



Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release

Date: 03<sup>rd</sup> August, 2024

Time of Issue: 1400 hours IST

**Subject: 1) Deep Depression over southwest Bihar and adjoining northwest Jharkhand  
2) A Low Pressure Area formed over southwest Rajasthan & neighbourhood  
3) Under influence of both the systems: a) isolated extremely heavy rainfall likely over Jharkhand, Chhattisgarh, East Madhya Pradesh on 03<sup>rd</sup> West Madhya Pradesh on 03<sup>rd</sup> & 04<sup>th</sup>; East Rajasthan on 04<sup>th</sup> Aug. b) Isolated very heavy rainfall also likely over West Uttar Pradesh on 03<sup>rd</sup>; East Uttar Pradesh on 03<sup>rd</sup> & 04<sup>th</sup>; Uttarakhand on 07<sup>th</sup> August.**

**Realised weather during past 24 hours till 0830 hours IST of today (Annexure I)**

**Heavy to very heavy rainfall** with **extremely heavy rainfall** occurred at isolated places over Jharkhand, Meghalaya, Chhattisgarh; **Heavy to very heavy rainfall** at isolated places over Rajasthan, West Madhya Pradesh, Coastal Karnataka, South Interior Karnataka, Gujarat Region, Madhya Maharashtra; **Heavy rainfall** at isolated places over Kerala, Punjab, East Madhya Pradesh, Vidarbha, Saurashtra & Kutch, Himachal Pradesh, Uttarakhand, Konkan & Goa, Bihar, Odisha, North Interior Karnataka, West Bengal & Sikkim, Arunachal Pradesh and Tripura.

**Weather Systems**

- ✓ The **Low Pressure** Area over Gangetic West Bengal and adjoining Jharkhand moved west-northwestwards, intensified into a depression at 1730 hours IST of 02<sup>nd</sup> August. It further intensified into a **deep depression** and lay centered at 0830 hours IST of today, the 03<sup>rd</sup> August over southwest Bihar and adjoining northwest Jharkhand near latitude 24.4°N and longitude 84.4°E, about 50 km northeast of Daltonganj (Jharkhand), 60 km south-southeast of Dehri (Bihar) and 140 km east-southeast of Churk (Uttar Pradesh). It is likely to continue to move west-northwestwards across northwest Jharkhand, southwest Bihar, southeast Uttar Pradesh and east Madhya Pradesh during next 48 hours (**refer Fig 1 for track and forecast of Deep depression**)
- ✓ A low pressure area formed over southwest Rajasthan and neighbourhood at 0830 hours IST of today, the 3<sup>rd</sup> August, 2024. It is likely to move nearly westwards during next 24 hours.
- ✓ The **Monsoon trough** is active and western end is south of the normal position at mean sea level.
- ✓ The **off-shore trough** at mean sea level runs along South Gujarat to Kerala coast.

**Forecast & Warnings: (upto 7 days): (Refer Annexure II and III)**

**Warnings associated with above systems:**

**(i) Rainfall Warning:**

**Jharkhand:**

Light to moderate rainfall at most places with **heavy to very heavy rainfall** at a few places is very likely on 3<sup>rd</sup> and isolated **extremely heavy rainfall** is also very likely over Northwest Jharkhand on 3<sup>rd</sup>; heavy rainfall at isolated places on 4<sup>th</sup> August.

**Bihar:**

Light to moderate rainfall at most places with **heavy to very heavy rainfall** at isolated places over Bihar on 3<sup>rd</sup> and 6<sup>th</sup>, heavy rainfall at isolated places on 4<sup>th</sup> & 5<sup>th</sup> August.

**Chhattisgarh:**

Light to moderate rainfall at most places with **heavy to very heavy rainfall** at a few places and **extremely heavy rainfall** at isolated places also over north Chhattisgarh is very likely on 3<sup>rd</sup> August.

**East Madhya Pradesh:**

Light to moderate rainfall at most places with **heavy to very heavy rainfall** at isolated places is very likely on 3<sup>rd</sup> & 4<sup>th</sup> and **extremely heavy rainfall** at isolated places is also very likely on 3<sup>rd</sup> August.

**West Madhya Pradesh:**

Light to moderate rainfall at most places is very likely with **heavy to very heavy rainfall** at isolated places is very likely during 3<sup>rd</sup> to 5<sup>th</sup> and **extremely heavy rainfall** at isolated places is also very likely on 3<sup>rd</sup> and 4<sup>th</sup> August.

**East Uttar Pradesh:**

Light to moderate rainfall at many places with **heavy to very heavy rainfall** at a few places and **extremely heavy rainfall** at isolated places over southeast Uttar Pradesh is very likely on 3<sup>rd</sup> and 4<sup>th</sup> August.

**West Uttar Pradesh:**

Light to moderate rainfall at many places with heavy to very heavy rainfall at isolated places is very likely on 3<sup>rd</sup> and isolated heavy on 4<sup>th</sup>.

**East Rajasthan:**

Light to moderate rainfall at most places with heavy rainfall at isolated places is very likely during 3<sup>rd</sup> to 6<sup>th</sup>; very heavy rainfall at isolated places on 3<sup>rd</sup> and **extremely heavy rainfall** is very likely on 4<sup>th</sup> August

**West Rajasthan:**

Light to moderate rainfall at most places with heavy to very heavy rainfall at isolated places is very likely during 3<sup>rd</sup>, 5<sup>th</sup> and 6<sup>th</sup> and heavy rainfall at isolated places on 4<sup>th</sup> August

**Gujarat region:**

Light to moderate rainfall at most places with heavy to very heavy rainfall at isolated on 3<sup>rd</sup> and 4<sup>th</sup> and extremely heavy rainfall at isolated places on 3<sup>rd</sup>.

**Saurashtra & Kutch.**

Light to moderate rainfall at most places with heavy to very heavy rainfall at isolated on 3<sup>rd</sup> and heavy rainfall on 4<sup>th</sup> August.

