



Government of India
Ministry of Earth Sciences
India Meteorological Department

Press Release
Date: 13th July, 2023

Time of Issue: 1345 hours IST

Subject: i) Very heavy to extremely heavy rainfall activity likely to continue over north Bihar today, over Uttar Pradesh, West Madhya Pradesh, Northeast India & Sikkim till 14 July and Uttarakhand during next 5 days and decrease thereafter.

ii) Very heavy rainfall activity likely over coastal Karnataka and Goa today and decrease thereafter.

Weather observed during past 24 hours ending at 0830 hours IST of today (Annexure I):

Significant Weather features, Forecast and Warning during next 5 days: (Annexure II)

- ❖ The western end of the monsoon trough at mean sea level lies south of its normal position and eastern end lies north of its normal position.
- ❖ A fresh Western Disturbance as a cyclonic circulation in middle & upper tropospheric level lies over North Pakistan & neighbourhood.
- ❖ A cyclonic circulation lies over Westcentral & adjoining Southwest Bay of Bengal in middle tropospheric levels.
- ❖ A cyclonic circulation lies over central parts of south Uttar Pradesh & neighbourhood in lower tropospheric levels and a trough extends from this cyclonic circulation to south Gujarat in lower tropospheric levels.
- ❖ The offshore trough at mean sea level lies off south Maharashtra coast to Kerala coast.
- ❖ A cyclonic circulation is likely to form over Northwest Bay of Bengal around 16th July, 2023.

Weather Forecast and Warning:

Northwest India: Fairly widespread to widespread rainfall with **isolated heavy to very heavy rainfall** is very likely to continue over Uttar Pradesh during next 2 days and isolated heavy rainfall thereafter. **Isolated heavy rainfall also very likely** over Himachal Pradesh during next 5 days; north Haryana during next 3 days; East Rajasthan on 14th & 17th July.

Isolated very heavy to extremely heavy rainfall very likely over Uttarakhand during next 5 days.

East & adjoining Northeast India: Fairly widespread to widespread rainfall with isolated **heavy to very heavy rainfall** very likely over Assam, Arunachal Pradesh and Bihar during next 2 days and reduction thereafter. Isolated **heavy rainfall** very likely over Odisha during next 5 days; Nagaland and Manipur during next 4 days and Gangetic West Bengal on 15th July. **Isolated very heavy to extremely heavy rainfall very likely over Sub-Himalayan West Bengal & Sikkim and Meghalaya during 13th -14th July and reduction thereafter.**

Central India: Light/moderate fairly widespread rainfall with **isolated heavy rainfall** is very likely over Madhya Pradesh during next 2 days; subdued during 15th to 16th and increase thereafter from 17th July.

Isolated heavy to very heavy rainfall likely over West Madhya Pradesh today and reduction thereafter.

West India: Light/moderate widespread rainfall with **isolated heavy rainfall** very likely to continue over Konkan & Goa, Ghat areas of Madhya Maharashtra during next 5 days; over Gujarat state during next 2 days. **Isolated very heavy rainfall** also very likely over Goa today.

