



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

Friday, September 27, 2024 Time of Issue: 1330 hours IST (MID-DAY)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems:

- The **cyclonic circulation** over north Madhya Maharashtra & neighbourhood lies over southwest Madhya Pradesh & neighbourhood extending upto middle tropospheric levels.
- The **trough** runs from south Gujarat to northwest Bihar across the cyclonic circulation over southwest Madhya Pradesh extending upto middle tropospheric levels.
- ✓ A **cyclonic circulation** lies over northeast Assam & neighbourhood extending upto middle tropospheric levels.

Forecast & Warnings (upto 7 days):

West India

- Fairly widespread to widespread light to moderate rainfall very likely over Konkan & Goa, Madhya Maharashtra, Gujarat State during next 3 days; Isolated to Scattered light to moderate rainfall over the same region during subsequent 4 days; Isolated to Scattered light to moderate rainfall over Marathwada during the week.
- ✓ Heavy to very Heavy rainfall with extremely heavy rainfall at isolated places very likely over Gujarat Region on 27th September.
- ✓ Isolated heavy to very heavy rainfall also very likely over Konkan & Goa, Madhya Maharashtra, Saurashtra & Kutch on 27th September
- Isolated heavy rainfall very likely over Madhya Maharashtra, Gujarat State on 28th September.

East & Northeast India

- ✓ Scattered to Fairly widespread light to moderate rainfall very likely over East India during next 4 days and Fairly widespread to widespread light/moderate rainfall over the remaining region during subsequent next 3 days; Fairly widespread light/moderate rainfall very likely over East India during next 2 days & Isolated to Scattered light to moderate rainfall during the next subsequent 5 days.
- Heavy to very Heavy rainfall with extremely heavy rainfall very likely over Sub-Himalayan West Bengal & Sikkim, Bihar on 27th September.
- ✓ **Isolated heavy rainfall** very likely over Jharkhand, Odisha on 27th September; Arunachal Pradesh on 27th September & during 01st-03rd October; Assam & Meghalaya on 27th September & during 29th September-03rdOctober; Sub-Himalayan West Bengal & Sikkim, Bihar on 28th September; Nagaland, Manipur, Mizoram & Tripura during 30th September-03rd October.

Central India:

- Scattered to Fairly widespread light to moderate rainfall over central India during the next 3 days and Isolated to Scattered light to moderate rainfall over the same region during subsequent 4 days.
- ✓ Isolated heavy to very heavy rainfall also very likely over West Madhya Pradesh on 27th September.
- ✓ Isolated heavy rainfall very likely over East Madhya Pradesh, Vidarbha, Chhattisgarh on 27th; West Madhya Pradesh on 28th September.

Northwest India

- Fairly widespread to widespread light to moderate rainfall very likely over East Uttar Pradesh during next 3 days & Isolated to Scattered light to moderate rainfall over the same region during subsequent next 4 days; Scattered to Fairly widespread light to moderate rainfall over Uttarakhand during next 2 days & Isolated to Scattered light to moderate rainfall over Himachal Pradesh, Punjab, Haryana-Chandigarh-Delhi, Rajasthan, West Uttar Pradesh during next 3-4 days and dry weather likely to prevail over the same region during subsequent next 3-4 days.
- Heavy to very Heavy rainfall with extremely heavy rainfall very likely over East Uttar Pradesh on 27th September.
- Isolated heavy to very heavy rainfall very likely over East Uttar Pradesh during 28th September.
- ✓ **Isolated heavy rainfall** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 26th; Haryana-Chandigarh on 26th; West Uttar Pradesh on 26th & 27th; Uttarakhand on 28th September.

South Peninsular India

- Fairly widespread to widespread light to moderate rainfall very likely over Kerala & Mahe, Lakshadweep during the week; Scattered to Fairly widespread light to moderate rainfall over the region during the week.
- ✓ **Isolated heavy rainfall** very likely over Tamil Nadu, Puducherry & Karaikal during next 27th-29th; Kerala & Mahe during 28th September- 02nd October.







Main Weather Observations:

