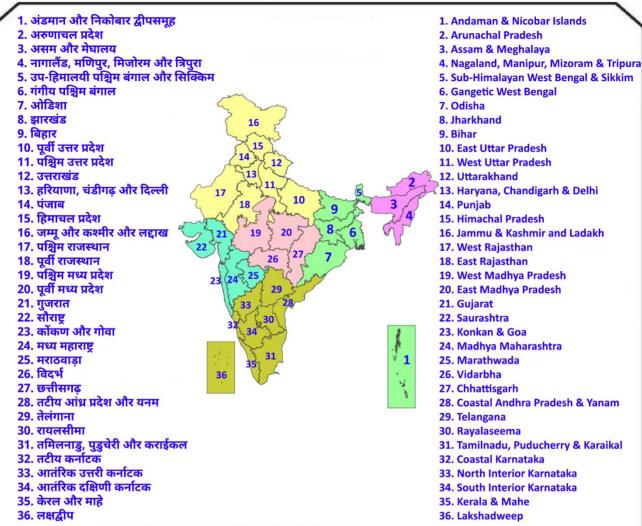
Sust Raising Winds

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

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

50 - 75 > 75

# **LEGENDS**



# SPATIAL DISTRIBUTION (% of Stations reporting)

% Stations	Category		% Stations	Category			
76-100	Widespread (WS/Most Places)		26-50	Scattered (SCT/A Few Places)			
51-75	Fairly Widesp	oread (FWS/Many Places	1-25	Isolated (ISOL)			
<b>=</b> Fog		Heavy Snow	_ Cold Wa	ve	COLOUR CODED WARNING		
<b>=</b> 108			J		No Warning (No Action)		
Reavy Rain		Dust Storm	- Cold Da	Cold Day		Watch (Be Aware)	
P Very Heavy Rain		+ Heat Wave	Ground	Ground Frost		Alert (Be Prepared To Take Action)	
Extremely Heavy Rain		+ Warm Night				Warning (Take Action)	
		+ Hot Day			Proba	bilistic Forecast	
Thunder & Lightning		T Hot Day			Terms	Probability of Occurrence (%	
Hailstorn	1	Not & Humid			Unlikely Likely	< 25 25 - 50	
•					Very Likely	50 - 75	

Strong Surface Winds





	DEFINITION/CRITERIA				
	Heavy: 64.5 to 115.5 mm/cm *				
Rain/ Snow *	Very Heavy: 115.6 to 204.4 mm/cm*  Extremely Heavy: > 204.4 mm/cm *				
	When maximum temperature of a station reaches ≥40° C for plains and ≥30° C for hilly regions				
	(a) Based on Departure from normal				
	Heat Wave: Maximum Temperature Departure from normal 4.5° C to 6.4° C.				
	Severe Heat Wave: Maximum Temperature Departure from normal ≥6.5° C				
Heat Wave	(b). Based on Actual maximum temperature				
	Heat Wave: When actual maximum temperature ≥45°C.  Severe Heat Wave: When actual maximum temperature ≥47°C				
	( c). Criteria for heat wave for coastal stations When maximum temperature departure is >4.5°C from normal. Heat Wave may be described provided maximum temperature ≥37°C				
	When maximum temperature remains 40°C				
Warm Night	Warm Night: When minimum temperature departure 4.5 °C to 6.4 °C.				
	Severe Warm Night: When minimum temperature departure >6.4 °C.				
	When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions.  (a). Based on departure				
	Cold Wave: Minimum Temperature Departure from normal -4.5 °C to -6.4 °C.				
Cold Wave	Severe Cold Wave: Minimum Temperature Departure from normal ≤ -6.5 °C				
Cold Wave	(b) Based on actual Minimum Temperature (for Plains only)				
	Cold Wave : When Minimum Temperature is ≤ 4.0 °C  Severe Cold Wave: When Minimum Temperature is ≤ 2.0 °C				
	( c) For Coastal Stations				
	When Minimum Temperature departure is ≤-4.5 °C & actual Minimum Temperature is ≤ 15 °C				
	When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions				
Cold Day	Based on departure				
Cold Day	Cold Day: Maximum Temperature Departure from normal -4.5 °C to -6.4 °C.  Severe Cold Day: Maximum Temperature Departure from normal ≤ -6.5 °C				
	Severe Cold Day. Maximum Temperature Departure from Horman 5 -0.5 C				
	Phenomenon of small droplets suspended in air and the horizontal visibility < 1km				
Fog	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				
hunderstorm	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.				
	Ice deposits on ground				
Frost	Air temperature ≤4°C ( over Plains)				
	A strong wind that rises suddenly, lasts for atleast 1 minute.				
	Moderate: Wind speed 52-61 kmph				
Squall	Severe: Wind speed 62-87 kmph				
-	Very Severe: Wind speed >87 kmph				
	Effect of various waves in the sea over specific area				
Sea State	Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre				
Jou June	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				
	Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)  Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)				
Cyclone	Very Severe Cyclonic Storm: Wind speed 66-117 kmph (46-63 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)				