



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

Saturday, September 7, 2024 Time of Issue: 1330 hours IST (MID-DAY)

#### ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

## **Significant Weather Features:**

#### **Weather Systems:**

- ✓ A Well Marked Low Pressure Area lies over the northwest & adjoining central Bay of Bengal at 0830 hrs IST of today. It is likely to move nearly northwards and intensify into a Depression over northwest Bay of Bengal off North Odisha-West Bengal coasts on 8th September. Thereafter, it is likely to move west-northwestwards across Gangetic West Bengal, north Odisha, Jharkhand and adjoining north Chhattisgarh during subsequent 3 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)

#### West & Central India:

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over West India; Scattered to Fairly widespread light/moderate rainfall very likely over Central India during the week.
- ✓ Isolated **very heavy rainfall** very likely over ghat areas of Madhya Maharashtra on 08<sup>th</sup> & 09<sup>th</sup> and over Vidarbha on 12<sup>th</sup> September.
- ✓ Isolated **heavy rainfall** very likely over Madhya Pradesh during next 7 days; Gujarat Region on 07<sup>th</sup>; Chhattisgarh, Konkan & Goa during 07<sup>th</sup> -12<sup>th</sup>; Vidarbha during 08<sup>th</sup> -13<sup>th</sup>; Madhya Maharashtra during 07<sup>th</sup> -10<sup>th</sup>; Marathwada on 12<sup>th</sup> & 13<sup>th</sup> September.

#### **South Peninsular India:**

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Coastal Karnataka, Kerala & Mahe; Scattered to Fairly widespread light/moderate rainfall over Coastal Andhra Pradesh & Yanam, Telangana, Lakshadweep; 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 08<sup>th</sup> September.
- ✓ Isolated **very heavy rainfall** very likely over Coastal Andhra Pradesh & Yanam and Telangana on 08th & 09th September.
- ✓ Isolated **heavy rainfall** very likely over Kerala & Mahe during 07<sup>th</sup> 09<sup>th</sup>; Coastal Andhra Pradesh & Yanam, Telangana, South Interior Karnataka during 07<sup>th</sup> 10<sup>th</sup>; Coastal Karnataka during 07<sup>th</sup> -11<sup>th</sup> September.

# East & Northeast India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar Islands during next 7 days; Scattered to Fairly widespread light/moderate rainfall very likely over Arunachal Pradesh during the week and East India during 06<sup>th</sup>-09<sup>th</sup> & fairly widespread to widespread light/moderate rainfall during 10<sup>th</sup>-12<sup>th</sup> September.
- ✓ Isolated **very heavy rainfall** very likely over Odisha during 08<sup>th</sup> -10<sup>th</sup>; Assam & Meghalaya during 10<sup>th</sup> -12<sup>th</sup>; Nagaland, Manipur, Mizoram & Tripura on 10<sup>th</sup> & 11<sup>th</sup> September.
- ✓ Isolated **heavy rainfall** very likely over Assam & Meghalaya & Nagaland, Manipur, Mizoram & Tripura during next 7 days; Odisha during 07<sup>th</sup> -11<sup>th</sup>; Arunachal Pradesh during 10<sup>th</sup> -13<sup>th</sup>; West Bengal & Sikkim during 09<sup>th</sup> -13<sup>th</sup>; Bihar and Jharkhand during 11<sup>th</sup> & 13<sup>th</sup> September.