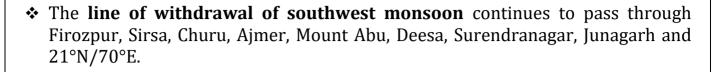
- ❖ Rainfall distribution (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over East Uttar Pradesh, Vidarbha, Chhattisgarh, West Bengal & Sikkim, Bihar, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Gujarat state, Coastal Karnataka; at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Madhya Pradesh, Arunachal Pradesh, Marathwada, Coastal Andhra Pradesh & Yanam, West Uttar Pradesh, East Rajasthan; at a few places over West Uttar Pradesh, East Rajasthan, Andaman & Nicobar Islands, Odisha, Kerala & Mahe, Telangana, Interior Karnataka; at isolated places over Punjab, Haryana-Chandigarh-Delhi, West Rajasthan, Tamil Nadu, Puducherry & Karaikal, Rayalaseema.
- Heavy rainfall recorded (from 0830 hours IST of yesterday to 0830 hours IST of today): Heavy to very Heavy rainfall at a few places with extremely heavy rainfall at isolated places over Bihar, East Uttar Pradesh; Heavy to very Heavy rainfall with extremely heavy rainfall at isolated places over Gujarat Region, Chhattisgarh; Heavy to very Heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Saurashtra & Kutch, West Madhya Pradesh; Heavy rainfall at isolated places over West Uttar Pradesh, Gangetic West Bengal, Madhya Maharashtra, Odisha, Jharkhand, Coastal Andhra Pradesh & Yanam, Konkan & Goa, Vidarbha, Uttarakhand, Arunachal Pradesh, Himachal Pradesh, Jammu-Kashmir, East Madhya Pradesh, Assam & Meghalaya.
- ❖ **Significant amount of rainfall** (from 0830 hours IST of yesterday to 0830 hours IST of today) (in cm): refer annexure II.
- ❖ Minimum Temperature Departures (as on 27-09-2024): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over West Rajasthan, at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, East Madhya Pradesh; above normal (1.6°C to 3.0°C) at a few places over Saurashtra & Kutch, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal and West Madhya Pradesh; at isolated places over East Rajasthan, Odisha, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Rayalaseema. These are below normal (-1.6°C to -3.0°C) at isolated places over Assam & Meghalaya, Gangetic West Bengal and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.4°C is reported at Koraput (Odisha) over the plains of the country. (Fig.4)
- * Maximum Temperature Departures (as on 26-09-2024): Maximum temperatures were markedly above normal (5.1°C or more) at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; appreciably above normal (3.1°C to 5.0°C) at isolated places over Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at a few places over West Rajasthan; at isolated places over West Uttar Pradesh, Gujarat state. These were markedly below normal (-5.1°C or less) at isolated places over Bihar, West Bengal & Sikkim; appreciably below normal (-3.1°C to -5.0°C) at a few places over Odisha; at isolated places over East Madhya Pradesh, Marathwada, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam; below normal (-1.6°C to -3.0°C) at a few places over Konkan & Goa, Madhya Maharashtra, Haryana-Chandigarh-Delhi, Punjab and near normal over rest parts of the country. Yesterday, the highest Maximum Temperature of 43.3°C was reported at Pokharan (West Rajasthan) over the country. (Fig. 2)





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Meteorological Analysis (Based on 0830 hours IST)

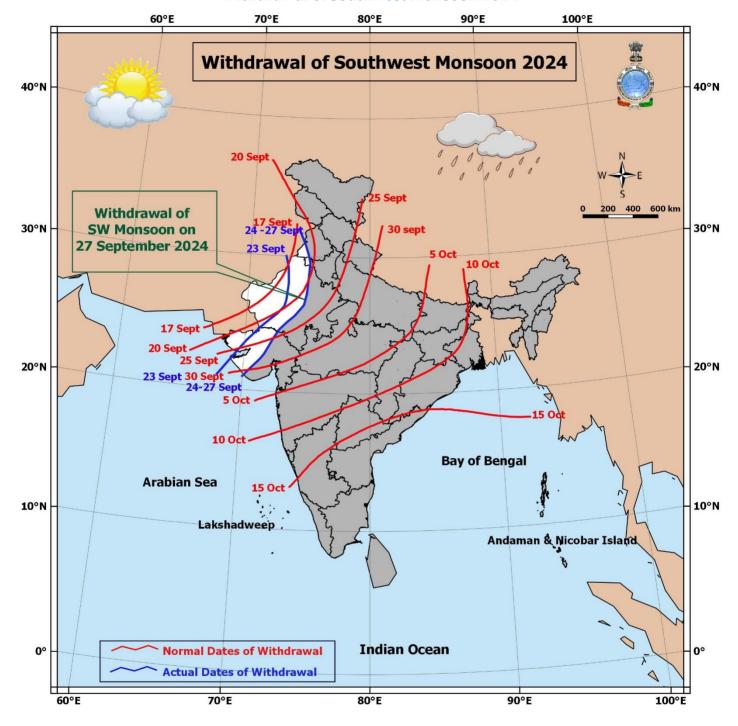


- ❖ The **cyclonic circulation** over north Madhya Maharashtra & neighbourhood now lies over southwest Madhya Pradesh & neighbourhood and extends upto 5.8 km above mean sea level tilting southwestwards with height.
- ❖ The **trough** from north Madhya Maharashtra & neighbourhood to north Bangladesh now runs from south Gujarat to northwest Bihar across the cyclonic circulation over southwest Madhya Pradesh and neighborhood between 1.5 km & 5.8 km above mean sea level.
- ❖ The **cyclonic circulation** over northeast Assam and neighbourhood persists and now extends at upto 5.8 km above mean sea level.





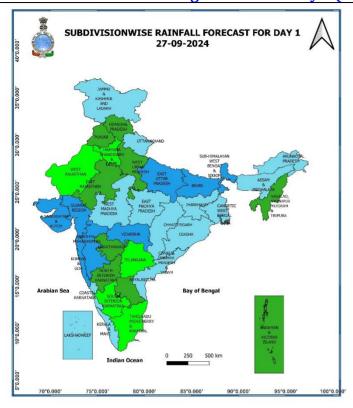
Withdrawal of Southwest Monsoon 2024

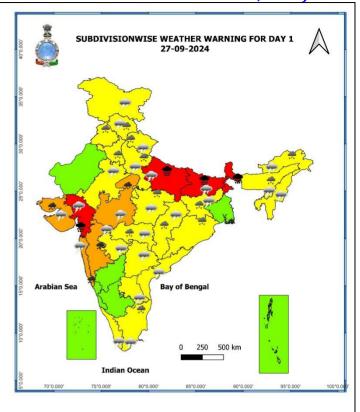






Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 04th October, 2024)