**West Bengal:**

Light to moderate rainfall at most places with **heavy to very heavy rainfall** at isolated places is very likely over Sub-Himalayan West Bengal during 3<sup>rd</sup> to 6<sup>th</sup> August.

Light to moderate rainfall at most places with isolated **heavy rainfall** is very likely over Gangetic West Bengal on 3<sup>rd</sup> August.

**❖ Forecast warning for remaining parts of Northwest India**

- ✓ Fairly widespread to widespread light to moderate rainfall **accompanied with thunderstorm & lightning** very likely over Jammu-Kashmir, Himachal Pradesh, Uttarakhand; scattered to fairly widespread rainfall over Uttar Pradesh and Rajasthan; isolated to scattered rainfall over Punjab, Haryana-Chandigarh-Delhi during the week.
- ✓ **Isolated very heavy rainfall also likely over Uttarakhand on 07<sup>th</sup> August.**
- ✓ Isolated **heavy rainfall** very likely over Jammu-Kashmir during 03<sup>rd</sup>-05<sup>th</sup>; Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan during 03<sup>rd</sup>-10<sup>th</sup>; Punjab on 03<sup>rd</sup>, 04<sup>th</sup> & 07<sup>th</sup>; Haryana-Chandigarh on 04<sup>th</sup> & 07<sup>th</sup> August.

**❖ West & Central India**

- ✓ Fairly widespread to widespread light to moderate rainfall **accompanied with thunderstorm & lightning** very likely over the region during the week.
- ✓ **Isolated extremely heavy rainfall very likely over ghat areas of Madhya Maharashtra, Konkan & Goa on 03<sup>rd</sup> & 04<sup>th</sup> August.**

- ✓ **Heavy to very heavy rainfall very likely at isolated places over Konkan & Goa during 03<sup>rd</sup>-07<sup>th</sup>; Madhya Maharashtra during 03<sup>rd</sup>-06<sup>th</sup> August.**
- ✓ **Heavy rainfall very likely at isolated places over Vidarbha on 03<sup>rd</sup>; Marathwada on 03<sup>rd</sup> & 04<sup>th</sup> August.**

❖ **East & Northeast India**

- ✓ Fairly widespread to widespread light to moderate rainfall **accompanied with thunderstorm, lightning** very likely over East & Northeast India during the week.
- ✓ **Isolated extremely heavy rainfall very likely over Meghalaya on 03<sup>rd</sup> August.**
- ✓ **Very heavy rainfall very likely at isolated places over Assam & Meghalaya on 06<sup>th</sup> & 07<sup>th</sup> and Manipur, Mizoram & Tripura on 05<sup>th</sup> August.**
- ✓ Isolated **heavy rainfall** very likely over Odisha on 03<sup>rd</sup> and during 06<sup>th</sup>-08<sup>th</sup>; Gangetic West Bengal on 06<sup>th</sup>; Jharkhand on 06<sup>th</sup> & 07<sup>th</sup>; Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya during 03<sup>rd</sup>-10<sup>th</sup> August.

❖ **South Peninsular India:**

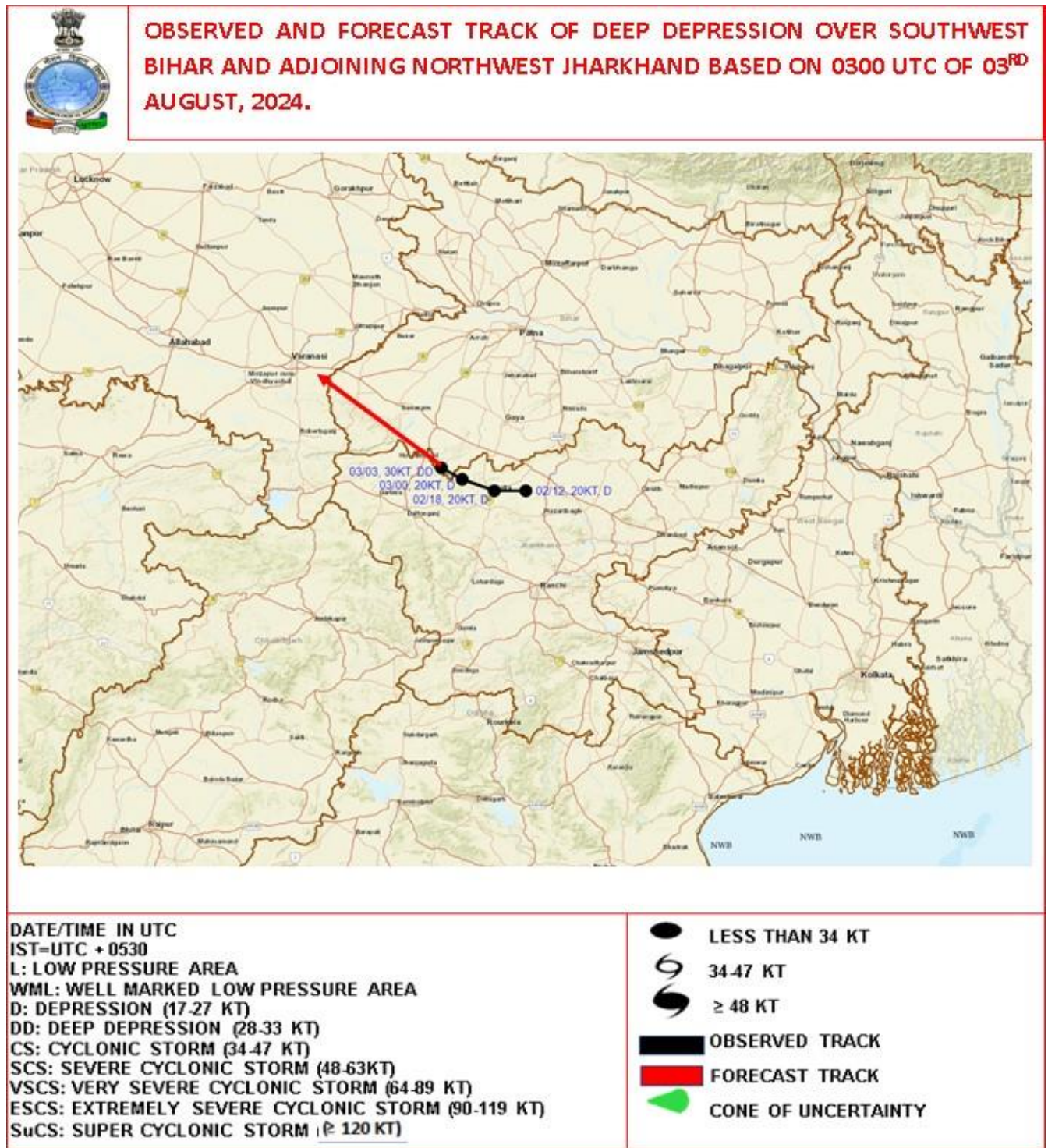
- ✓ Fairly widespread to widespread light to moderate rainfall over Coastal Karnataka, Lakshadweep and Kerala & Mahe, Karnataka and isolated to scattered rainfall over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Telangana and Rayalaseema during next 5 days.
- ✓ **Very heavy rainfall very likely at isolated places over South Interior Karnataka on 03<sup>rd</sup>; Coastal Karnataka on 03<sup>rd</sup> & 04<sup>th</sup> August.**
- ✓ **Heavy rainfall** very likely at isolated places over Kerala & Mahe, Tamil Nadu during 03<sup>rd</sup>-05<sup>th</sup>; Coastal Karnataka during 03<sup>rd</sup> -06<sup>th</sup>; North Interior Karnataka on 03<sup>rd</sup>; South Interior Karnataka on 03<sup>rd</sup> & 04<sup>th</sup> August.