# Northwest India

- ✓ Scattered to Fairly widespread light/moderate rainfall very likely over Northwest India on 06<sup>th</sup> & 07<sup>th</sup>; isolated to scattered rainfall over the region during subsequent 5 days.
- ✓ Isolated **very heavy rainfall** very likely over East Rajasthan on 07<sup>th</sup> September.
- ✓ Isolated **heavy rainfall** very likely over West Uttar Pradesh on 07<sup>th</sup>; Haryana, West Rajasthan on 07<sup>th</sup> & 08<sup>th</sup>; Uttarakhand on 07<sup>th</sup> and during 09<sup>th</sup> -11<sup>th</sup>; East Uttar Pradesh on 10<sup>th</sup> & 11<sup>th</sup>; East Rajasthan during 07<sup>th</sup> -09<sup>th</sup> and on 13<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 Himachal Pradesh, East Rajasthan, Andaman & Nicobar Islands, Konkan & Goa, Telangana, Coastal Karnataka at many places over Uttarakhand, Haryana-Chandigarh-Delhi, West Rajasthan, West Madhya Pradesh, Vidarbha, Chhattisgarh, Marathwada, Kerala & Mahe, Lakshadweep, Coastal Andhra Pradesh & Yanam; at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, West Uttar Pradesh, East Madhya Pradesh, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Gujarat Region, Rayalaseema; at isolated places over East Uttar Pradesh, West Bengal & Sikkim, Bihar, Jharkhand, Arunachal Pradesh, Saurashtra & Kutch, Tamil Nadu, Puducherry & Karaikal, Interior Karnataka.
- Heavy rainfall recorded (from 0830 hours IST of yesterday to 0830 hours IST of today): Heavy to very heavy rainfall at isolated places East Rajasthan, Telangana; Heavy rainfall at isolated places over Uttarakhand, Haryana, West Rajasthan, Madhya Pradesh, Odisha, Coastal Andhra Pradesh, Kerala.
- \* Significant amount of rainfall (from 0830 hours IST of yesterday to 0830 hours IST of today) (in cm): East Rajasthan: Loharia (dist Banswara) 17, Deogarh (dist Rajsamand) 14, Pushkar Sr (dist Ajmer) 13, Baswa (dist Dausa) 12, Pachpahar Sr (dist Jhalawar) 10, Bhungra Sr (dist Banswara) 9, Ghatol (dist Banswara) 9, Pipalkhunt Sr (dist Pratapgarh) 8, Telangana: Angareddy (dist Sangareddy) 12, Suryapet (dist Suryapet) 9, West Rajasthan: Raipur Sr (dist Pali) 10, Merta City (dist Nagaur) 7, Coastal Andhra Pradesh & Yanam: Palakonda (dist Parvathipuram Manyam) 9, Seethanagaram (dist Parvathipuram Manyam) 8, Merakamudidam (dist Vizianagaram) 8, Palakonda(arg) (dist Parvathipuram Manyam) 8, Haryana: Panchkula (dist Panchkula) 9, Jagadhari (dist Yamuna Nagar) 8, Panchkula (dist Panchkula) 7, Odisha: Khairamal (dist Boudhgarh) 8, Gosani (dist Gajapati) 8, Similiguda (dist Koraput) 7, Nandapur (dist Koraput) 7, Kerala & Mahe: Muliyar (dist Kasargode) 7, Uttarakhand: Loharkhet (Bageshwar) 7, Haripur (Dehradun) 6, East Madhya Pradesh: Narsinghpur-aws (dist Narsinghpur) 7, West Madhya Pradesh: Malhargarh (dist Mandsaur) 7,
- ❖ Minimum Temperature Departures (as on 07-09-2024): 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 Vidarbha, Bihar, Assam & Meghalaya; at isolated places over Himachal Pradesh, Uttar Pradesh, West Madhya Pradesh, Jharkhand, West Bengal & Sikkim, Odisha, Assam & Meghalaya. Saurashtra & Kutch. These are below normal (-1.6°C to -3.0°C) at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe 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 06-09-2024): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Odisha; at isolated places over Assam & Meghalaya, Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at isolated places over West Bengal, Sikkim, Nagaland, Manipur, Mizoram & Tripura, Bihar, Vidarbha, Madhya Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad. These were below normal (-1.6°C to -3.0°C) at a few places over East Rajasthan, at isolated places over Coastal Andhra Pradesh & Yanam, Haryana-Chandigarh-Delhi, Himachal Pradesh, Madhya Maharashtra, West Uttar Pradesh and near normal over rest parts of the country. Yesterday, the highest Maximum Temperature of 40.1°C was reported at Madurai (Tamil Nadu) over the country. (Fig. 2)



