



National Weather Forecasting Centre Indian Meteorological Department Ministry of Earth Sciences

2025-08-28

Time of Issue: 13:41:00 hours IST

(Mid-Day)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

Weather Forecast and Warnings:

South Peninsular India:

Heavy to very heavy rainfall with Extremely heavy rainfall very likely at isolated places over Telangana and Coastal Karnataka on 28th August with heavy rainfall over Telangana during subsequent 2 days and heavy to very heavy rainfall over Coastal Karnataka during subsequent 6 days.

Isolated **heavy rainfall** likely over Kerala on 28th & 29th August & on 02nd & 03rd September; Interior Karnataka on 28th & 29th August; Coastal Andhra Pradesh & Yanam on 28th August & 03rd September with **very heavy rainfall over Interior Karnataka, Tamil Nadu and Kerala on 28th August.**

Light to moderate rainfall at most/many places accompanied with thunderstorm & lightning likely over the region during next 7 days.

East & Central India:

Isolated **heavy rainfall** likely over Chhattisgarh, East Madhya Pradesh during next 7 days; Sub-Himalayan West Bengal & Sikkim, Vidarbha during 28th-30th; West Madhya Pradesh during 28th August-01st September; Bihar during 30th August-01st September; Jharkhand on 30th August; Odisha during 31st August-03rd September with isolated **very heavy rainfall over Vidarbha, Sub-Himalayan West Bengal on 28th August.**

Light to moderate rainfall at most/many places accompanied with thunderstorm & lightning likely over the region during next 7 days.

West India:

Isolated heavy rainfall is very likely over Gujarat region,Konkan & Goa, Madhya Maharashtra during next 7 days with **very heavy rainfall** over Konkan, Goa, Marathawada on 28th; Ghat areas of Madhya Maharashtra on 28th & 29th August.

Light to moderate rainfall at most/many places very likely over the region during next 7 days.

Northwest India:

Isolated **heavy rainfall** likely to continue over Uttarakhand, Himachal Pradesh, East Rajasthan during next 7 days; Jammu & Kashmir, Punjab, Haryana during 29th August-02nd September; West Rajasthan on 30th & 31st August; West Uttar Pradesh during 31st August-02nd September; East Uttar Pradesh on 01st & 02nd September with **isolated very heavy rainfall very likely over Uttarakhand on 28th & 29th August, 01st & 02nd September and East Rajasthan on 31st August.**

Light/moderate rainfall at most/many places over Northwest India and accompanied with thunderstorm & lightning likely over Uttar Pradesh, Himachal Pradesh on 28th; West Rajasthan on 28th & 29th August; Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand during next 7 days.

Northeast India:

Isolated **heavy rainfall** likely to continue over Arunachal Pradesh during 28th-30th August; Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 28th & 29th August, 01st & 02nd September.

Light/moderate rainfall at many places accompanied with thunderstorm & lightning likely during next 5 days.



National Weather Forecasting Centre Indian Meteorological Department Ministry of Earth Sciences

Main Weather Observations:

- * Rainfall distribution (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Assam & Meghalaya, Sub Himalayan West Bengal & Sikkim, Konkan & Goa, Marathwada, Vidarbha, Telangana, Karnataka, Kerala & Mahe and Lakshadweep; at many places over Andaman & Nicobar Islands, Arunachal Pradesh, Gangetic West Bengal, Odisha, Uttarakhand, Himachal Pradesh, Jammu-KashmirLadakh-Gilgit-Baltistan-Muzaffarabad, West Madhya Pradesh, Gujarat Region, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam and Rayalaseema; at a few places over Nagaland, Manipur, Mizoram & Tripura, Jharkhand, West Uttar Pradesh, Haryana-Chandigarh-Delhi, Punjab, West Rajasthan, East Rajasthan, East Madhya Pradesh and Chhattisgarh; at isolated places over Bihar, East Uttar Pradesh, Saurashtra & Kutch and Tamil Nadu, Puducherry & Karaikal; Dry over rest of the country.
- Significant rainfall recorded(in cm) (from 0830 hours IST of yesterday to 0830 hours IST of today): Telangana: Kamareddy (dist Kamareddy) 41, Naga Reddipet (dist Kamareddy) 33, Bhiknur (dist Kamareddy) 33, Tadwai (dist Kamareddy) 33, Sadasivanagar (dist Kamareddy) 32, Lingampet (dist Kamareddy) 32, Chegunta (dist Medak) 26, Domakonda (dist Kamareddy) 25, Yellareddy (dist Kamareddy) 25, Machareddy (dist Kamareddy) 25, Laxmanchanda (dist Nirmal) 22, Thimmapur (dist Karimnagar) 22, Tadwai Mlg (dist Mulugu) 21, Papannapet (dist Medak) 21, Govindaraopet (dist Muluqu) 20, Doultabad (dist Siddipet) 20, Ramayampet (dist Medak) 20, Kondapak (dist Siddipet) 19, Sarangapurnrl (dist Nirmal) 19, Dhar Palle (dist Nizamabad) 18, Medak (dist Medak) 18, Sathupalle (dist Khammam) 17, Sarangapur (dist Jagtial) 17, Dilawarpur (dist Nirmal) 16, Bheemgal (dist Nizamabad) 15, Tekmal (dist Medak) 15, Gambhiraopet (dist Rajanna Sircilla) 14, Ellanthukunta (dist Rajanna Sircilla) 14, Gandhari (dist Kamareddy) 14, Nagireddypet(a) (dist Kamareddy) 13, Alladurg (dist Medak) 13, Chinthakam (dist Khammam) 13, Khammam Urban (dist Khammam) 12, Khammam(arg) (dist Khammam) 12, Mirdoddi (dist Siddipet) 12, Regode (dist Medak) 12, Konijerla (dist Khammam) 12, Thollada (dist Khammam) 12, Tandoormncl (dist Mancherial) 11, Kammar Palle (dist Nizamabad) 11, Shankarapatnam (dist Karimnagar) 11, Jannaram (dist Mancherial) 11, Mortad (dist Nizamabad) 11, Varni (dist Nizamabad) 11, Wargal (dist Siddipet) 11, Bejjanki (dist Siddipet) 10, Gajwel (dist Siddipet) 10, Yeda Palle (dist Nizamabad) 10, Jammikunta (dist Karimnagar) 10, Hathanoora (dist Sangareddy) 10, Ghanpurjskb (dist J. Bhupalpally) 10, Balkonda (dist Nizamabad) 10; Coastal Karnataka: Gersoppa (dist Uttara Kannada) 17, Honavar Obsy (dist Uttara Kannada) 14, Ankola (dist Uttara Kannada) 13, Karwar Obsy (dist Uttara Kannada) 12, Mangaluru Ap Obsy (dist Dakshina Kannada) 12, Kadra (dist Uttara Kannada) 12, Manki (dist Uttara Kannada) 9, Kumta (dist Uttara Kannada) 9, Shakti Nagar Obsy (dist Dakshina Kannada) 9, Sulya (dist Dakshina Kannada) 9, Mani (dist Dakshina Kannada) 9, Karkala (dist Udupi) 9, Bantwal (dist Dakshina Kannada) 9, Siddapura (dist Udupi) 9, Kundapur (dist Udupi) 8, Udupi (dist Udupi) 8, Dharmasthala (dist Dakshina Kannada) 7, Uppinangadi (dist Dakshina Kannada) 7, Kota (dist Udupi) 7, Mudubidre (dist Dakshina Kannada) 7; Konkan & Goa: Sanguem (dist South Goa) 19; Ponda (dist North Goa), Quepem (dist South Goa) 18 Each; Mapusa (dist North Goa), Dodamarg (dist Sindhudurg) 17 Each; Canacona (dist South Goa), Panjim (dist North Goa) 15 Each; Sawantwadi (dist Sindhudurg) 14; Kudal (dist Sindhudurg), Vaibhavwadi (dist Sindhudurg) 11 Each; Mormugao - Pmo IMD (dist South Goa), Ratnagiri (dist Ratnagiri), Mulde ARG (dist Sindhudurg), Dabolim N.a.s.- Navy (dist South Goa) 9 Each; Sangameshwar Devrukh (dist Ratnagiri), Lanja (dist Ratnagiri) 8 Each; Rajapur (dist Ratnagiri) 7; Sub Himalayan West Bengal & Sikkim: Jiti T.e. (dist Jalpaiguri) 15; Ghughumari (dist Cooch Behar) 11; Alipurduar PTO (dist Alipurduar) 10; Barobhisha (dist Alipurduar), Nh31 Bridge (dist Jalpaiguri), Cooch Behar (dist Cooch Behar), Mekhligani (dist Cooch Behar), Shipgyar (dist Mangan) 9 Each; Jhallong (dist Kalimpong) 8; Buxaduar (dist Alipurduar), Dharala Valley Tea Esta (dist Jalpaiguri), Diana Tea Estate (dist Jalpaiguri), Hilla T.e. (dist Jalpaiguri), Sankos Tea Estate (dist Alipurduar) 7 Each; West Uttar Pradesh: Atrauli (dist Aligarh) 14; Madhya Maharashtra: Gaganbawada (dist Kolhapur) 13; Radhanagari (dist Kolhapur) 10; Marathwada: Naigaon Khairgaon (dist Nanded) 12; Udgir - IMD Parttime (dist Latur) 11; Jalkot (dist Latur) 10; Renapur (dist Latur), Udgir (dist Latur) 9 Each; Ausa (dist Latur) 8; Chakur (dist Latur), Lohara (dist Dharashiv), Mukhed (dist Nanded), Shirur Anantpal (dist Latur), Georai (dist Beed) 7 Each; Himachal Pradesh: Pandoh (dist Mandi) 11; West Madhya Pradesh: Bajna (dist Ratlam) 11; Khalwa (dist Khandwa) 10; Sanwer (dist Indore), Raoti (dist Ratlam) 8 Each; Amla (dist Betul) 7; Uttarakhand: Pantnagar (dist Udham Singh Nagar) 11; South Interior Karnataka: Agumbe Aws (dist Shivamogga) 11;Coastal Andhra Pradesh & Yanam: Tiruvuru (dist Ntr District) 10; Nandigama (dist Ntr District) 9; Polavaram (dist Eluru), Bhimadole (dist Eluru), Bheemavaram (dist West Godavari) 8 Each; Kerala & Mahe: Hosdurg (dist Kasargod) 10; Enamakkal (dist Thrissur), Vellanikkara (dist Thrissur), Karipur Ap. (dist Malappuram), Chimoni ARG (dist Thrissur), Peringome AWS (dist Cannur), Padannakkad AWS (dist Kasargod), Lower Sholayar AWS (dist Thrissur), Kozhikode (dist Kozhikode) 8 Each; Kunnamkulam (dist Thrissur), Vilangankunnu ARG (dist Thrissur), Kannur Airport AWS (dist Cannur), Chemberi AWS (dist Cannur), Panathur AWS (dist Kasargod), Madikkai AWS (dist Kasargod), Bayar AWS (dist Kasargod), Peechi AWS (dist Thrissur), Ams Kannur