For more details, kindly refer: [https://mausam.imd.gov.in/responsive/all\\_india\\_forcast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forcast_bulletin.php)

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

- ❖ **Jharkhand:** Mandu (dist Ramgarh) 27, Ramgarh Kvk Aws (dist Ramgarh) 27, Bau Kanke (dist Ranchi) 26, Purvi Tundi (dist Dhanbad) 24, Hendigir (dist Hazaribag) 21, Koner (dist Hazaribag) 19, Bokaro Thermal (dist Bokaro) 17, Ranchi Aero (dist Ranchi) 17, Ormanjhi (dist Ranchi) 17, Papunki (dist Dhanbad) 16, Ramgarh (dist Ramgarh) 16, Icar Namkum (dist Ranchi) 15, Rajdhanwar (dist Giridih) 14, Balumath (dist Latehar) 14, Putki (dist Dhanbad) 13, Barkisuriya (dist Giridih) 13, Bhurkunda (dist Ramgarh) 13, Tenughat (dist Bokaro) 13, Maithon (dist Dhanbad) 13, Mandu Dvc (dist Ramgarh) 13, Gobindpur (dist Dhanbad) 12, Tilaiya (dist Koderma) 12, Giridih (dist Giridih) 12, Bandgaon (dist West Singhbhum) 12, Sisai (dist Gumla) 12, Jamtara Fmo (dist Jamtara) 12;
- ❖ **Assam & Meghalaya:** Cherrapunji(rkm) (dist East Khasi Hills) 25, Cherrapunji (dist East Khasi Hills) 22, Mawsynram (dist East Khasi Hills) 21, Mawkyrwat (dist South West Khasi Hills) 20, Mawkyrwat\_arg (dist South West Khasi Hills) 16, Mawphlang (dist East Khasi Hills) 15, Williamnagar (dist East Garo Hills) 11, Nongstein (dist West Khasi Hills) 10, Srijangram Arg (dist Bongaigaon) 7, Manikpur Arg (dist Bongaigaon) 7;
- ❖ **CHHATTISGARH:** Shankargarh (dist Balrampur) 21, Kusmi (dist Balrampur) 18, Rajpur (dist Balrampur) 16, Odagi (dist Surajpur) 13, Ramanujganj (dist Balrampur) 12, Pratappur (dist Surajpur) 12, Samari (dist Balrampur) 12, Chando (dist Balrampur) 12, Raghunath Nagar (dist Balrampur) 11, Bhanupratappur (dist Kanker) 10, Balrampur (dist Balrampur) 10, Wandrafanagar (dist Balrampur) 10, Doura Kochali (dist Balrampur) 10, Bhatgaon (dist Surajpur) 9, Kelhari (dist Manendragarh Bharatpur) 9, Janakpur Bharatpur (dist Manendragarh Bharatpur) 9, Chalgali (dist Balrampur) 9, Durg (dist Durg) 8, Biharpur (dist Surajpur) 8, Kutaru (dist Bijapur) 8, Bhairamgarh (dist Bijapur) 8, Sonhat (dist Koriya) 8, Durgkondal (dist Kanker) 8, Kotadol (dist Manendragarh Bharatpur) 7, Manora (dist Jashpur) 7, Latori (dist Surajpur) 7, Bhaiyathan (dist Surajpur) 7, Pakhanjur (dist Kanker) 7, Kunkuri (dist Jashpur) 7, Lundra (dist Surguja) 7;
- ❖ **WEST RAJASTHAN:** Kolayat Magra (dist Bikaner) 19, Merta City (dist Nagaur) 13, Khivensar (dist Nagaur) 12, Sum (dist Jaisalmer) 12, Luni (dist Jodhpur) 11, Degana (dist Nagaur) 10, Nagaur Tehsil (dist Nagaur) 9, Marwar Junction (dist Pali) 9, Ramsar (dist Barmer) 8, Jaisalmer (dist Jaisalmer) 8, Balotra (dist Barmer) 7;
- ❖ **EAST RAJASTHAN:** Masuda (dist Ajmer) 18, Nayanagar/beawar (dist Ajmer) 17, Pisagan (dist Ajmer) 17, Mangliawas (dist Ajmer) 15, Bhim (dist Rajsamand) 15, Tatgarh (dist Ajmer) 13, Deogarh (dist Rajsamand) 10, Mounntabu Tehsil (dist Sirohi) 9, Begu (dist Chittorgarh) 9, Pushkar (dist Ajmer) 8, Raipur (dist Bhilwara) 7, Hurda (dist Bhilwara) 7, Mounnt Abu (dist Sirohi) 7, Sangod (dist Kota) 7;