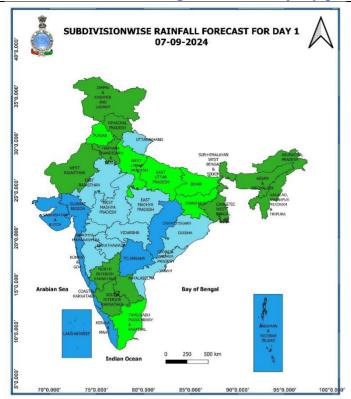
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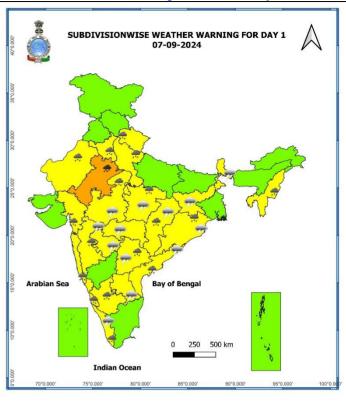
# Meteorological Analysis (Based on 0830 hours IST)

- The **low pressure area** over central and adjoining north Bay of Bengal moved nearly northwards and now lies as a **Well Marked Low Pressure Area** over the northwest and adjoining central Bay of Bengal at 0830 hrs IST of today, the 7<sup>th</sup> September, 2024. The associated cyclonic circulation extends upto 7.6 km above mean sea level tilting southwestwards with height. It is likely to move nearly northwards and intensify into a **Depression** over northwest Bay of Bengal off North Odisha-Gangetic West Bengal coasts on 8<sup>th</sup> September. Thereafter, it is likely to move west-northwestwards across Gangetic West Bengal, north Odisha, Iharkhand and adjoining north Chhattisgarh during subsequent 3 days.
- The **Monsoon trough** at mean sea level now passes through Bikaner, Kota, Damoh, Pendra Road, Paradip and the centre of **Well Marked low Pressure area** over northwest and adjoining central Bay of Bengal.
- A cyclonic circulation lies over central Pakistan & neighbourhood and extends upto 1.5 km above mean sea level.
- The **cyclonic circulation** over northeast Rajasthan now lies over central Rajasthan & neighbourhood and extends upto 5.8 km above mean sea level tilting southwestwards with height.
- ❖ A trough runs from above **cyclonic circulation to** north Chhattisgarh across central Madhya Pradesh at 0.9 km above mean sea level.
- The **cyclonic circulation** over Westcentral Arabian Sea off Oman coast extending upto 3.1 km above mean sea level persists.
- The **Western Disturbance** as a cyclonic circulation over Jammu and Kashmir and the associated trough aloft in middle tropospheric westerlies has become less marked
- The **trough** from Southeast Uttar Pradesh to a **cyclonic circulation** associated with **low pressure area** has become less marked.
- The **cyclonic circulation** over north Bangladesh & neighbourhood at 0.9 km above mean sea level has become less marked.



# Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 14th September, 2024)



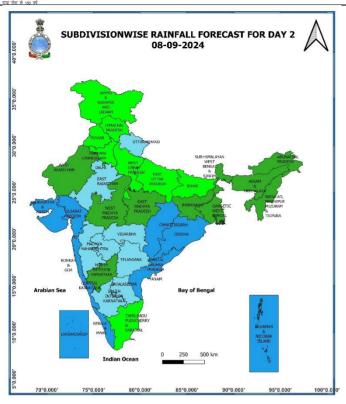


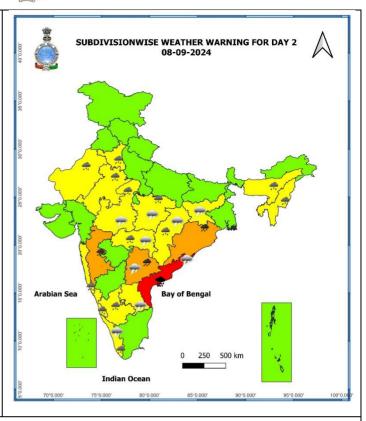
#### 07 September (Day 1):

- ❖ Heavy to very heavy rainfall (≥ 12 cm) very likely at isolated places over East Rajasthan; Heavy rainfall (≥ 7 cm) at isolated places over Uttarakhand, Haryana-Chandigarh, West Uttar Pradesh, West Rajasthan, Madhya Pradesh, Chhattisgarh, Odisha, Nagaland, Manipur, Mizoram & Tripura, 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 Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Jharkhand, Odisha, Madhya Maharashtra, Marathwada, Kerala & Mahe, 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 many parts of Westcentral Arabian sea & adjoining areas of east central Arabian sea, northern parts of southwest Arabian sea, Shri Lanka coast, most parts of south and central Bay of Bengal, along and off 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 manner, many parts of southeast Bay of Bengal and adjoining areas. 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, off north Yemen, south Oman coasts. Fishermen are advised not to venture into these areas.