National Weather Forecasting Centre Indian Meteorological Department Ministry of Earth Sciences

(dist Cannur) 7 Each; North Interior Karnataka: Yedrami (dist Kalaburgi) 9, Bidar Pto (dist Bidar) 9; Assam & Meghalaya: Dhemaji (dist Dhemaji) 9; Byrnihat ARG (dist Ri Bhoi) 8; Cherrapunji (dist East Khasi Hills) 7; East Rajasthan: Veja SR (dist Dungarpur) 9; Dhambola (dist Dungarpur) 8; Chhotisadri (dist Pratapgarh) 7; Odisha: Banki (dist Cuttack) 7; Gujarat Region: Lunawada (dist Mahisagar), Narmada Kvk AWS (dist Narmada) 7 Each; Punjab: Nawanshahr (dist Sbs Nagar) 7; East Madhya Pradesh: Seoni (dist Seoni) 7; Rayalaseema: Srisailam (dist Nandyal) 7.

- **♦** Heavy Rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Heavy to very heavy rainfall at some places with Extremely heavy rainfall (≥21 cm) and exceptionally heavy rainfall has been recorded at isolated places over Telangana(Kamareddy-41 cm).
- **♦**Heavy to very heavy rainfall at some places with Extremely heavy rainfall (≥21 cm) has been recorded at isolated places over Goa.
- ♦ Very heavy rainfall (12-20 cm) has been recorded at isolated places over Coastal Karnataka, Sub-Himalayan West Bengal, south Konkan, Ghat areas of Madhya Maharashtra and Marathawada.
- **Heavy rainfall (7-11 cm)** has been recorded at isolated places over Uttarakhand, Himachal Pradesh, Punjab, East Rajasthan, Madhya Pradesh, Odisha, Gujarat Region, Interior Karnataka, Kerala, Coastal Andhra Pradesh, Arunachal Pradesh, Assam and Nagaland.
- ♦ Minimum Temperature Departures (as on 28-08-2025): markedly above normal(> 5.1°C) at many places over East Madhya Pradesh; at few places over Jammu-KashmirLadakh-Gilgit-Baltistan-Muzaffarabad and West Madhya Pradesh; at isolated places over Assam & Meghalaya, Bihar, East Uttar Pradesh, Himachal Pradesh and Chhattisgarh. appreciably above normal(3.1°C to 5.0°C) at isolated places over Sub Himalayan West Bengal & Sikkim, Odisha, Gujarat Region, Saurashtra & Kutch and Vidarbha. above normal(1.6°C to 3.0°C) at few places over Andaman & Nicobar Islands, West Uttar Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, Madhya Maharashtra and Tamil Nadu, Puducherry & Karaikal; at isolated places over Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, West Rajasthan and Konkan & Goa. near normal(-1.5°C to 1.5°C) at many places over Kerala & Mahe and Lakshadweep; at most places over Arunachal Pradesh, Jharkhand, Punjab, East Rajasthan, Marathwada, Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal Karnataka, North Interior Karnataka and South Interior Karnataka; at few places over Telangana. The lowest minimum temperature of 19.5°C is reported at Jeur (Madhya maharashtra) over the Plains of India.
- ♦ Maximum Temperature Departures (as on 27-08-2025): appreciably above normal(3.1°C to 5.0°C) at isolated places over Assam & Meghalaya, Odisha, East Uttar Pradesh and East Madhya Pradesh. above normal(1.6°C to 3.0°C) at many places over Chhattisgarh; at few places over Nagaland, Manipur, Mizoram & Tripura, Sub Himalayan West Bengal & Sikkim, Bihar, Uttarakhand and West Madhya Pradesh; at isolated places over Gangetic West Bengal, West Uttar Pradesh, Haryana-Chandigarh-Delhi, Himachal Pradesh, Saurashtra & Kutch, Vidarbha and Tamil Nadu, Puducherry & Karaikal. near normal(-1.5°C to 1.5°C) at many places over Andaman & Nicobar Islands and West Rajasthan; at most places over Arunachal Pradesh, Jharkhand, East Rajasthan, Gujarat Region, Konkan & Goa and South Interior Karnataka; at few places over Punjab, Madhya Maharashtra, Marathwada, Rayalaseema, Coastal Karnataka, North Interior Karnataka, Kerala & Mahe and Lakshadweep; at isolated places over Coastal Andhra Pradesh & Yanam and Telangana. The highest maximum temperature of 37.9°C is reported at PALAYAMKOTTAl (TAMIL NADU).