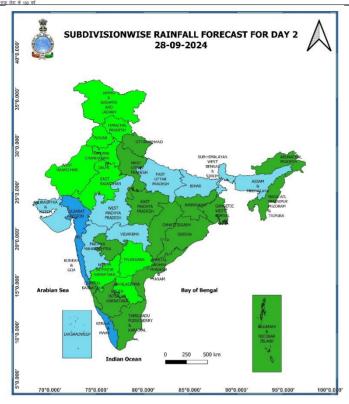


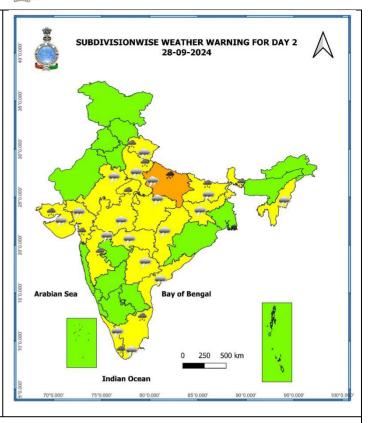
27 September (Day 1):

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



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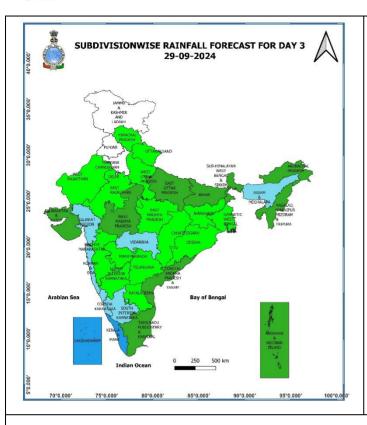


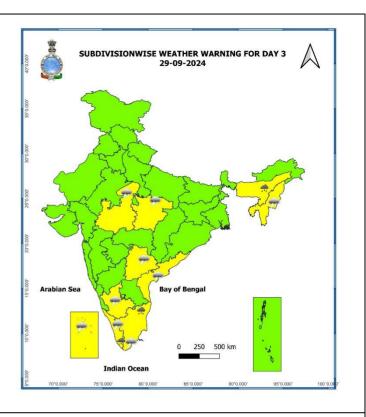
28 September (Day 2):

- ❖ Heavy to very Heavy rainfall (≥12 cm) very likely at isolated places over East Uttar Pradesh; Heavy rainfall (≥7 cm) very likely at isolated places over Uttarakhand, West Uttar Pradesh, West Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, Madhya Maharashtra, Gujarat state, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe.
- ❖ Thunderstorm accompanied gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Kerala & Mahe; with lightning very likely at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Gujarat state, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Telangana.
- ❖ Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph is likely to prevail over gulf of Mannar. Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over western parts of southwest Arabian sea adjoining few parts of westcentral Arabian sea along and off Somalia coast. Fishermen are advised not to venture into these areas.



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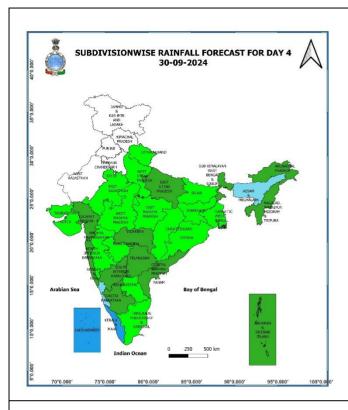


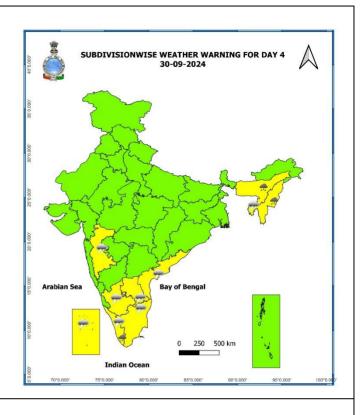
29 September (Day 3):

- **↔ Heavy rainfall (≥7 cm)** very likely at isolated places over Assam & Meghalaya, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe.
- ❖ Thunderstorm accompanied gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Kerala & Mahe, Lakshadweep; with lightning very likely at isolated places over Madhya Pradesh, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Telangana, South Interior Karnataka.
- ❖ Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph is likely to prevail over gulf of Mannar, Kerala coast and Lakshadweep area. Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over western parts of southwest Arabian sea adjoining few parts of westcentral Arabian sea along and off Somalia coast. Fishermen are advised not to venture into these areas.







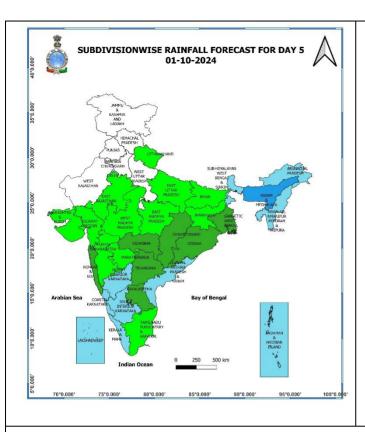


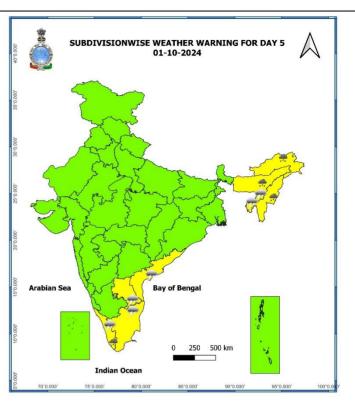
30 September (Day 4):

- ❖ Heavy rainfall (≥7 cm) likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Kerala & Mahe.
- Thunderstorm accompanied gusty winds (speed reaching 30-40 kmph) likely at isolated places over Kerala & Mahe, Lakshadweep; with lightning likely at isolated places over Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema, South Interior Karnataka.
- ❖ Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph is likely to prevail over gulf of Mannar, Kerala coast and Lakshadweep area. Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over western parts of southwest Arabian sea adjoining few parts of westcentral Arabian sea along and off Somalia coast. Fishermen are advised not to venture into these areas.