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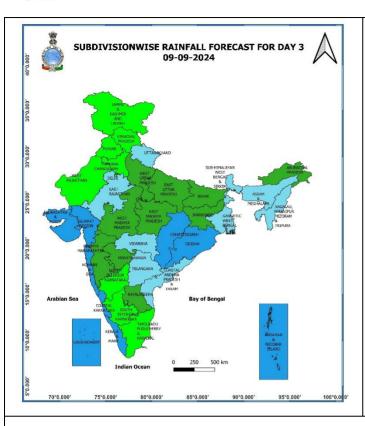


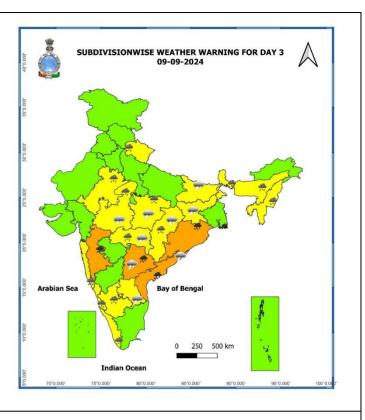
## 08 September (Day 2):

- ❖ 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) very likely at isolated places over Odisha, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Telangana; Heavy rainfall (≥ 7 cm) at isolated places over Haryana-Chandigarh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Kerala & Mahe, 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 Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Kerala & Mahe, 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 many parts of Westcentral Arabian sea & few western parts of east central Arabian sea, northern parts of southwest Arabian sea, Shri Lanka coast, most parts of south and central Bay of Bengal, northwest and adjoining northeast Bay of Bengal, along and off Andhra Pradesh, Odisha, west Bengal coasts & adjoining Bangladesh 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 manner, many parts of south and central Bay of Bengal, along and off north Andhra Pradesh, 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 parts of Westcentral Arabian sea, along and off Somalia coast. Fishermen are advised not to venture into these areas.



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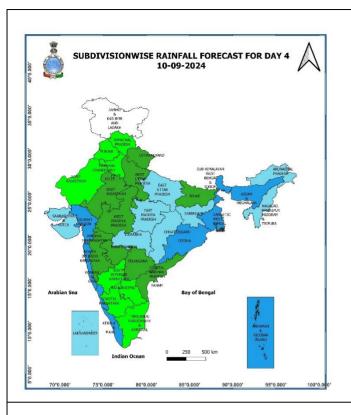


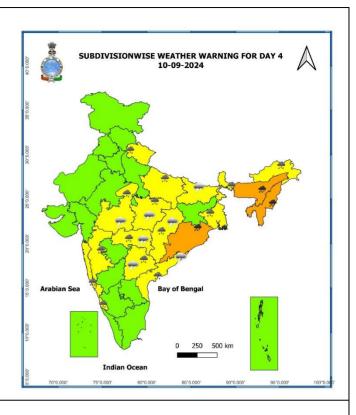
#### 09 September (Day 3):

- ❖ Heavy to very heavy rainfall (≥ 12 cm) very likely at isolated places over Odisha, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and Telangana; Heavy rainfall (≥ 7 cm) at isolated places over Uttarakhand, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, 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 Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, 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 many parts of Westcentral Arabian sea & few western parts of east central Arabian sea, northern parts of southwest Arabian sea, Shri Lanka coast, most parts of south and central Bay of Bengal, northwest Bay of Bengal, many parts of northeast Bay of Bengal, along and off 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 manner, many parts of central & southeast Bay of Bengal, most parts of northwest Bay of Bengal and adjoining parts of northeast Bay of Bengal, south Tamil Nadu, north Andhra Pradesh, Odisha, west Bengal coasts and adjoining Bangladesh 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 parts of Westcentral Arabian sea, along and off Somalia coast. Fishermen are advised not to venture into these areas.