National Weather Forecasting Centre Indian Meteorological Department Ministry of Earth Sciences

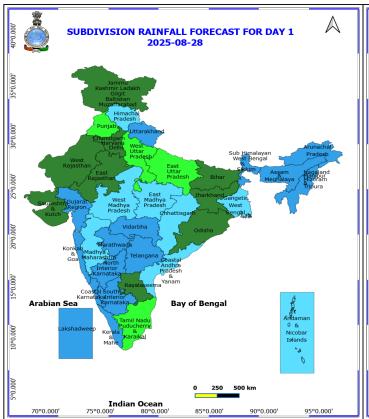
Meteorological Analysis (Based on 0830 hours IST)

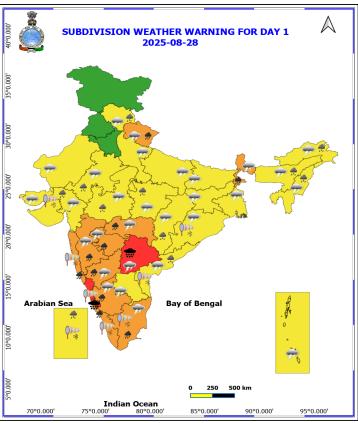
- The **low-pressure** area over South Odisha adjoining Chhattisgarh lay over central parts of Chhattisgarh & neighbourhood at 0830 hrs IST of today, the 28th August 2025. The associated cyclonic circulation extended upto 5.8 km above mean sea level tilting southwestwards with height.
- The monsoon trough now passes through Sri Ganganagar, Shivpuri, Damoh, centre of low-pressure area over central parts of Chhattisgarh & neighbourhood, Kalingapatnam and thence to east-southeastwards to central Bay of Bengal.
- The **Western Disturbance** as a **cyclonic circulation** over north Pakistan lay over north Pakistan & adjoining Punjab and extended upto 5.8 km above mean sea level.
- The **upper air cyclonic circulation**over south Punjab extending upto 1.5 km above mean sea level has merged with the above system.
- A **shear zone** runs roughly along Lat. 17°N over the Indian region between 4.5 & 5.8 km above mean sea level.
- An upper air cyclonic circulation lay over northeast Assam & neighbourhood and extended upto 1.5 km above mean sea level.
- The trough from central Madhya Pradesh to south Punjab extending upto 1.5 km above mean sea level has become less marked.

Weather Outlook for subsequent 3 days

• Scattered to Fairly widespread rainfall likely over northern, western India, western peninsular and eastern India.







28 August (Day 1)

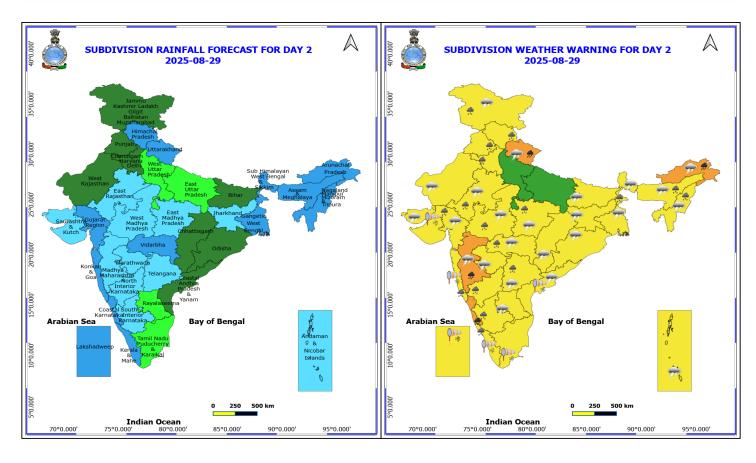
- ♦ Heavy to Very Heavy Rainfall with isolated Extremely Heavy Rainfall very likely at isolated places over Coastal Karnataka and Telangana.
- ♦ Heavy to Very Heavy Rainfall very likely at isolated places over Interior Karnataka, Kerala & Mahe, Konkan & Goa, Maharashtra, Sub Himalayan West Bengal & Sikkim, Tamil Nadu Puducherry & Karaikal and Uttarakhand.
- ♦ Heavy Rainfall very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Chhattisgarh, Coastal Andhra Pradesh, East Rajasthan, Gujarat Region, Himachal Pradesh, Lakshadweep, Madhya Pradesh and Nagaland, Manipur, Mizoram and Tripura.
- ❖ Thunderstorm accompanied with lightning & gusty winds(30-40kmph) very likely at isolated places over Andaman & Nicobar Islands, Bihar, Interior Karnataka, Jharkhand and Telangana.
- ♦ Thunderstorm accompanied with Lightning very likely at isolated places over Andhra Pradesh, Arunachal Pradesh, Assam & Meghalaya, Chhattisgarh, Gujarat State, Himachal Pradesh, Madhya Pradesh, Maharashtra, Nagaland, Manipur, Mizoram and Tripura, Odisha, Rajasthan, Tamil Nadu Puducherry & Karaikal, Uttar Pradesh, Uttarakhand and West Bengal & Sikkim.
- ♦ Strong Surface Winds very likely at isolated places over Coastal Andhra Pradesh, Coastal Karnataka, Kerala & Mahe, Konkan & Goa, Lakshadweep, Odisha, Saurashtra & Kutch and Tamil Nadu Puducherry & Karaikal.
- ♦ Squally wind with speed reaching 45 kmph to 55 kmph gusting to 65 kmph is likely to prevail along and off Somalia, Oman coasts, most parts of westcentral Arabian sea, adjoining & some parts of southwest, eastcentral Arabian Sea; Squally weather with wind speed reaching 40 50 kmph gusting to 60 kmph likely to prevail along and off south Gujarat, Konkan, Goa, Karnataka, Kerala coasts, Lakshadweep, Comorin areas, and most parts of eastcentral Arabian Sea; along and off north and adjoining south Andhra Pradesh, Odisha, West Bengal, Bangladesh



National Weather Forecasting Centre Indian Meteorological Department Ministry of Earth Sciences

coasts, over north Bay of Bengal & most parts of central Bay of Bengal, over most parts of southwest Bay of Bengal and adjoining southeast Bay of Bengal, off Sri Lanka coast, over Gulf of Mannar.