- ❖ **GUJARAT REGION:** Valsad\_Kvk Aws (dist Valsad) 17, Kaprada (dist Valsad) 17, Daman\_aws (dist Daman), Vapi (dist Valsad) 17, Daman (dist Daman) 14, Daman Fmo (dist Daman) 13, Daman\_aws (dist Daman) 13, Pardi (dist Valsad) 12, Umergam (dist Valsad) 9, Navsari (dist Navsari) 8, Khergam (dist Navsari) 7, Chhota Udepur (dist Chhota Udepur) 7, Valod (dist Tapi) 7
- ❖ **SOUTH INTERIOR KARNATAKA:** Agumbe Emo (dist Shivamogga) 15, Sringeri Hms (dist Chikkamagaluru) 8, Linganamakki Hms (dist Shivamogga) 7, Kammardi (dist Chikkamagaluru) 7, Bhagamandala (dist Kodagu) 7, Jayapura (dist Chikkamagaluru) 7;
- ❖ **WEST MADHYA PRADESH:** Biaora (dist Rajgarh) 12, Sultanpur (dist Raisen) 11, Harda (dist Harda) 11, Raisen-aws (dist Raisen) 9, Gairatgang (dist Raisen) 8, Bareli (dist Raisen) 8, Sehore-aws (dist Sehore) 7, Udaipura (dist Raisen) 7, Badi (dist Raisen) 7, Shamshabad (dist Vidisha) 7, Berasia (dist Bhopal) 7, Ganjbasoda (dist Vidisha) 7;
- ❖ **COASTAL KARNATAKA:** Castle Rock (dist Uttara Kannada) 12, Siddapur (dist Uttara Kannada) 11, Karkala (dist Udupi) 9, Kota (dist Udupi) 9, Karwar Obsy (dist Uttara Kannada) 9, Gersoppa (dist Uttara Kannada) 8, Honavar Obsy (dist Uttara Kannada) 8, Kollur (dist Udupi) 8, Gokarna (dist Uttara Kannada) 8, Mulki (dist Dakshina Kannada) 7, Shirali Pto (dist Uttara Kannada) 7, Siddapura (dist Udupi) 7, Kundapur (dist Udupi) 7, Manki (dist Uttara Kannada) 7, Kadra (dist Uttara Kannada) 7;
- ❖ **MADHYA MAHARASHTRA:** Lonavala\_agri (dist Pune) 12, Peth (dist Nashik) 10, Velhe (dist Pune) 10, Chandgad (dist Kolhapur) 9, Surgana (dist Nashik) 9, Mahabaleshwar-Imd Obsy (dist Satara) 8, Igatpuri (dist Nashik) 7, Gaganbawada (dist Kolhapur) 7;
- ❖ **KONKAN & GOA:** Sanguem (dist South Goa) 11, Jawhar (dist Palghar) 10, Matheran (dist Raigad) 9, Mokheda - Fmo (dist Palghar) 9, Quepem (dist South Goa) 9, Roha (dist Raigad) 8, Sudhagad Pali (dist Raigad) 8, Poladpur (dist Raigad) 7;
- ❖ **Bihar:** Puraini (dist Madhepura) 11, Sherghati (dist Gaya) 9, Dobhi (dist Gaya) 8, Imamganj (dist Gaya) 8, Udai Kishanganj (dist Madhepura) 7, Kumarkhand (dist Madhepura) 7, Barachatti (dist Gaya) 7, Banka (dist Banka) 7, Rajauli (dist Nawada) 7, Madhepura 7, Deo (dist Aurangabad) 7;
- ❖ **Odisha:** Pipili (dist Puri) 11, Padia (dist Malkangiri) 9, Mathili (dist Malkangiri) 8, Korukunda (dist Malkangiri) 8, Malkangiri (dist Malkangiri) 7;
- ❖ **NORTH INTERIOR KARNATAKA:** Londa (dist Belagavi) 10;
- ❖ **Gangetic West Bengal:** Dum Dum (dist North 24 Parganas) 10, Mo Saltlake (dist North 24 Parganas) 8, Diamond Harbour (dist South 24 Parganas) 8, Burnpur (dist Paschim Bardhaman) 8, Asansol (dist Paschim Bardhaman) 8, Rajnagar (dist Birbhum) 7;
- ❖ **EAST MADHYA PRADESH:** Amarpatan (dist Satna) 9, Ramnagar (dist Satna) 9, Matiyari (dist Mandla) 9, Jaisingh Nagar (dist Shahdol) 8, Barhi (dist Katni) 7, Khurai (dist Sagar) 7, Venkatnagar (dist Anuppur) 7, Sarai (dist Singrauli) 7, Nagode (dist Satna) 7, Jaitpur (dist Shahdol) 7;
- ❖ **HIMACHAL PRADESH:** Jogindarnagar (dist Mandi) 9, Gohar (dist Mandi) 8, Shillaro (dist Shimla) 8, Baijnath (dist Kangra) 7, Paonta (dist Sirmaur) 7;
- ❖ **KERALA:** Taliparamba (dist Cannur) 8, Panniyoor Arg (dist Cannur) 7;
- ❖ **Saurashtra & Kutch:** Jodia (dist Jamnagar) 7;
- ❖ **PUNJAB:** Ranjit Sagar Dam Site (dist Pathankot) 7;