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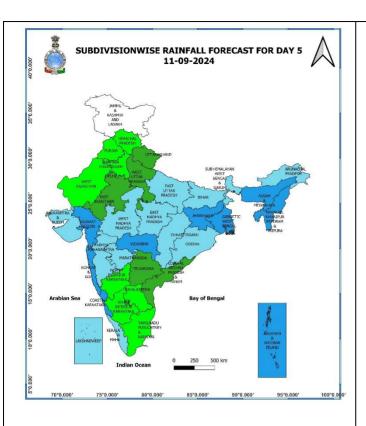


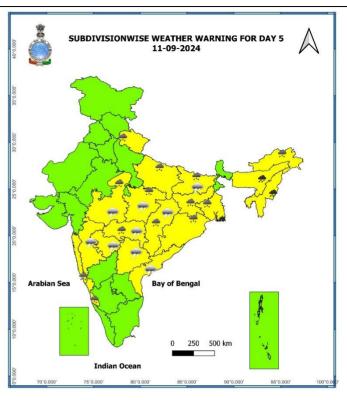
#### 10 September (Day 4):

- ♣ Heavy to very heavy rainfall (≥ 12 cm) likely at isolated places over Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; Heavy rainfall (≥ 7 cm) at isolated places over Uttarakhand, East Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, West Bengal & Sikkim, Arunachal Pradesh, Konkan & Goa, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Telangana, Coastal 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 Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Coastal Andhra Pradesh & Yanam
- Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph likely to prevail over many parts of Westcentral Arabian sea & few western parts of east central Arabian sea, northern parts of southwest Arabian sea, Shri Lanka coast, most parts of south and central Bay of Bengal, northwest Bay of Bengal, many parts of northeast Bay of Bengal, along and off 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 manner, many parts of central & southeast Bay of Bengal, most parts of northwest Bay of Bengal and adjoining parts of northeast Bay of Bengal, north Andhra Pradesh, Odisha, west Bengal coasts and adjoining Bangladesh 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 parts of Westcentral Arabian sea, along and off Somalia coast. Fishermen are advised not to venture into these areas.



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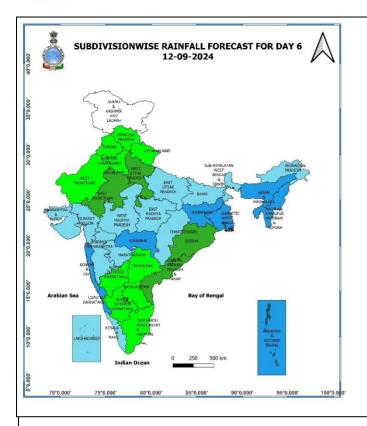


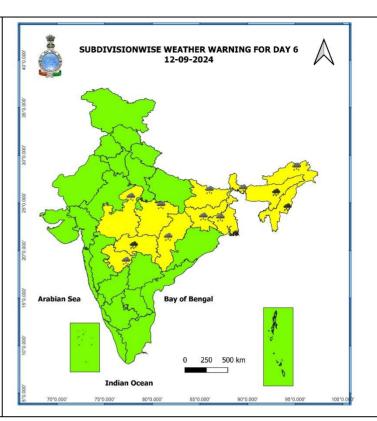
#### 11 September (Day 5):

- ♣ Heavy to very heavy rainfall (≥ 12 cm) likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; Heavy rainfall (≥ 7 cm) likely at isolated places over Uttarakhand, East Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Konkan & Goa, Coastal 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 Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam.
- ❖ Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph likely to prevail over many parts of Westcentral Arabian sea & few western parts of east central Arabian sea, northern parts of southwest Arabian sea, Shri Lanka coast, most parts of south and central Bay of Bengal, northwest Bay of Bengal, many parts of northeast Bay of Bengal, along and off 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 manner, many parts of central & southeast Bay of Bengal, most parts of northwest Bay of Bengal and adjoining parts of northeast Bay of Bengal, north Andhra Pradesh, Odisha, west Bengal coasts and adjoining Bangladesh 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 parts of Westcentral Arabian sea, along and off Somalia coast.