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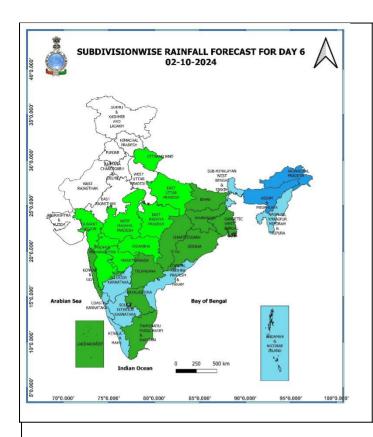


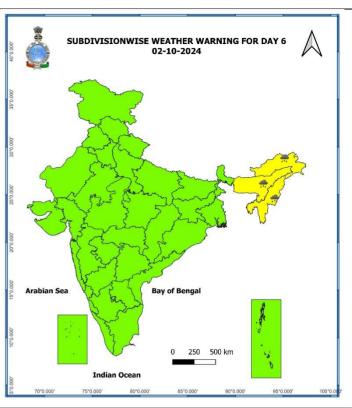
01 October (Day 5):

- ❖ Heavy rainfall (≥7 cm) likely at isolated places over Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe.
- ❖ Thunderstorm accompanied gusty winds (speed reaching 30-40 kmph) likely at isolated places over Kerala & Mahe; with lightning likely at isolated places over Assam & Meghalaya, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema.
- ❖ Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over western parts of southwest Arabian sea adjoining few parts of westcentral Arabian sea along and off Somalia coast. Fishermen are advised not to venture into these areas.



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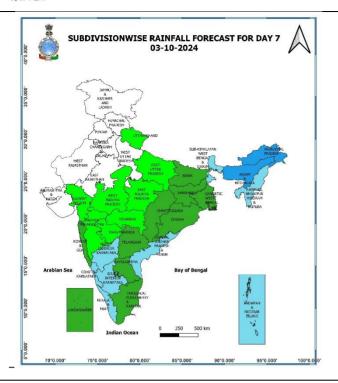


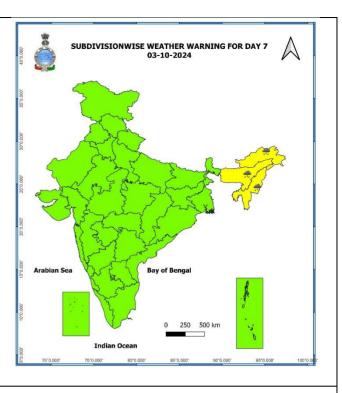
02 October (Day 6):

♦ Heavy rainfall (≥7 cm) likely at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.



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03 October (Day 7):

❖ Heavy rainfall (≥7 cm) likely at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

Weather Outlook for subsequent 3 days (During 04th October- 06th October, 2024)

- ❖ Dry weather likely to prevail over West Rajasthan, north Gujarat, Punjab, Haryana-Chandigarh-Delhi, and Isolated rainfall activity likely over Himachal Pradesh, Uttarakhand, East Rajasthan and Uttar Pradesh.
- ❖ Isolated to Scattered rainfall likely over Central, Eastern, North Eastern and Peninsular India.
- Action may be taken based on **ORANGE** AND **RED** COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.



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Impact due to

- ✓ **Isolated extremely heavy rainfall** very likely over Gujarat Region, Sub-Himalayan West Bengal & Sikkim, Bihar, East Uttar Pradesh on 27th September.
- ✓ **Isolated heavy to very heavy rainfall** very likely over West Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, Saurashtra & Kutch on 27th; East Uttar Pradesh on 28th September.
- ✓ **Moderate flash flood risk** likely over few watersheds & neighbourhoods of south Gujarat Region, Konkan & Goa; **Low to Moderate flash flood risk** over few watersheds & neighbourhoods of East Uttar Pradesh, Bihar, Madhya Maharashtra, South Saurashtra & Kutch on 27th & 28th September.

Impact Expected

- ✓ Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- ✓ Occasional reduction in visibility due to heavy rainfall.
- ✓ Disruption of traffic in major cities and roadways due to water logging in roads leading to increased travel time.
- ✓ Minor damage to kutcha roads.
- ✓ Possibilities of damage to vulnerable structure.
- ✓ Localized Landslides/Mudslides/landslips/mud slips/land sinks/mud sinks.
- ✓ Damage to horticulture and standing crops in some areas due to inundation and wind.
- ✓ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

Action Suggested

- ✓ Judicious regulation of surface transports including railways and roadways.
- ✓ Check for traffic congestion on your route before leaving for your destination.
- ✓ Follow any traffic advisories that are issued in this regard.
- ✓ Avoid going to areas that face the water logging problems often.
- ✓ Avoid staying in vulnerable structure

Agromet advisories for Heavy Rainfall likely over various parts of the country

- ➤ In Madhya Maharashtra region of **Maharashtra**, postpone harvesting of matured soybean, groundnut, maize and pearl millet. Immediately move the harvested produce to safer places and cover them with plastic sheets or tarpaulin.
- ➤ In Konkan region of **Maharashtra**, make arrangements to drain out excess water from rice, finger millet, turmeric, groundnut, vegetables and orchards.
- ➤ Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Tamilnadu, Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Gujarat, Goa, West Bengal, Odisha, Bihar and Jharkhand.
- ➤ Keep the harvested produce at safer places.
- > Provide mechanical support to horticultural crops & staking to vegetables.