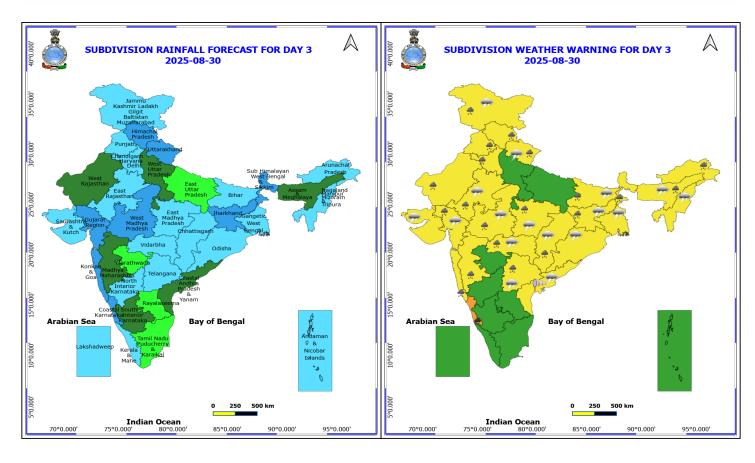




29 August (Day 2)

- Heavy to Very Heavy Rainfall very likely at isolated places over Arunachal Pradesh, Coastal Karnataka, Madhya Maharashtra and Uttarakhand.
- Heavy Rainfall very likely at isolated places over Assam & Meghalaya, East Rajasthan, Gujarat Region, Haryana, Chandigarh & Delhi, Himachal Pradesh, Interior Karnataka, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Kerala & Mahe, Konkan & Goa, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Punjab, Sub Himalayan West Bengal & Sikkim, Telangana and Vidarbha.
- ♦ Thunderstorm accompanied with lightning & gusty winds(30-40kmph) very likely at isolated places over Andaman & Nicobar Islands, Bihar, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Jharkhand and Telangana.
- ♦ Thunderstorm accompanied with Lightning very likely at isolated places over Andhra Pradesh, Arunachal Pradesh, Assam & Meghalaya, Chhattisgarh, Gujarat State, Madhya Pradesh, Maharashtra, Nagaland, Manipur, Mizoram and Tripura, Odisha, Rajasthan, Uttarakhand and West Bengal & Sikkim.
- ♦ Strong Surface Winds very likely at isolated places over Coastal Andhra Pradesh, Kerala & Mahe, Konkan & Goa, Lakshadweep, Saurashtra & Kutch and Tamil Nadu Puducherry & Karaikal.
- Squally wind with speed reaching 45 kmph to 55 kmph gusting to 65 kmph is likely to prevail along and off Somalia, Oman coasts, most parts of westcentral Arabian sea, adjoining & some parts of southwest, eastcentral Arabian Sea; Squally weather with wind speed reaching 40 50 kmph gusting to 60 kmph likely to prevail along and off south Gujarat, Konkan, Goa, Karnataka, Kerala coasts, Lakshadweep, Comorin areas, and most parts of eastcentral Arabian Sea; along and off north and adjoining south Andhra Pradesh coasts, over most parts of central, southwest Bay of Bengal and adjoining southeast Bay of Bengal, off Sri Lanka coast, over Gulf of Mannar.

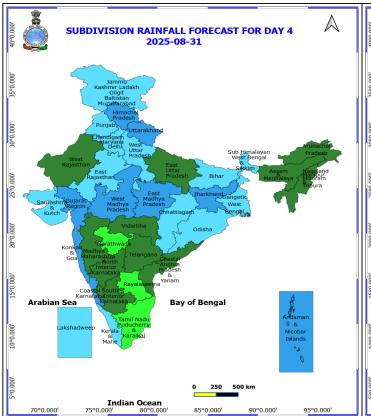


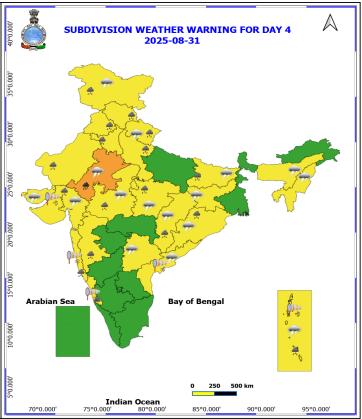


30 August (Day 3)

- Heavy to Very Heavy Rainfall very likely at isolated places over Coastal Karnataka.
- **Heavy Rainfall** very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Bihar, Chhattisgarh, Gujarat Region, Haryana, Chandigarh & Delhi, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Jharkhand, Konkan & Goa, Madhya Maharashtra, Madhya Pradesh, Punjab, Rajasthan, Sub Himalayan West Bengal & Sikkim, Telangana, Uttarakhand and Vidarbha.
- ❖ Thunderstorm accompanied with lightning & gusty winds(30-40kmph) very likely at isolated places over Bihar, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Jharkhand and Telangana.
- ♦ Thunderstorm accompanied with Lightning very likely at isolated places over Assam & Meghalaya, Chhattisgarh, Coastal Andhra Pradesh, East Rajasthan, Gangetic West Bengal, Gujarat State, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Odisha, Uttarakhand and Vidarbha.
- Strong Surface Winds very likely at isolated places over Coastal Andhra Pradesh.
- ♦ Squally wind with speed reaching 45 kmph to 55 kmph gusting to 65 kmph is likely to prevail along and off Somalia, Oman coasts, most parts of westcentral Arabian sea, adjoining & some parts of southwest, eastcentral Arabian Sea; Squally weather with wind speed reaching 40 50 kmph gusting to 60 kmph likely to prevail over some parts of eastcentral Arabian Sea, along and off north Andhra Pradesh coast, off south Odisha coast, over few parts of northwest, southeast Bay of Bengal, many parts of westcentral Bay of Bengal, most parts of southwest Bay of Bengal, off Sri Lanka coast, over Gulf of Mannar.