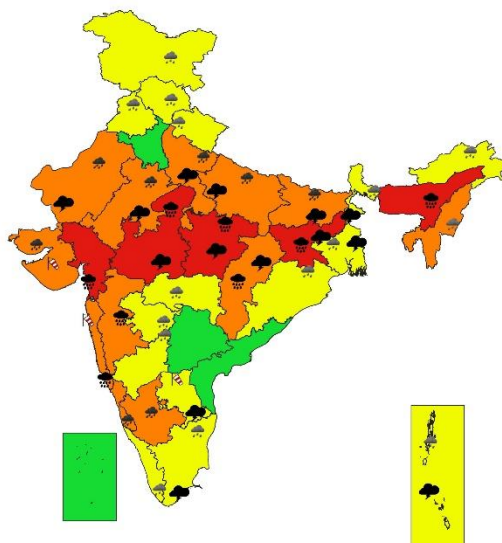


7 Days Rainfall Forecast								
S. No.	Subdivision	03-Aug	04-Aug	05-Aug	06-Aug	07-Aug	08-Aug	09-Aug
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	FWS	WS	WS	WS	FWS	FWS	FWS
2	ARUNACHAL PRADESH	WS	WS	FWS	FWS	FWS	WS	WS
3	ASSAM & MEGHALAYA	WS	FWS	FWS	WS	WS	WS	WS
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	WS	FWS	WS	WS	WS	WS	WS
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	WS	WS	WS	WS	WS	WS	WS
6	GANGETIC WEST BENGAL	WS	FWS	FWS	WS	FWS	FWS	FWS
7	ODISHA	FWS	FWS	SCT	FWS	WS	FWS	FWS
8	JHARKHAND	WS	FWS	FWS	WS	WS	WS	FWS
9	BIHAR	WS	FWS	FWS	WS	WS	WS	WS
10	EAST UTTAR PRADESH	FWS	SCT	SCT	FWS	WS	FWS	FWS
11	WEST UTTAR PRADESH	SCT	SCT	SCT	FWS	WS	FWS	FWS
12	UTTARAKHAND	WS	FWS	FWS	FWS	WS	WS	WS
13	HARYANA CHANDIGARH & DELHI	SCT	SCT	SCT	SCT	FWS	FWS	SCT
14	PUNJAB	SCT	SCT	SCT	SCT	FWS	SCT	SCT
15	HIMACHAL PRADESH	WS	WS	WS	FWS	WS	WS	WS
16	JAMMU & KASHMIR AND LADAKH	FWS	FWS	FWS	SCT	SCT	SCT	SCT
17	WEST RAJASTHAN	FWS	FWS	WS	FWS	SCT	SCT	FWS
18	EAST RAJASTHAN	FWS	WS	WS	FWS	FWS	FWS	FWS
19	WEST MADHYA PRADESH	WS	WS	WS	FWS	FWS	FWS	FWS
20	EAST MADHYA PRADESH	WS	WS	WS	WS	WS	FWS	FWS
21	GUJARAT REGION	WS	WS	WS	FWS	FWS	FWS	FWS
22	SAURASHTRA & KUTCH	WS	FWS	FWS	SCT	SCT	SCT	SCT
23	KONKAN & GOA	WS	WS	WS	WS	WS	WS	WS
24	MADHYA MAHARASHTRA	WS	WS	FWS	SCT	SCT	SCT	SCT
25	MARATHAWADA	WS	FWS	SCT	SCT	SCT	ISOL	ISOL
26	VIDARBHA	WS	WS	FWS	FWS	FWS	FWS	FWS
27	CHHATTISGARH	WS	FWS	SCT	FWS	FWS	FWS	FWS
28	COASTAL ANDHRA PRADESH & YANAM	SCT	SCT	SCT	SCT	FWS	FWS	FWS
29	TELANGANA	SCT	SCT	SCT	FWS	FWS	SCT	SCT
30	RAYALASEEMA	ISOL	ISOL	ISOL	ISOL	SCT	SCT	SCT
31	TAMILNADU PUDUCHERRY & KARAIKAL	SCT	SCT	SCT	SCT	SCT	SCT	ISOL
32	COASTAL KARNATAKA	WS	WS	WS	WS	WS	FWS	FWS
33	NORTH INTERIOR KARNATAKA	SCT	SCT	SCT	FWS	FWS	FWS	SCT
34	SOUTH INTERIOR KARNATAKA	SCT	FWS	FWS	FWS	FWS	SCT	SCT
35	KERALA & MAHE	WS	WS	WS	FWS	FWS	FWS	FWS
36	LAKSHADWEEP	WS	WS	FWS	FWS	SCT	SCT	SCT

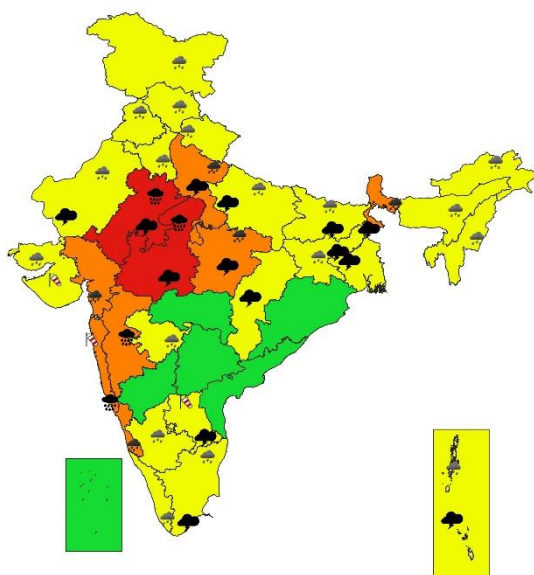
- As the lead period increases forecast accuracy decreases.