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Flash Flood Guidance:

ANNEXURE I

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 28-09-2024:

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

East Uttar Pradesh - Ambedkarnagar, Azamgarh, Sultanpur, Kaushambi, Varansi, Mirzapur, Basti, Sant Kabirnagar, Siddarthnagar, Maharajganj, Kushinagar, Prayagraj and Jaunpur districts.

Bihar - Pashim Champaran, Purbi Champaran, Sithamarhi, Sheopur, Muzaffarpur, Gopalganj, Siwan, Saran, Vaishali, Patna, Jahanabad, Madhubani and Bhojpur 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.

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Product: WRF FFR | Timescale: 24-hr | Region: "INDIA" Product Date: 2024-09-27 06:00 UTC | Valid Date: 2024-09-28 06:00 UTC

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 28-09-2024 :

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

South Gujarat Region - Dadar & Nagar Haveli, Daman, Bharuch, Dangs, Narmada, Navsari, Surat, Tapi and Valsad districts.

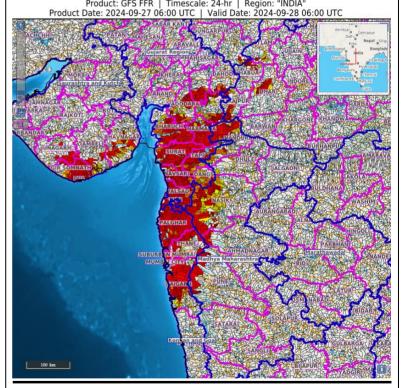
Konkan & Goa - Mumbai City, Palghar, Raigarh, Ratnagiri, Suburban Mumbai and Thane districts.

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

Madhya Maharashtra - Ahmadnagar, Dhule, Nandurbar, Nasik districts

South Saurashtra & Kutch - Amreli, Bhavnagar, Gir Somnath and Junagarh 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.







ANNEXURE II

Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 27.09.2024 (in cm):