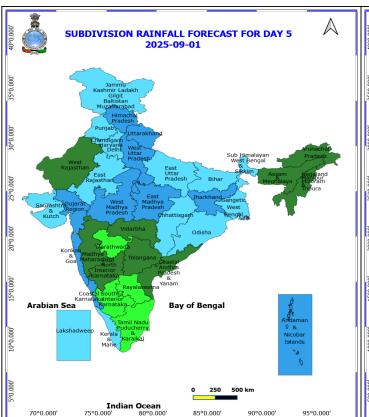


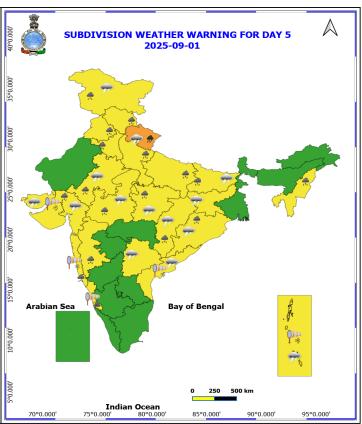


31 August (Day 4)

- Heavy to Very Heavy Rainfall likely at isolated places over East Rajasthan.
- ♦ Heavy Rainfall likely at isolated places over Andaman & Nicobar Islands, Bihar, Chhattisgarh, Coastal Karnataka, Gujarat Region, Haryana, Chandigarh & Delhi, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Konkan & Goa, Madhya Maharashtra, Madhya Pradesh, Odisha, Punjab, Uttarakhand, West Rajasthan and West Uttar Pradesh.
- ♦ Thunderstorm accompanied with lightning & gusty winds(30-40kmph) likely at isolated places over Andaman & Nicobar Islands, Bihar, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Jharkhand and Telangana.
- ♦ Thunderstorm accompanied with Lightning likely at isolated places over Assam & Meghalaya, Chhattisgarh, Coastal Andhra Pradesh, East Rajasthan, Gujarat State, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Odisha and Uttarakhand.
- ♦ Strong Surface Winds likely at isolated places over Andaman & Nicobar Islands, Coastal Andhra Pradesh, Coastal Karnataka, Konkan & Goa and Saurashtra & Kutch.
- Squally wind with speed reaching 45 kmph to 55 kmph gusting to 65 kmph is likely to prevail along and off Somalia, Oman coasts, most parts of westcentral Arabian sea, adjoining parts of northwest Arabian Sea, adjoining & some parts of southwest, eastcentral Arabian Sea; Squally weather with wind speed reaching 40 50 kmph gusting to 60 kmph likely to prevail along and off south Gujarat, Konkan, Goa, Karnataka coasts, over most parts of eastcentral Arabian Sea, along and off Andhra Pradesh coast, many parts of westcentral Bay of Bengal, most parts of southwest Bay of Bengal, few parts of southeast Bay of Bengal, over Andaman Sea.



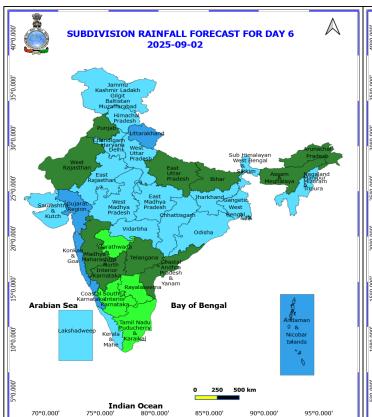


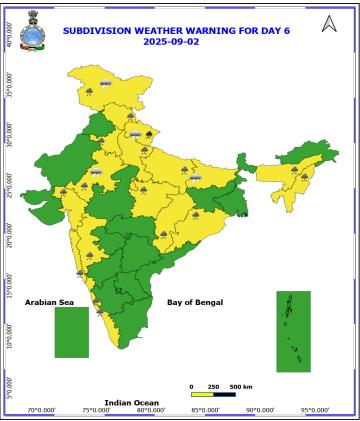


1 September (Day 5)

- Heavy to Very Heavy Rainfall likely at isolated places over Uttarakhand.
- ♦ Heavy Rainfall likely at isolated places over Bihar, Chhattisgarh, Coastal Karnataka, East Rajasthan, Gujarat Region, Haryana, Chandigarh & Delhi, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Konkan & Goa, Madhya Maharashtra, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Odisha, Punjab and Uttar Pradesh.
- ♦ Thunderstorm accompanied with lightning & gusty winds(30-40kmph) likely at isolated places over Andaman & Nicobar Islands, Bihar, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Jharkhand and Telangana.
- ❖ Thunderstorm accompanied with Lightning likely at isolated places over Chhattisgarh, Coastal Andhra Pradesh, East Rajasthan, Gujarat State, Madhya Pradesh, Odisha and Uttarakhand.
- ♦ Strong Surface Winds likely at isolated places over Andaman & Nicobar Islands, Coastal Andhra Pradesh, Coastal Karnataka, Konkan & Goa and Saurashtra & Kutch.
- ♦ Squally wind with speed reaching 45 kmph to 55 kmph gusting to 65 kmph is likely to prevail along and off Somalia, Oman coasts, most parts of westcentral Arabian sea, adjoining parts of northwest Arabian Sea, adjoining & some parts of southwest, eastcentral Arabian Sea; Squally weather with wind speed reaching 40 50 kmph gusting to 60 kmph likely to prevail along and off south Gujarat, Konkan, Goa, Karnataka coasts, over most parts of eastcentral Arabian Sea, along and off Andhra Pradesh coast, most parts of central southwest Bay of Bengal, few parts of southeast Bay of Bengal, over Andaman Sea, few parts of Gulf of Mannar.





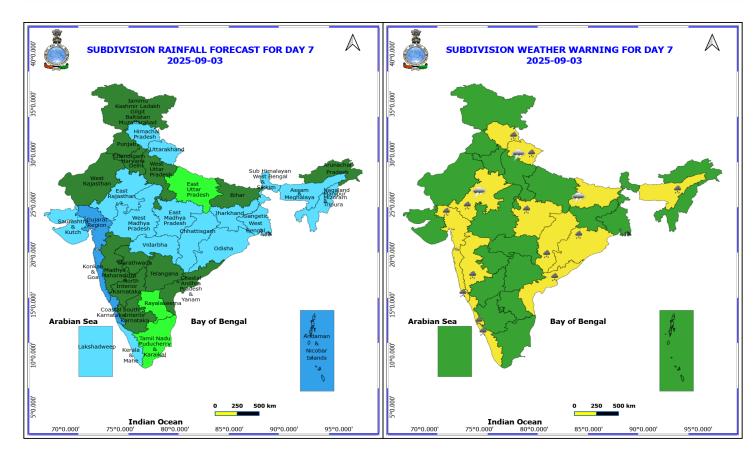


2 September (Day 6)

- Heavy to Very Heavy Rainfall likely at isolated places over Uttarakhand.
- ♦ Heavy Rainfall likely at isolated places over Assam & Meghalaya, Chhattisgarh, Coastal Karnataka, East Madhya Pradesh, East Rajasthan, Gujarat Region, Haryana, Chandigarh & Delhi, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Kerala & Mahe, Konkan & Goa, Madhya Maharashtra, Nagaland, Manipur, Mizoram and Tripura, Odisha and Uttar Pradesh.
- Thunderstorm accompanied with lightning & gusty winds(30-40kmph) likely at isolated places over Bihar and Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- Thunderstorm accompanied with Lightning likely at isolated places over East Rajasthan and Uttarakhand.

No Fishermen Warning





3 September (Day 7)

- Heavy to Very Heavy Rainfall likely at isolated places over Uttarakhand.
- ♦ Heavy Rainfall likely at isolated places over Bihar, Chhattisgarh, Coastal Karnataka, East Rajasthan, Gujarat Region, Haryana, Chandigarh & Delhi, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Konkan & Goa, Madhya Maharashtra, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Odisha, Punjab and Uttar Pradesh.
- ♦ Thunderstorm accompanied with lightning & gusty winds(30-40kmph) likely at isolated places over Andaman & Nicobar Islands, Bihar, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Jharkhand and Telangana.
- ❖ Thunderstorm accompanied with Lightning likely at isolated places over Chhattisgarh, Coastal Andhra Pradesh, East Rajasthan, Gujarat State, Madhya Pradesh, Odisha and Uttarakhand.
- ♦ Strong Surface Winds likely at isolated places over Andaman & Nicobar Islands, Coastal Andhra Pradesh, Coastal Karnataka, Konkan & Goa and Saurashtra & Kutch.