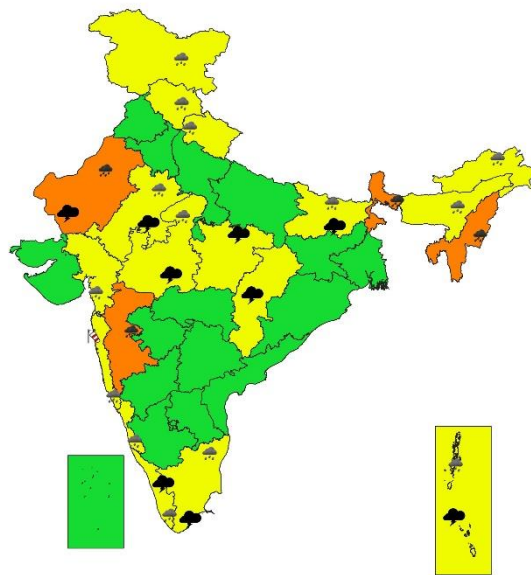
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1  
03-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 2  
04-08-2024



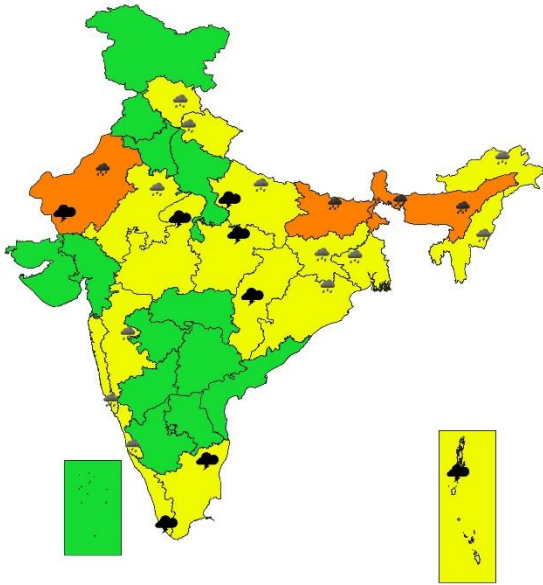
SUBDIVISIONWISE WEATHER WARNING FOR DAY 3  
05-08-2024



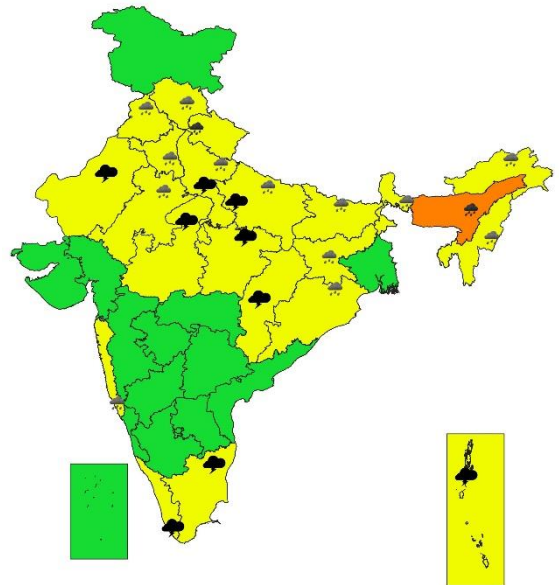




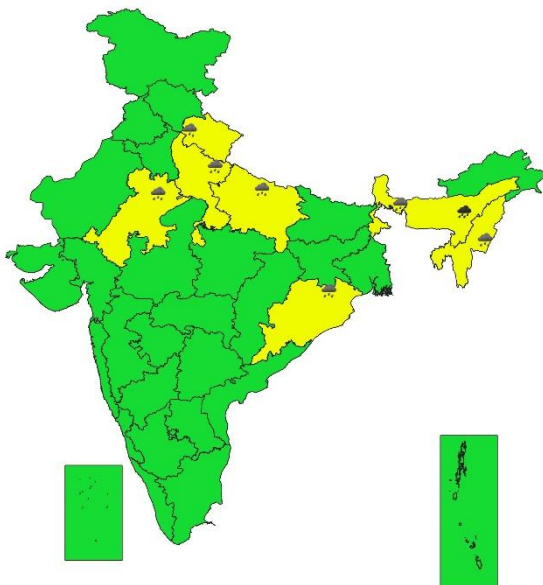
SUBDIVISIONWISE WEATHER WARNING FOR DAY 4  
06-08-2024



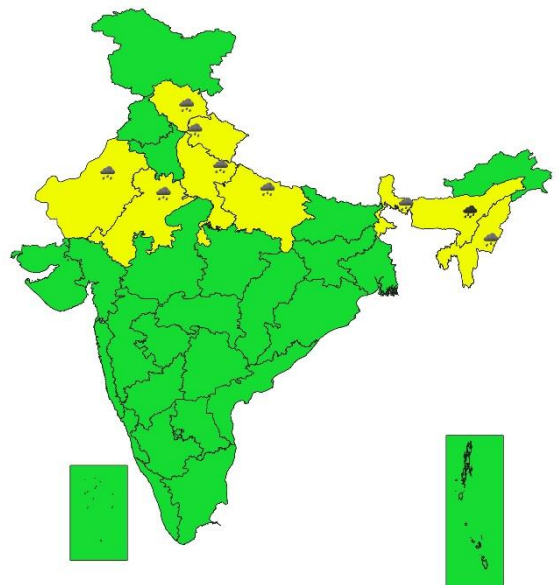
SUBDIVISIONWISE WEATHER WARNING FOR DAY 5  
07-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 6  
08-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 7  
09-08-2024



- Action may be taken based on **ORANGE AND RED** COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.