- ❖ Bihar: Forbesganj (dist Araria) 34, Jokihat (dist Araria) 31, Chargharia (dist Kishanganj) 29, Palasi (dist Araria) 28, Ranigani (dist Araria) 27, Sikti (dist Araria) 27, Tedhagach (dist Kishangani) 27, Bahargama (dist Araria) 26, Kochadhaman (dist Kishanganj) 25, Srinagar (dist Purnea) 25, Kursakanta (dist Araria) 23, Kishanganj (dist Kishanganj) 23, Araria (dist Araria) 22, Narpatganj (dist Araria) 20, Dagarua (dist Purnea) 20, Rahghopur (dist Supaul) 20, Taibpur (dist Kishanganj) 20, Bahadurganj (dist Kishanganj) 20, Jalalgarh (dist Purnea) 20, Pothia (dist Kishanganj) 20, Krityanand Nagar (dist Purnea) 20, Dhengraghat (dist Purnea) 19, Thakurgani (dist Kishangani) 19, Kasba (dist Purnea) 19, Pratapganj (dist Supaul) 18, Mansahi (dist Katihar) 18, Baisa (dist Purnea) 17, Manihari (dist Katihar) 17, Katihar (dist Katihar) 17, Dighalbank (dist Kishanganj) 17, Madhipura (dist Madhepura) 16, Baisi (dist Purnea) 15, Kumarkhand (dist Madhepura) 15, Birpur (dist Supaul) 15, Purnea (dist Purnea) 15, Banmankhi (dist Purnea) 15, Amaur (dist Purnea) 14, Singheshwar (dist Madhepura) 14, Saraigarh Bhaptiyahi (dist Supaul) 14, Andhratharhi (dist Madhubani) 14, Murliganj (dist Madhepura) 13, Supaul (dist Supaul) 13, Tribeniganj (dist Supaul) 13, Darauli (dist Siwan) 13, Raghunathpur (dist Siwan) 13, Kishanpur (dist Supaul) 13, Jhanjharpur (dist Madhubani) 12, Madhepur (dist Madhubani) 12, Madhwapur (dist Madhubani) 12, Basua (dist Supaul) 12, Pipra (dist Supaul) 12, Chhatapur (dist Supaul) 11, Ghoghardiha (dist Madhubani) 11, Nirmali (dist Supaul) 11, Sikta (dist West Champaran) 11, Gualpara (dist Madhepura) 11, Mairwa (dist Siwan) 11. Galgalia (dist Kishangani) 11. Rainagar (dist Madhubani) 11. Mushari (dist Muzaffarpur) 10, Dhamdaha (dist Purnea) 10, Bathnaha (dist Sitamarhi) 10, Kucchaikot (dist Gopalganj) 9, Areraj (dist East Champaran) 9, Patarghat (dist Saharsa) 9, Marauna (dist Supaul) 9, Amdabad (dist Katihar) 9, Bhore (dist Gopalganj) 9, Korha (dist Katihar) 9, Ghanharia (dist Madhepura) 9, Sattar Kataiya (dist Saharsa) 9, Ziradei (dist Siwan) 9, Barari (dist Katihar) 9, Siswan (dist Siwan) 8, Sonbarsa (dist Saharsa) 8, Saulighat (dist Madhubani) 8, Ghanshyampur (dist Darbhanga) 8, Ghailadh (dist Madhepura) 8, Benipatti (dist Madhubani) 8, Babubarhi (dist Madhubani) 8, Pachdeuri (dist Gopalganj) 8, Barahar Kothi (dist Purnea) 8, Pandaul (dist Madhubani) 8, Nautan (dist Siwan) 7, Kadwa (dist Katihar) 7, Bokhara (dist Sitamarhi) 7, Hathwa (dist Gopalgani) 7, Kahara (dist Saharsa) 7, Baitunthpur (dist Gopalgani) 7, Lalbegiaghat (dist East Champaran) 7, Runnisaidpur (dist Sitamarhi) 7, Barsoi (dist Katihar) 7, Gopalganj (dist Gopalganj) 7, Phulwaria (dist Gopalgani) 7, Goriakothi (dist Siwan) 7, Lakri Nabigani (dist Siwan) 7, Uchakagaon (dist Gopalganj) 7, Sursand (dist Sitamarhi) 7, Siwan Sadar (dist Siwan) 7, UdaiKishanganj (dist Madhepura) 7,
- ❖ East Uttar Pradesh: Lambhuaa (dist Sultanpur) 27, Sultanpur Obsy (dist Sultanpur) 20, Azamgarh (dist Azamgarh) 16, Deogaon Lalganj (dist Azamgarh) 15, Tanda (dist Ambedkar Nagar) 15, Bhanpur (dist Basti) 13, Pratapgarh (t) (dist Pratapgarh) 12, Ayoadhya (dist Ayodhya) 12, Patti (dist Pratapgarh) 11, Sultanpur Cwc (dist Sultanpur) 10, Akbarpur Fmo (dist Ambedkar Nagar) 10, Ghazipur Obsy (dist Ghazipur) 9, Phoolpur Teh (dist Azamgarh) 9, Dhanghata (dist Sant Kabir Nagar) 8, Ayodhya (ag) (dist Ayodhya) 8, Ghazipur Cwc (dist Ghazipur) 8, Haraiya (dist Basti) 8,Gorakhpur (dist Gorakhpur) 7, Akbarpur (dist Ambedkar Nagar) 7,
- ❖ Gujarat Region: Vyara (dist Tapi) 21, Daman (dist Daman) 16, Songadh (dist Tapi) 16, Daman Fmo (dist Daman) 15, Daman_aws (dist Daman) 12, Pardi (dist Valsad) 11, Vyara_aws (dist Tapi) 10, Umergam (dist Valsad) 9, Valod (dist Tapi) 8, Navasari_aws (dist Navsari) 8, Jalalpor (dist Navsari) 8, Uchchhal (dist Tapi) 7, Dangs (ahwa) (dist Dangs) 7, Bardoli (dist Surat) 7, Khergam (dist Navsari) 7,
- ❖ Chhattisgarh: Kusmi (dist Balrampur) 21, Ramanujnagar (dist Surajpur) 12, Bhatgaon (dist Surajpur) 9, Rajpur (dist Balrampur) 9, Pathalgaon (dist Jashpur) 8,
- ❖ Saurashtra & Kutch: Visavadar (dist Junagadh) 16, Ghoga_arg (dist Bhavnagar) 15, Ghogha (dist Bhavnagar) 15, Palitana (dist Bhavnagar) 11, Vallabhipur (dist Bhavnagar) 11,



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

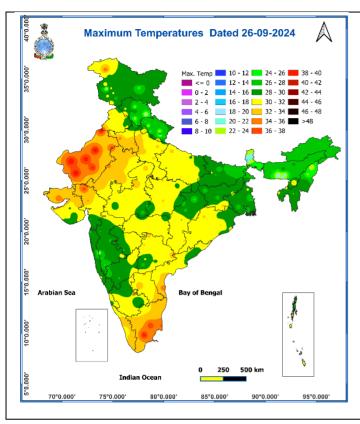
Diu (dist Diu) 10, Una (dist Gir Somnath) 10, Shihor (dist Bhavnagar) 10, Bhesan (dist Junagadh) 9, Chuda (dist Surendranagar) 9, Sayla (dist Surendranagar) 9, Bhavnagar (dist Bhavnagar) 9, Kodinar (dist Gir Somnath) 9, Sutrapada (dist Gir Somnath) 9, Vadia (dist Amreli) 9, Lilia (dist Amreli) 7,