No Fishermen Warning



National Weather Forecasting Centre Indian Meteorological Department Ministry of Earth Sciences

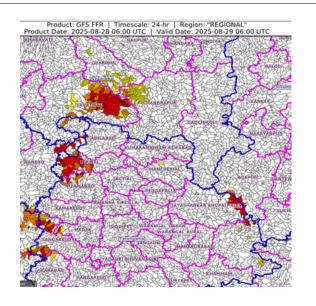
Flash Flood Warnings

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 29-08-2025 :

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

Telangana - Adilabad, Kamareddy, Medak, Nirmal, Nizamabad, Sangareddy and Vikarabad districts. **Vidarbha** - Chandrapur, Wardha and Yavatmal districts.

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





National Weather Forecasting Centre Indian Meteorological Department Ministry of Earth Sciences

Table-1

7 Days	Rainfall	Forecast

	I Days Kallil							
S.No.	Subdivision	28-	29-	30-	31-	1- Sep	2- Sep	3- Sep
		Aug	Aug	Aug	Aug			
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1 A	ANDAMAN & NICOBAR ISLANDS	FWS	FWS	FWS	WS	WS	WS	WS
2 A	ARUNACHAL PRADESH	WS	WS	FWS	SCT	SCT	SCT	SCT
3 <i>A</i>	ASSAM & MEHGHALAYA	WS	WS	SCT	SCT	SCT	SCT	FWS
4 1	N. M. M. & T.	WS	WS	FWS	SCT	SCT	FWS	FWS
5 5	S.H. WEST BENGAL & SIKKIM	WS	WS	WS	FWS	FWS	FWS	FWS
6 (GANGETIC WEST BENGAL	FWS	WS	FWS	FWS	FWS	FWS	FWS
7 (ODISHA	SCT	SCT	FWS	FWS	FWS	FWS	FWS
8 .	JHARKHAND	SCT	FWS	WS	WS	WS	FWS	FWS
9 E	BIHAR	SCT	SCT	FWS	FWS	FWS	SCT	SCT
10 E	EAST UTTAR PRADESH	ISOL	ISOL	ISOL	SCT	FWS	SCT	ISOL
11 \	WEST UTTAR PRADESH	ISOL	ISOL	SCT	FWS	WS	FWS	SCT
12 l	UTTARAKHAND	WS	WS	WS	WS	WS	WS	FWS
13 H	HARYANA, CHD & DELHI	SCT	SCT	FWS	FWS	FWS	FWS	SCT
14 F	PUNJAB	ISOL	SCT	FWS	FWS	FWS	SCT	SCT
15 H	HIMACHAL PRADESH	FWS	WS	WS	WS	WS	FWS	FWS
16	JAMMU AND KASHMIR AND LADAKH	SCT	SCT	FWS	FWS	FWS	FWS	SCT
17 \	WEST RAJASTHAN	SCT	SCT	SCT	SCT	SCT	SCT	SCT
18 E	EAST RAJASTHAN	SCT	FWS	FWS	FWS	FWS	FWS	FWS
19 V	WEST MADHYA PRADESH	FWS	FWS	WS	WS	WS	FWS	FWS
20 E	EAST MADHYA PRADESH	FWS	FWS	FWS	WS	WS	FWS	FWS
21 (GUJRAT REGION	WS	WS	WS	WS	WS	WS	WS
22 5	SAURASHTRA & KUTCH	SCT	FWS	FWS	FWS	FWS	FWS	FWS
23 k	KONKAN & GOA	WS	WS	WS	WS	WS	WS	WS
24 N	MADHYA MAHARASHTRA	FWS	FWS	SCT	SCT	SCT	SCT	SCT
25 N	MARATHWADA	WS	FWS	ISOL	ISOL	ISOL	ISOL	SCT
26 \	VIDARBHA	WS	WS	FWS	SCT	SCT	FWS	FWS
27 (CHATTISGARH	FWS	SCT	FWS	FWS	FWS	FWS	FWS
28 (COASTAL ANDHRA PRADESH	FWS	SCT	SCT	SCT	SCT	SCT	SCT
29 7	TELANGANA	WS	FWS	FWS	SCT	SCT	SCT	SCT
30 F	RAYALASEEMA	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
31 7	TAMILNADU & PUDUCHERRY	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
32 (COSTAL KARNATAKA	WS	WS	WS	WS	WS	WS	WS
33 1	NORTH INTERIOR KARNATAKA	WS	FWS	FWS	SCT	SCT	SCT	SCT
34 5	SOUTH INTERIOR KARNATAKA	WS	FWS	SCT	SCT	ISOL	ISOL	SCT
35 k	KERALA	WS	WS	FWS	FWS	FWS	FWS	FWS
36 L	LAKSHDWEEP	WS	WS	FWS	FWS	FWS	FWS	FWS

Legend	Category	%Stations
WS	Widespread/Most Places	76-100
FWS	Fairly Widespread/Many Places	51-75
SCT	Scattered/ A Few Places	26-50
ISOL	Isolated Places	1-25
DRY	No Rain	0