## **IMPACT due to**

- **Isolated extremely heavy rainfall very likely over Chhattisgarh, East Madhya Pradesh, Gujarat Region, Jharkhand and Meghalaya & Tripura on 03<sup>rd</sup>; West Madhya Pradesh, ghat areas of Madhya Maharashtra, Konkan & Goa on 03<sup>rd</sup> & 04<sup>th</sup> and East Rajasthan on 04<sup>th</sup> August.**
- **Isolated very heavy rainfall also likely over East Rajasthan, West Uttar Pradesh, South Interior Karnataka, Saurashtra & Kutch on 03<sup>rd</sup>; East Uttar Pradesh, Coastal Karnataka, Gujarat State on 03<sup>rd</sup> & 04<sup>th</sup>; West Rajasthan on 04<sup>th</sup> & 05<sup>th</sup>; Assam & Meghalaya on 06<sup>th</sup> & 07<sup>th</sup> and Uttarakhand on 07<sup>th</sup> August.**
- 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 kutch 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**

- 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**

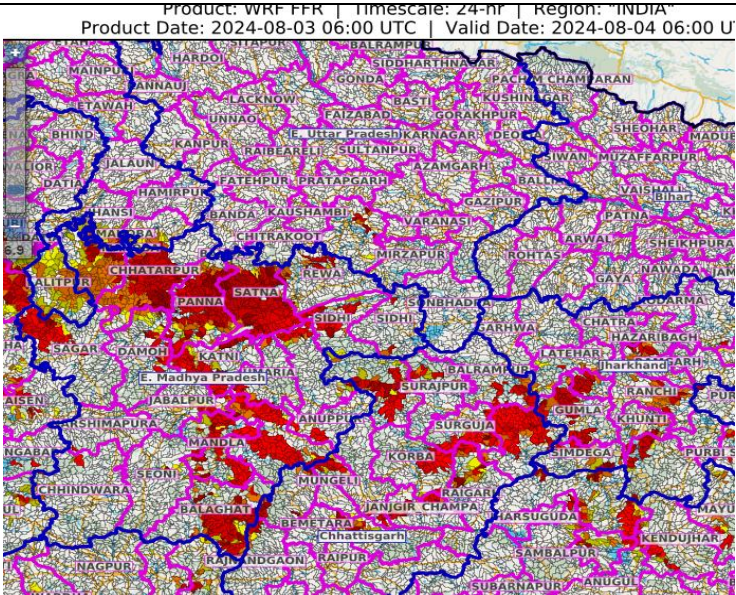
- Make provision for draining out excess water from crop fields to avoid water stagnation in Arunahal Pradesh, Assam & Meghalaya, NMMT, Sub Himalayan West Bengal, Jharkhand, Bihar, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Konkan & Goa, *Ghat* areas of Madhya Maharashtra, Gujarat State, Kerala and Karnataka.
- Drain out excess water from the fields of transplanted rice in South Gujarat, Konkan and ghat areas of Madhya Maharashtra; from rice nurseries and maize in Jharkhand; from cowpea, moth bean, green gram and sesame fields in Rajasthan; from soybean, maize, green gram, black gram and ginger fields in Madhya Pradesh.
- Provide mechanical support to horticultural crops & staking to vegetables.

Flash Flood Guidance:

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 04-08-2024 :

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Chhattisgarh, East Madhya Pradesh and adjoining Jharkhand Met Sub-divisions during next 24 hours.

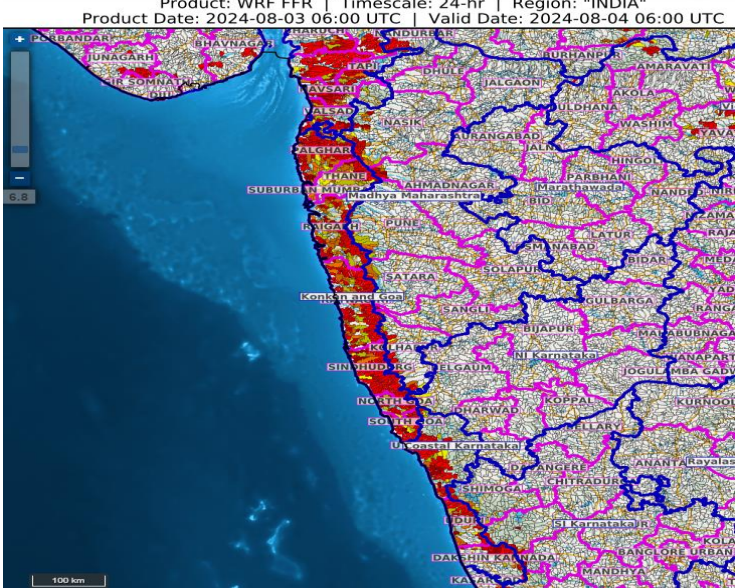
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 04-08-2024 :

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Coastal Karnataka, Gujarat Region and Konkan & Goa Met Sub-divisions during next 24 hours.

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.

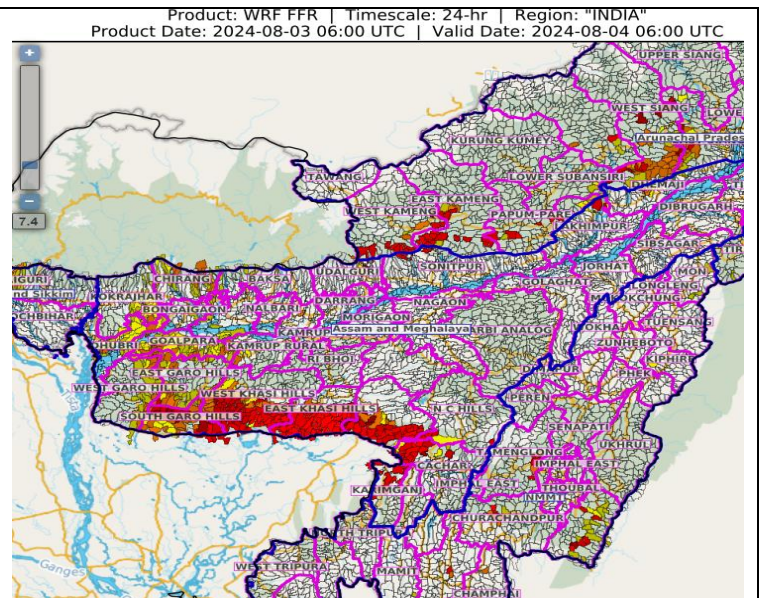




24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 04-08-2024 :