- Sub-Himalayan West Bengal & Sikkim: Raiganj (pto) (dist North Dinajpur) 14, Mekhliganj (dist Cooch Behar) 14, Buxaduar (dist Alipurduar) 14, Balurghat (dist South Dinajpur) 13, Amfu Majhian (dist South Dinajpur) 11, Jalpaiguri (dist Jalpaiguri) 11, Yuksom (dist Gyalshing) 11, Domohani (dist Jalpaiguri) 11, Siliguri Pto (dist Darjeeling) 11, Lava (dist Kalimpong) 10, Hasimara (dist Alipurduar) 10, Falakata (dist Alipurduar) 9, Dinhata (dist Cooch Behar) 9, Damthang (dist Namchi) 9, Munsong (dist Darjeeling) 9, Bhutanghat (dist Alipurduar) 9, Bagdogra Iaf (dist Darjeeling) 9, Champasari (dist Darjeeling) 8, Ravangla Arg (dist Namchi) 8, Majitar (dist Pakyong) 8, Bagrakote (dist Jalpaiguri) 8, Darjeeling (dist Darjeeling) 8, Gajoldoba (dist Jalpaiguri) 8, Kumargram (dist Alipurduar) 7, Gyalsing (pto) (dist Gyalshing) 7, Pakyong (dist Pakyong) 7, Nh31 Bridge (dist Jalpaiguri) 7, Dhupguri (dist Jalpaiguri) 7, Malda (dist Malda) 7, Chengmari/diana (dist Jalpaiguri) 7, Tadong (dist Gangtok) 7, Nagarkata (dist Jalpaiguri) 7, Rongli (dist Pakyong) 7, Soreng Arg (dist Soreng) 7, Bijonbari (dist Darjeeling) 7, Pedong (dist Kalimpong) 7, Barobhisha (dist Alipurduar) 7,
- ❖ West Madhya Pradesh: Khirkiya-arg (dist Harda) 12, Depalpur (dist Indore) 8, Udainagar (dist Dewas) 7,
- West Uttar Pradesh: Najibabad (t) (dist Bijnor) 11,
- Madhya Maharashtra: Konkan & Goa: Matheran (dist Raigad) 10, Mhasla (dist Raigad) 9, Palghar_agri (dist Palghar) 9, Mangaon (dist Raigad) 8, Murbad (dist Thane) 8, Dapoli_agri (dist Ratnagiri) 7, Santacruz Imd Obsy (dist Mumbai Suburban) 7, Poladpur (dist Raigad) 7, Vasai (dist Palghar) 7, Vikramgad (dist Palghar) 7,
- Odisha: Kantapada (Cuttack) 11, Pipili (Puri) 11, Banki (Cuttack) 11, Padampur (Bargarh) 10, Khordha Pto (Khurda) 9, Bhuban (Dhenkanal) 8, Jatni (Khurda) 7, Gop (Puri) 7, Satyabadi (Puri) 7, Niali (Cuttack) 7, Bhograi (Balasore) 7,
- ❖ Jharkhand: Sahibganj Kvk Aws (dist Sahibganj) 11, Mahuadnr (dist Latehar) 9,Borio (dist Sahibganj) 8, Nandadih (dist Giridih) 8, Ramgarh (dist Palamu) 7,
- Coastal Andhra Pradesh & Yanam: Kalingapatnam (dist Srikakulam) 10, Visakhapatnam (dist Vishakhapatnam) 9,
- ❖ Konkan & Goa: Matheran (dist Raigad) 10, Mhasla (dist Raigad) 9, Palghar_agri (dist Palghar) 9, Mangaon (dist Raigad) 8, Murbad (dist Thane) 8, Dapoli_agri (dist Ratnagiri) 7, Santacruz Imd Obsy (dist Mumbai Suburban) 7, Poladpur (dist Raigad) 7, Vasai (dist Palghar) 7, Vikramgad (dist Palghar) 7,
- Vidarbha: Nagpur (aws) (dist Nagpur) 10, Wardha (Aws) (dist Wardha) 7, Hingna (dist Nagpur) 7, Gondia Ap (dist Gondia) 7,
- Gangetic West Bengal: Contai (dist East Midnapore) 10;
- Uttarakhand: Banbasa(Champawat): 9,
- * Arunachal Pradesh: Oyan Arg (dist East Siang) 9, Miao (dist Changlang) 7,
- ❖ Himachal Pradesh: Jogindarnagar (dist Mandi) 8, Palampur (dist Kangra) 8, Baijnath (dist Kangra) 7,
- ❖ Jammu-Kashmir: Bakore Arg (dist Jammu) 7,
- **East Madhya Pradesh:** Patera (dist Damoh) 7, Patan (dist Jabalpur) 7,
- Assam & Meghalaya: Dhubri_ Cwc (dist Dhubri) 7, Williamnagar (dist East Garo Hills) 7,



Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures



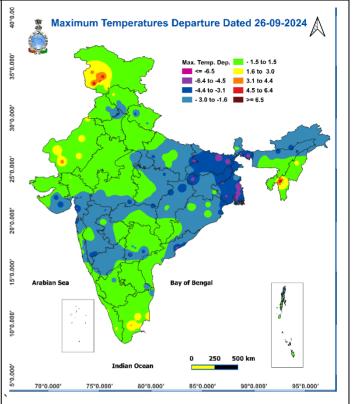
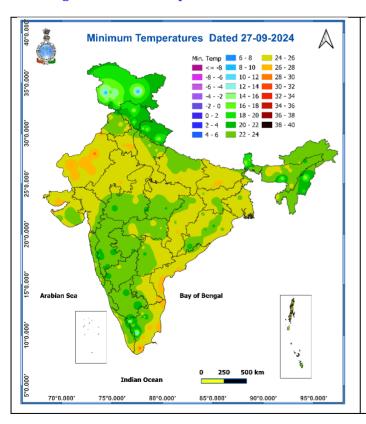