Fig. 1: Maximum Temperatures Dated 2025-08-28

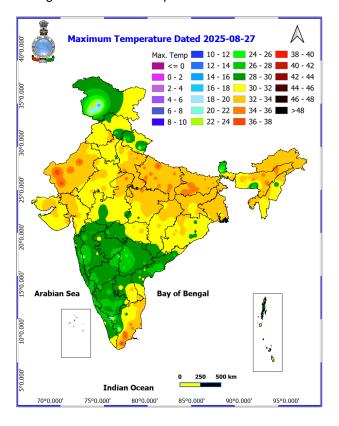


Fig. 3: Minimum Temperatures Dated 2025-08-28

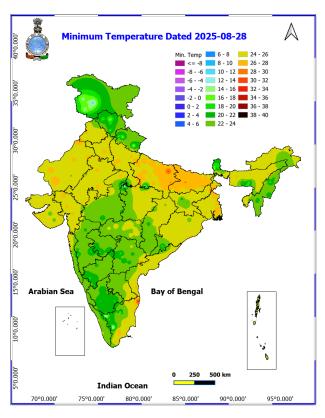


Fig. 2: Departure of Maximum Temp. Dated 2025-08-28

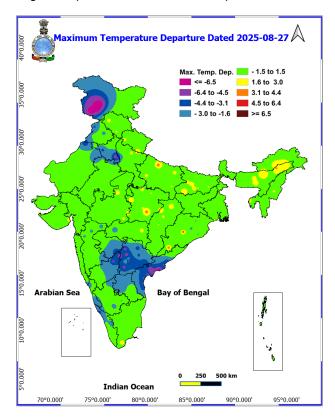
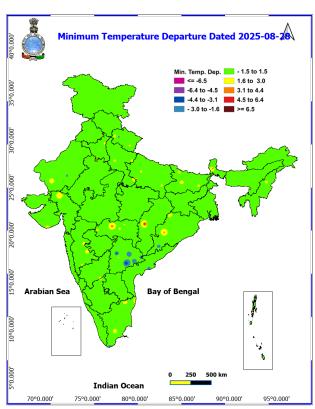
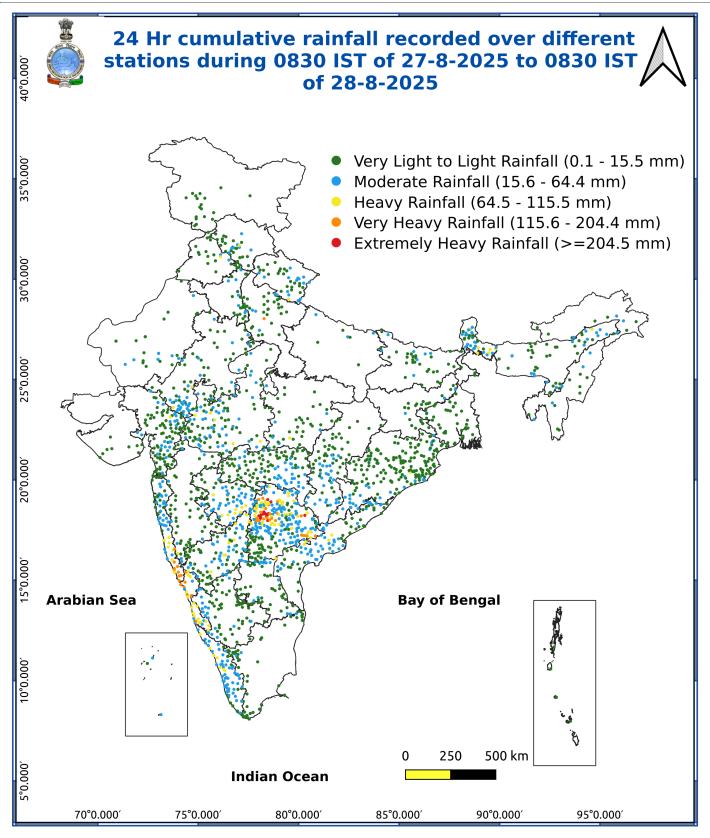


Fig. 4: Departure of Minimum Temp. Dated 2025-08-28









National Weather Forecasting Centre Indian Meteorological Department Ministry of Earth Sciences

Impact & Action Suggested due to

Isolated Extremely heavy rainfall very likely at isolated places over Telangana and Coastal Karnataka on 28th August.

Isolated very heavy rainfall over Coastal Karnataka on 29th & 30th; Interior Karnataka, Tamil Nadu, Kerala, Vidarbha, Sub-Himalayan West Bengal, Konkan, Goa, Marathawada on 28th; ghat areas of Madhya Maharashtra on 28th & 29th August; over Uttarakhand on 28th & 29th August, 01st & 02nd September and East Rajasthan on 31st August.

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 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/mudslips/landsinks/mudsinks.
- 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

- 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 various parts of the country

Agromet advisories for likely impact of Heavy / Heavy to Very Heavy / Extremely Heavy Rainfall

In **Telangana**, drain out excess water from fields of rice, cotton, maize, soybean, pigeon pea, turmeric and vegetables in **Northern Telangana Zone** and rice, cotton, soybean, maize and pigeon pea in **Southern Telangana Zone**.

In **Karnataka**, provide adequate drainage facilities in rice fields and plantations of arecanut and banana in **Coastal Zone**; rice, maize, cotton, ginger fields and plantations of arecanut in **Hill Zone**; maize, ginger fields and plantations of arecanut and black pepper in **Southern Transition Zone** and groundnut, green gram, cotton and pigeon pea fields in **North East Dry Zone**.

In **Kerala**, ensure adequate drainage facilities in rice nursery and standing crop fields. Provide support to banana plants.

In **Coastal Andhra Pradesh**, make arrangements for draining excess water from fields of maize, green gram, groundnut, mesta and cotton in **North Coastal Zone**; maize, groundnut, finger millet, ginger, turmeric and vegetables in **High Altitude Tribal Zone** andrice, maize, pigeon pea, cotton, black gram and groundnut in **Krishna Godavari Zone**.

In **Maharashtra**, make arrangements to drain out excess water from fields of rice, finger millet, turmeric, groundnut, vegetables and fruit orchards in **Konkan**; rice, maize, groundnut, soybean, vegetable fields and fruit orchards in **ghat areas** of **Madhya Maharashtra**; cotton, pigeon pea, soybean, vegetables and fruit orchards in **Vidarbha**and black gram, green gram, soybean, cotton, pigeon pea, groundnut, maize, sorghum, pearl millet, sugarcane, turmeric, vegetables and fruit orchards in **Marathwada**.





National Weather Forecasting Centre Indian Meteorological Department Ministry of Earth Sciences

In **Uttarakhand**, maintain proper drainage channels in fields of barnyard millet, finger millet and green gram in **Sub Humid Sub Tropic Zone** and rice, green gram, black gram, sugarcane, maize, groundnut, finger millet and vegetables in **Bhabar and Tarai Zone**. In **Hill Zone**, postpone sowing of vegetable pea and radish and provide proper drainage in fields of finger millet and kidney beans.

In **Jammu and Kashmir**, drain out excess rain water from fields of rice, maize, pulses and vegetables in **Sub Tropical Zone** and maize, *kharif* pulses, rice and vegetables in**Intermediate Zone**. In **Valley Temperate Zone**, ensure proper drainage in fields of maize, kidney beans and vegetables and maintain a thin layer of water in rice fields.

In **Himachal Pradesh**, maintain proper drainage channels in ginger, turmeric and maize fields in **Mid Hills Sub Humid Zone** and rice, maize and vegetable fields in **Sub Montane and Low Hills Sub Tropical Zone**. In **High Hills Sub Temperate Wet Zone**, postpone transplanting of cauliflower, cabbage and broccoli seedlings and make proper drainage channels in fields of maize, finger millet and vegetables to avoid water stagnation.

In **Sub-Himalayan West Bengal**, make provision to drain out excess water from *aman* paddy and vegetable fields (chilli, bitter gourd, pointed gourd, okra, brinjal etc.) in **Terai Zone**.

Livestock / Fishery

Keep the animals inside the shed during heavy rainfall and provide them balanced feed.

Store feed and fodder in a safe place to prevent spoilage.

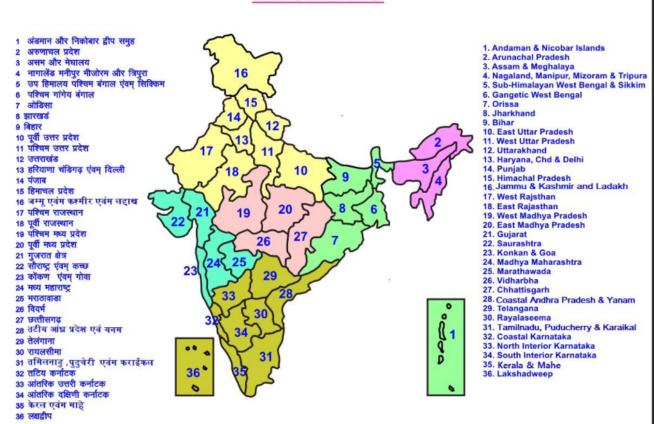
Construct an outlet with proper netting around the ponds to drain out excess water, thereby preventing fish from escaping in case of overflow.

Agromet advisories for likely impact of Thunderstorm / Gusty Winds / Squally Winds

Provide mechanical support to horticultural crops and staking or support to vegetables and young fruit plants / fruit-bearing plants to avoid lodging due to strong winds.