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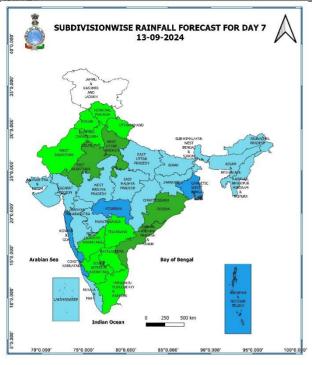
#### 12 September (Day 6):

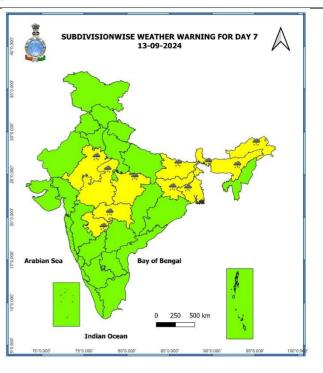
**♦ Heavy to very heavy rainfall** (≥ 12 cm) likely at isolated places over Vidarbha, Assam & Meghalaya; **Heavy rainfall** (≥ 7 cm) likely at isolated places over Madhya Pradesh, Chhattisgarh, West Bengal & Sikkim, Bihar, Jharkhand, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Marathwada.





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#### 13 September (Day 7):

♣ Heavy rainfall (≥ 7 cm) likely at isolated places over East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, West Bengal & Sikkim, Bihar, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Marathwada.

# Weather Outlook for subsequent 3 days (During 14th September- 16th 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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- ✓ Isolated **extremely heavy rainfall** very likely over Coastal Andhra Pradesh & Yanam on 08<sup>th</sup> September.
- ✓ Very heavy rainfall at isolated over East Rajasthan on 07th; ghat areas of Madhya Maharashtra on 08th & 09th and Vidarbha on 12th; Coastal Andhra Pradesh & Yanam and Telangana on 08th & 09th; Odisha during 08th -10th; Assam & Meghalaya during 10th -12th; Nagaland, Manipur, Mizoram & Tripura on 10th & 11th September.
- Low flash flood risk likely over few watersheds & neighbourhoods of Uttarakhand on 07th & 08th 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.
- ✓ 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**

- ✓ Iudicious 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 rice, pigeon pea, maize, sunflower, groundnut, soybean, vegetables and orchards in Maharashtra; from maize, cotton and soyabean in Rajasthan; from rice, soybean, red gram, maize, cotton and turmeric in **Telangana**; from rice, finger millet, maize and groundnut in **Odisha** 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, NMMT, Vidarbha, Chhattisgarh, Konkan & Goa, Kerala, Coastal Karnataka and South Interior Karnataka.
- Postpone transplanting of rice in North Coastal **Andhra Pradesh**.
- Provide mechanical support to horticultural crops & staking to vegetables.
- Keep the harvested produce at safer place.



# Flash Flood Guidance: ANNEXURE I

# 24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 08-09-2024:

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

**Uttarakhand** - Almora, Bageshwar, Chamoli, Champawat, Dehradun, Nanital, Pauri Garhwal, Pithoragarh and Tehri Garwal 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.