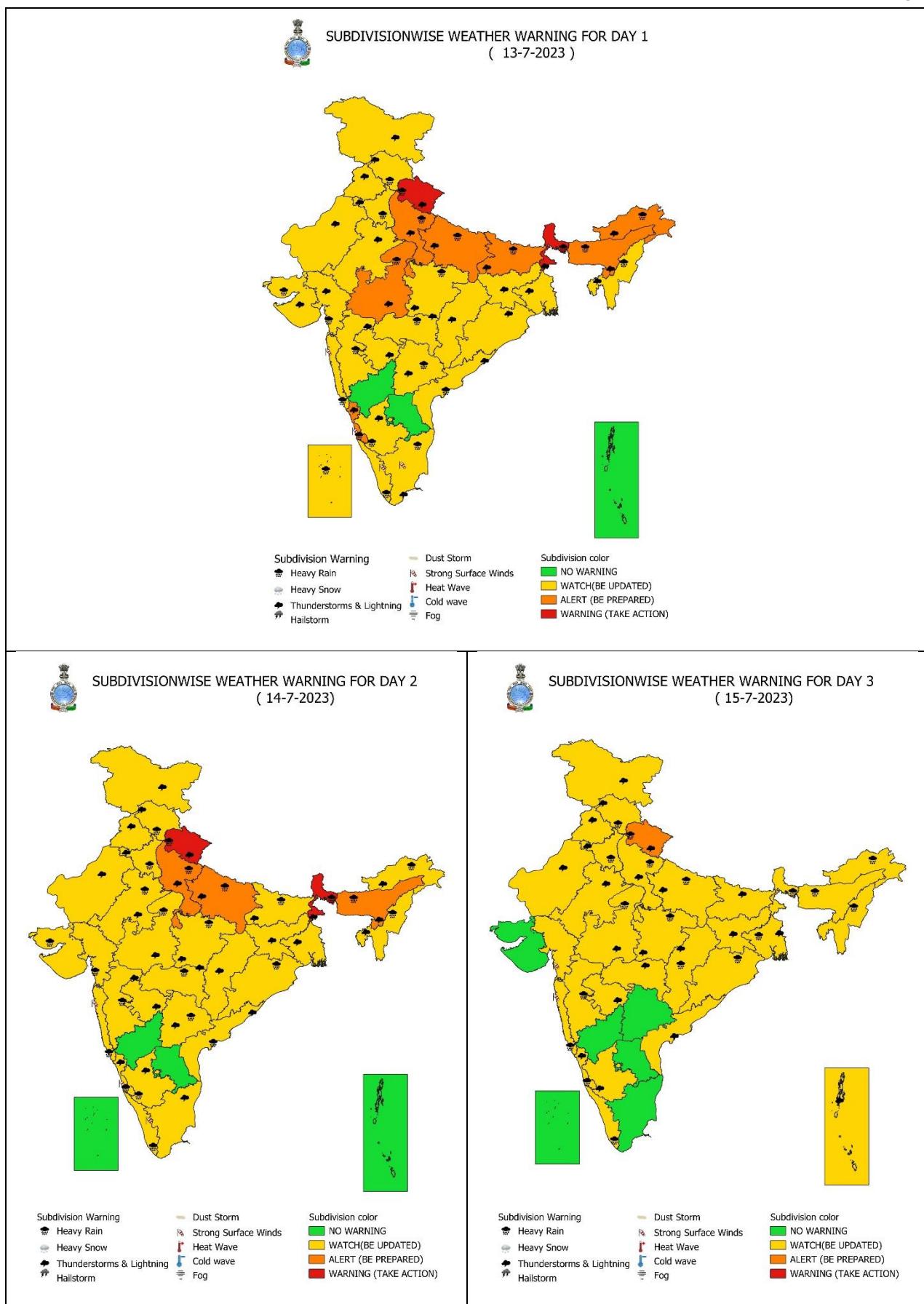
South India: Light/moderate fairly widespread rainfall with **isolated heavy rainfall** very likely to over Coastal Karnataka, South Interior Karnataka and Kerala during next 3 days; Tamil Nadu, Coastal Andhra Pradesh, Telangana during next 2 days.