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 Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)

Subdivision Colour

NO WARNING

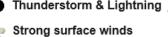
WATCH (BE UPD

ALERT (BE PREI

	Terms	Probability of Occurrence (%)
	Unlikely	< 25
DATED)	Likely	25 - 50
DADED TO TAKE ACTION	Very Likely	50 - 75
PARED TO TAKE ACTION	Most Likely	> 75

WARNING (TAKE ACTION)







_	Very	Heavy	Rair
4	Very	Heavy	Rair

Hailstrom



Probabilistic Forecast



Dust Strom



Heat Wave Cold Day



Ground Frost

Hot Day

FOG FOG



		LEGENDS		
	WARNING	Probabilistic Forecast		
	WARNING (TAKE ACTION)	Terms Probability of Occurrence (%)		
	ALERT (BE PREPARED)	Unlikely < 25 Likely 25 - 50		
	WATCH (BE UPDATED)	Very Likely 50 - 75		
- / -	NO WARNING (NO ACTION)	Most Likely > 75		
Rain/ Snow	Heavy: 64.5 to 115.5 mm/cm * Very Heavy: 115.6 to 204.4 mm/cm * Extremely Heavy: > 204.4 mm/cm *			
	(a) Based on Departure from norm		lly region	
	Heat Wave: Maximum Temperature De Severe Heat Wave: Maximum Tempera			
(b). Based on Actual maximum temperature				
Heat Wave	Heat Wave: When actual maximum tem			
	Severe Heat Wave: When actual maxin	/		
	 (c). Criteria for heat wave for coas When maximum temperature departure temperature ≥37°C 	stal stations is >4.5°C from normal. Heat Wave may be described provided	maximu	
8.	When maximum temperature rem			
Varm Night	Warm Night: When minimum temperatu			
3	Severe Warm Night: When minimum to	amperature departure >0.4 °C.		
	(a). Based on departure	a station ≤10°C for plains and ≤0°C for hilly regio	ns.	
	Cold Wave: Minimum Temperature Dep Severe Cold Wave: Minimum Temperat		_	
Ų-	(b) Based on actual Minimum Ten			
Cold Wave	Cold Wave : When Minimum Temperatu			
	Severe Cold Wave: When Minimum Te	emperature is ≤ 2.0 °C		
	(c) For Coastal Stations	e is ≤-4.5 °C & actual Minimum Temperature is ≤ 15 °C		
n		station ≤10°C for plains and ≤0°C for hilly regions		
Cold Dow	Cold Day: Maximum Temperature Depart	arture from normal -4.5 °C to -6.4 °C.		
Cold Day	Severe Cold Day: Maximum Temperatu	ure Departure from normal ≤ -6.5 °C		
	Phenomenon of small droplet	s suspended in air and the horizontal visibility	< 1ki	
0	Moderate Fog: When the visibility betw			
Fog	Very Dense Fog: when the visibility between Very Dense Fog: when the visibility < 5			
/-	Sudden electrical discharges man	ifacted by a fleeb of light (Lightning) and a character	nbling	
**************************************	sound (thunder)	rrested by a flash of light (Lighthing) and a sharp run		
nunderstorm Dust/Sand Storm	sound (thunder)	or sand energetically lifted to great heights by a stron	ng and	
Dust/Sand	An ensemble of particles of dust of		ng and	
Dust/Sand Storm	An ensemble of particles of dust of turbulent wind.		ng and	
Dust/Sand	An ensemble of particles of dust of turbulent wind. Ice deposits on ground Air temperature ≤4°C (over Plains) A strong wind that rises sudd		ng and	
Dust/Sand Storm	An ensemble of particles of dust of turbulent wind. Ice deposits on ground Air temperature ≤4°C (over Plains) A strong wind that rises sudd Moderate: Wind speed 52-61 kmph	or sand energetically lifted to great heights by a stron	ng and	
Dust/Sand Storm	An ensemble of particles of dust of turbulent wind. Ice deposits on ground Air temperature ≤4°C (over Plains) A strong wind that rises sudd	or sand energetically lifted to great heights by a stron	ng and	
Dust/Sand Storm	An ensemble of particles of dust of turbulent wind. Ice deposits on ground Air temperature ≤4°C (over Plains) A strong wind that rises sudd Moderate: Wind speed 52-61 kmph Severe: Wind speed 52-87 kmph Very Severe: Wind speed >87 kmph	or sand energetically lifted to great heights by a stron	ng and	
Dust/Sand Storm	An ensemble of particles of dust of turbulent wind. Ice deposits on ground Air temperature ≤4°C (over Plains) A strong wind that rises sudd Moderate: Wind speed 52-61 kmph Severe: Wind speed 52-87 kmph Very Severe: Wind speed >87 kmph Effect of various waves in the sea	or sand energetically lifted to great heights by a stron	ng and	
Dust/Sand Storm Frost Squall	An ensemble of particles of dust of turbulent wind. Ice deposits on ground Air temperature ≤4°C (over Plains) A strong wind that rises sudd 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 Rough to very rough: Wind speed 41-High to very high: Wind speed 63-117	pr sand energetically lifted to great heights by a strong	ng and	
Dust/Sand Storm	An ensemble of particles of dust of turbulent wind. Ice deposits on ground Air temperature ≤4°C (over Plains) A strong wind that rises sudd 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 Rough to very rough: Wind speed 41-	pr sand energetically lifted to great heights by a strong	ng and	
Dust/Sand Storm Frost Squall	An ensemble of particles of dust of turbulent wind. Ice deposits on ground Air temperature ≤4°C (over Plains) A strong wind that rises sudd 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 Rough to very rough: Wind speed 41-High to very high: Wind speed 63-117	or sand energetically lifted to great heights by a strong	ng and	
Dust/Sand Storm Frost Squall	An ensemble of particles of dust of turbulent wind. Ice deposits on ground Air temperature ≤4°C (over Plains) A strong wind that rises sudd 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 Rough to very rough: Wind speed 41-High to very high: Wind speed 63-117 Phenomenal: Wind speed >117 kmph (Cyclonic Storm: Wind speed 62-87 km Severe Cyclonic Storm: Wind speed 83-117 Wind	denly, lasts for atleast 1 minute. a over specific area 62 kmph (22-33 knots) & Wave height 2.5-6 metre kmph (34-63 knots) & Wave height 6-14 metre >63 knots) & Wave height >14 metre ph (34-47 knots) 88-117 kmph (48-63 knots)	ng and	
Dust/Sand Storm Frost Squall	An ensemble of particles of dust of turbulent wind. Ice deposits on ground Air temperature \$4°C (over Plains) A strong wind that rises sudd Moderate: Wind speed 52-61 kmph Severe: Wind speed 52-87 kmph Very Severe: Wind speed >87 kmph Effect of various waves in the sea Rough to very rough: Wind speed 41-High to very high: Wind speed 63-117 Phenomenal: Wind speed >117 kmph (Cyclonic Storm: Wind speed 62-87 km Severe Cyclonic Storm: Wind speed 84-Very Severe Cyclonic Storm: Wind speed 85-Very Severe Cyclonic Storm: Wind Severe Cyclonic Storm: Wind speed 85-Very Severe Cyclonic Storm: Wind Severe Cyclonic St	denly, lasts for atleast 1 minute. a over specific area 62 kmph (22-33 knots) & Wave height 2.5-6 metre kmph (34-63 knots) & Wave height 6-14 metre >63 knots) & Wave height >14 metre ph (34-47 knots) 88-117 kmph (48-63 knots)	ng and	