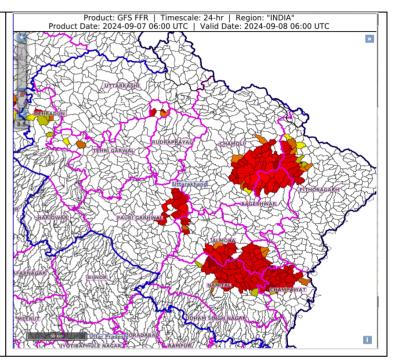




Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

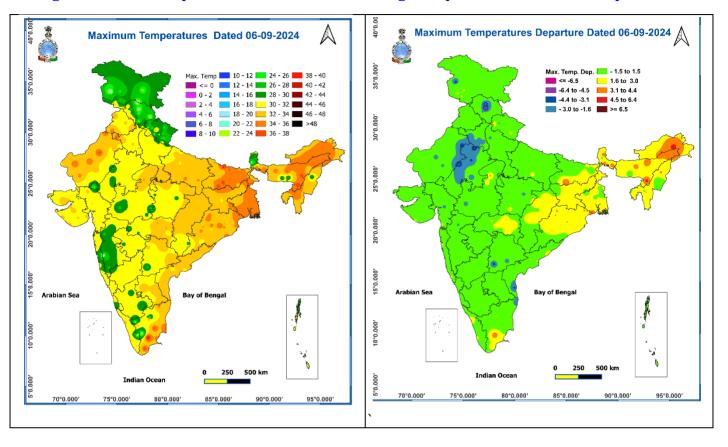


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

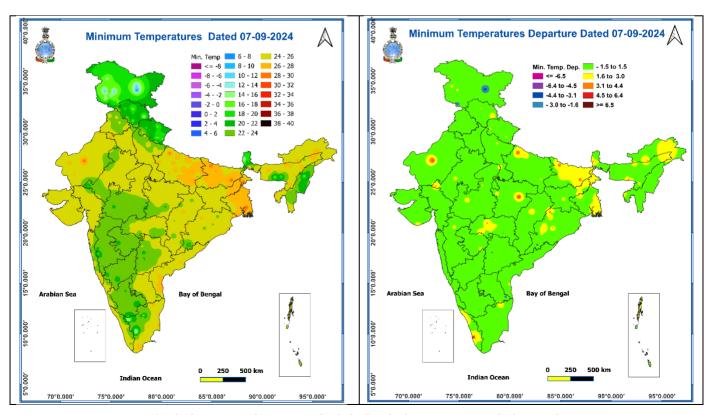
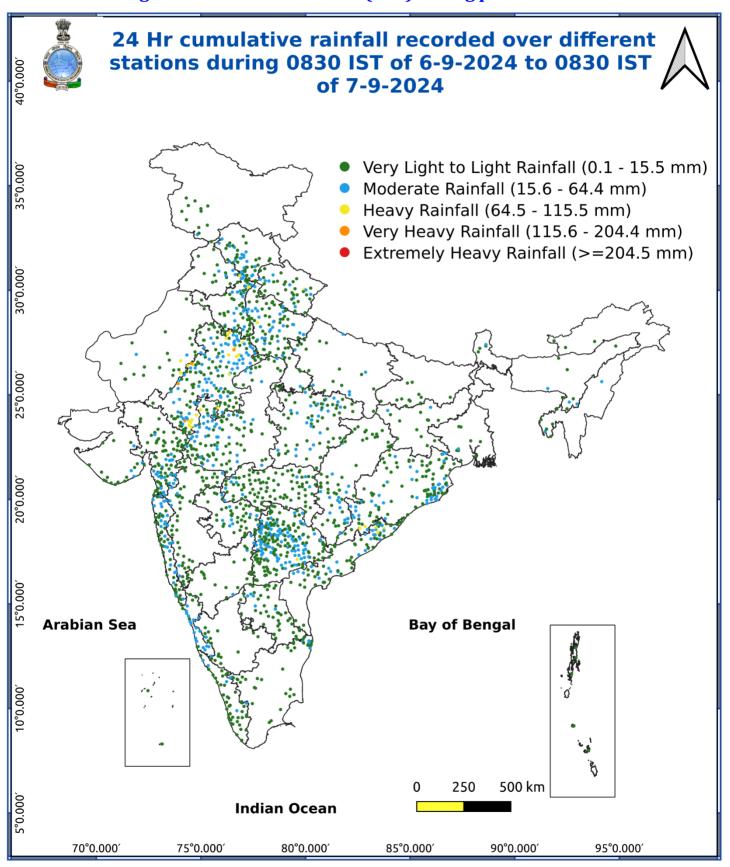






Fig. 5: Accumulated Rainfall (mm) during past 24 hours



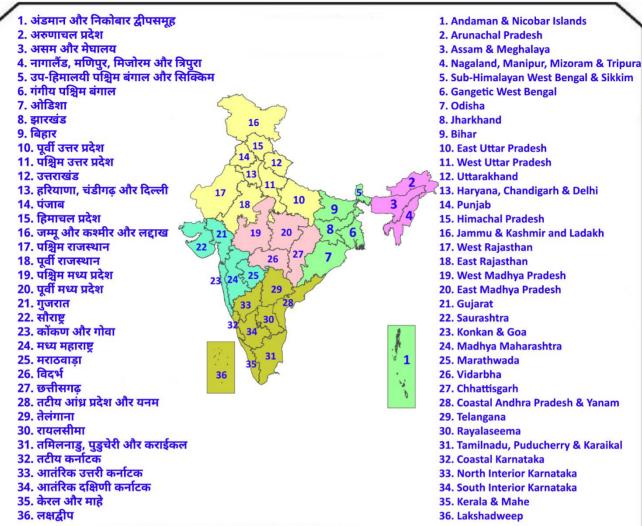
Sust Raising Winds

# 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)				