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

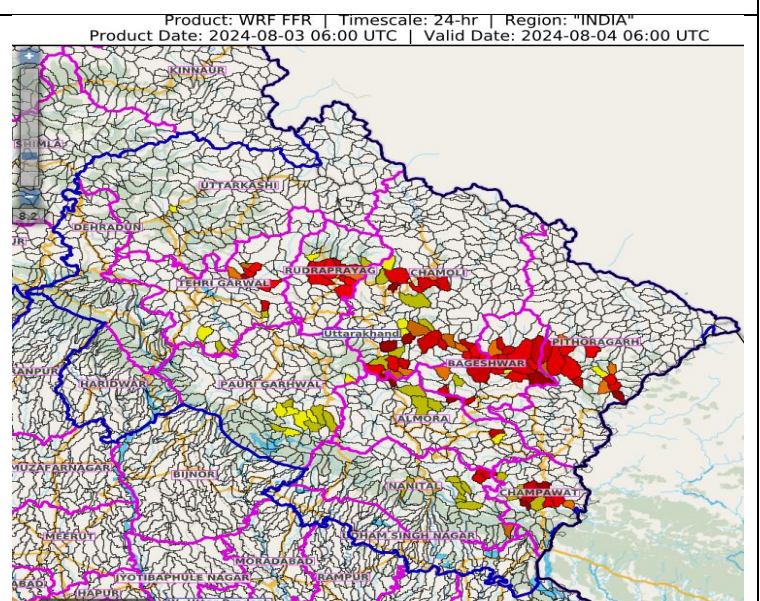
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 04-08-2024 :

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

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.



### Legends & abbreviations:

- ❖ **Heavy Rain:**64.5-115.5mm; **Very Heavy Rain:**115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station; **ARG:** Automatic Rain Gauge; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation; **PTO:** Part Time Office, **Aero:** Aerodrome, **IAF:** Indian Air Force.
- ❖ **Region wise classification of meteorological Sub-Divisions:**
  - **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
  - **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
  - **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
  - **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
  - **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathawada.
  - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

SPATIAL DISTRIBUTION (% of Stations reporting)			
% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)



Probabilistic Forecast	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75















## LEGENDS

### WARNING

WARNING (TAKE ACTION)
ALERT ( BE PREPARED)
WATCH (BE UPDATED)
NO WARNING ( NO ACTION)

### Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

 <b>Rain/ Snow *</b>	Heavy: 64.5 to 115.5 mm/cm * Very Heavy: 115.6 to 204.4 mm/cm* Extremely Heavy: > 204.4 mm/cm *
 <b>Heat Wave</b>	When maximum temperature of a station reaches $\geq 40^{\circ}\text{C}$ for plains and $\geq 30^{\circ}\text{C}$ for hilly regions <b>(a) Based on Departure from normal</b> Heat Wave: Maximum Temperature Departure from normal $4.5^{\circ}\text{C}$ to $6.4^{\circ}\text{C}$ . Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^{\circ}\text{C}$ <b>(b). Based on Actual maximum temperature</b> Heat Wave: When actual maximum temperature $\geq 45^{\circ}\text{C}$ . Severe Heat Wave: When actual maximum temperature $\geq 47^{\circ}\text{C}$ <b>(c). Criteria for heat wave for coastal stations</b> When maximum temperature departure is $> 4.5^{\circ}\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^{\circ}\text{C}$
 <b>Warm Night</b>	<b>When maximum temperature remains <math>40^{\circ}\text{C}</math></b> Warm Night: When minimum temperature departure $4.5^{\circ}\text{C}$ to $6.4^{\circ}\text{C}$ . Severe Warm Night: When minimum temperature departure $> 6.4^{\circ}\text{C}$ .
 <b>Cold Wave</b>	When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions. <b>(a). Based on departure</b> Cold Wave: Minimum Temperature Departure from normal $-4.5^{\circ}\text{C}$ to $-6.4^{\circ}\text{C}$ . Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$ <b>(b) Based on actual Minimum Temperature (for Plains only)</b> Cold Wave : When Minimum Temperature is $\leq 4.0^{\circ}\text{C}$ Severe Cold Wave: When Minimum Temperature is $\leq 2.0^{\circ}\text{C}$ <b>(c) For Coastal Stations</b> When Minimum Temperature departure is $\leq -4.5^{\circ}\text{C}$ & actual Minimum Temperature is $\leq 15^{\circ}\text{C}$
 <b>Cold Day</b>	When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions <b>Based on departure</b> Cold Day: Maximum Temperature Departure from normal $-4.5^{\circ}\text{C}$ to $-6.4^{\circ}\text{C}$ . Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$
 <b>Fog</b>	<b>Phenomenon of small droplets suspended in air and the horizontal visibility &lt; 1km</b> 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
 <b>Thunderstorm</b>	Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)
 <b>Dust/Sand Storm</b>	An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.
 <b>Frost</b>	<b>Ice deposits on ground</b> Air temperature $\leq 4^{\circ}\text{C}$ ( over Plains)
 <b>Squall</b>	<b>A strong wind that rises suddenly, lasts for atleast 1 minute.</b> Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph Very Severe: Wind speed $> 87$ kmph
 <b>Sea State</b>	<b>Effect of various waves in the sea over specific area</b> 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
 <b>Cyclone</b>	Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots) Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots) Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots) Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots) Super Cyclone Strom: Wind speed $> 220$ kmph ( $> 119$ knots)