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures



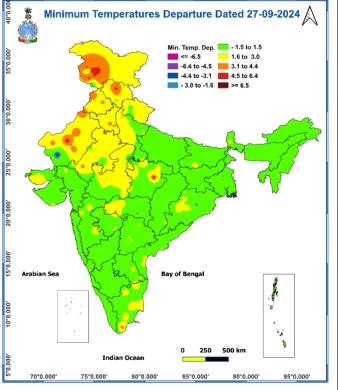
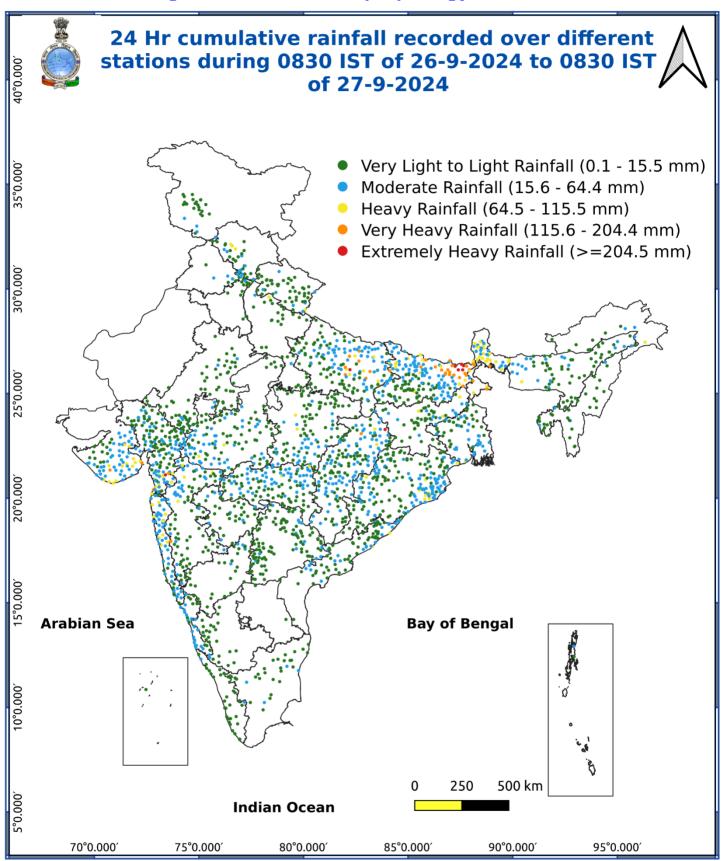






Fig. 5: Accumulated Rainfall (mm) during past 24 hours

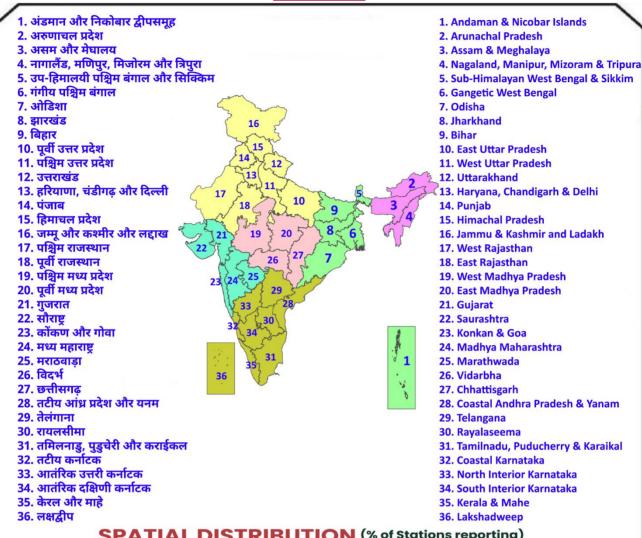


Sust Raising Winds



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

LEGENDS



SPATIAL DISTRIBUTION (% of Stations reporting)

% Stations		Category	% Stations	Category		gory
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 Wa	ve	COLOUR CODED WARNING	
		ineary one in	1		No Warning (No Action)	
Heavy Rain		ي Dust Storm	- Cold Da	y	Watch (Be Aware)	
> Very Heavy Rain		+ Heat Wave	Ground	Frost	Alert (Be Prepared To Take Action)	
Extremely Heavy Rain		+ Warm Night			Warning (Take Action)	
Thunder & Lightning		•1			Probabilistic Forecast	
		+ Hot Day			Terms	Probability of Occurrence (%
Hailstorm		hot & Humid			Unlikely Likely	< 25 25 - 50

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	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					
	(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					
Varm Night	Warm Night: When minimum temperature departure 4.5 °C to 6.4 °C.					
	Severe Warm Night: When minimum temperature departure >6.4 °C.					
Cold Wave	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.					
	Severe Cold Wave: Minimum Temperature Departure from normal ≤ -6.5 °C					
	(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 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					
	Dhannan of and the plate are and disciplined the basic and the basic and the basic and the second of					
	Phenomenon of small droplets suspended in air and the horizontal visibility < 1km Moderate Fog: When the visibility between 500-200 metres					
Fog	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.					
Frost	Ice deposits on ground					
	Air temperature ≤4°C (over Plains)					
	A strong wind that rises suddenly, lasts for atleast 1 minute					
	A strong wind that rises suddenly, lasts for atleast 1 minute. Moderate: Wind speed 52-61 kmph					
Squall	Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph					
Squall	Moderate: Wind speed 52-61 kmph					
Squall	Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph					
	Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph Very Severe: Wind speed >87 kmph 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					
Squall Sea State	Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph Very Severe: Wind speed >87 kmph 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					
	Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph Very Severe: Wind speed >87 kmph 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					
	Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph Very Severe: Wind speed >87 kmph 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 Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)					
Sea State	Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph Very Severe: Wind speed >87 kmph 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 Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots) Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)					
	Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph Very Severe: Wind speed >87 kmph 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 Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)					