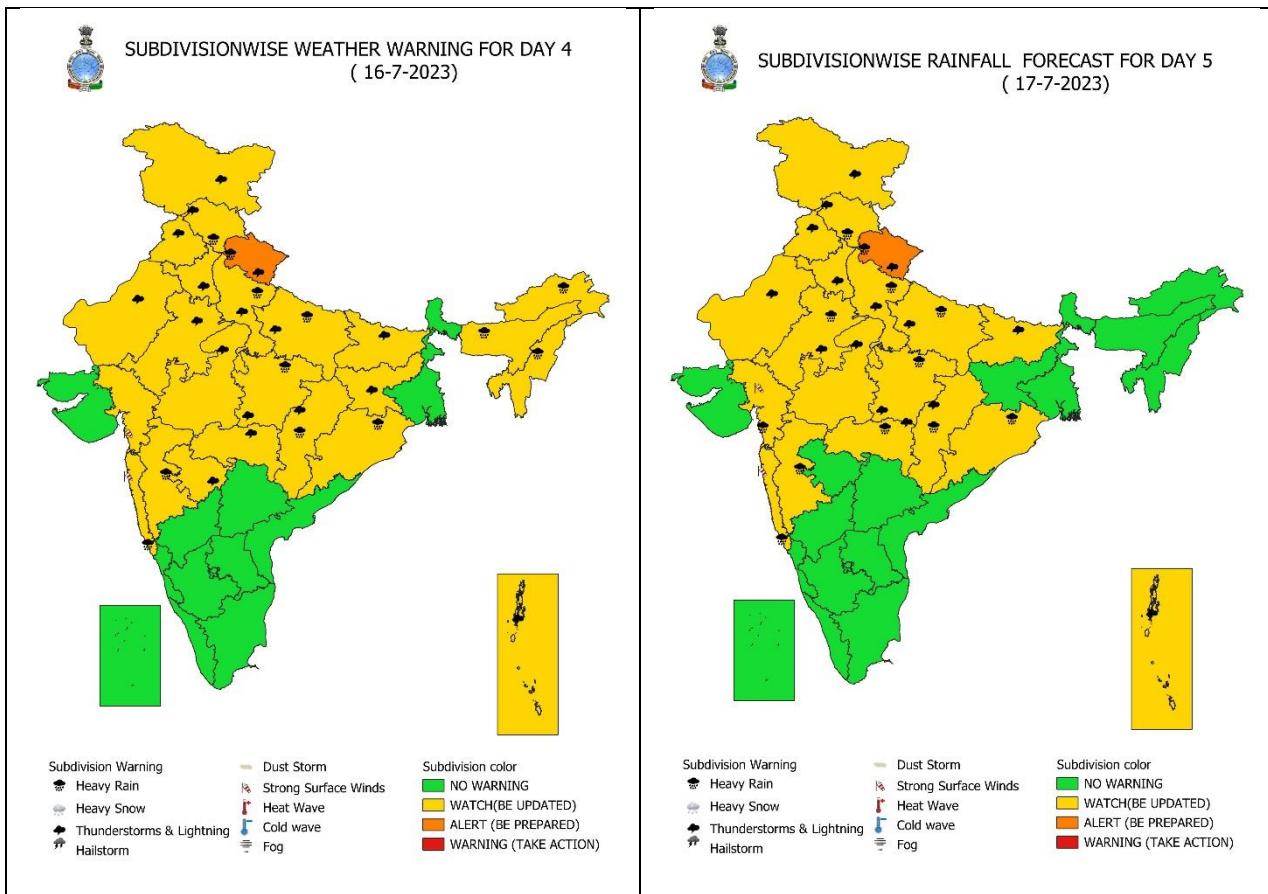
Isolated very heavy rainfall also very likely over coastal Karnataka today and reduction thereafter.

For more details kindly refer: https://mausam.imd.gov.in/responsive/all_india_forcast_bulletin.php

Rainfall Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 13th July 2023):

- **Heavy Rainfall observed:** **Extremely heavy rainfall** at isolated places over Uttarakhand, Meghalaya, Sub-Himalaya West Bengal & Sikkim, West Uttar Pradesh, West Madhya Pradesh, north coastal Tamil Nadu; **Heavy to Very heavy rainfall** at isolated places over Uttarakhand, East Uttar Pradesh, north Haryana, Gujarat State, Odisha, Bihar, Coastal Karnataka and **Heavy rainfall** at isolated places over Himachal Pradesh, East Rajasthan, Vidarbha, Arunachal Pradesh, South Interior Karnataka, Telangana and Coastal Andhra Pradesh.
- **Significant rainfall recorded (in cm):**
 - **Meghalaya:** Mawsynram (dist East Khasi Hills) 54, Cherrapunji(rkm) (dist East Khasi Hills) 24, Mawkyrwat (dist South West Khasi Hills) 21, Cherrapunji (dist East Khasi Hills) 20, Mawkyrwat_arg (dist South West Khasi Hills) 13
 - **Sub-Himalaya West Bengal & Sikkim:** Jalpaiguri-29, north Sikkim-25, Darjeeling-15,
 - **Uttarakhand: Haridwar:** Laksar-22, Roorkee(CWC)-19, Roshnabaad-17, Bhagwanpur-10; Tehri: Narendernagar-11, Koteswar(CWC)-7, Pauri: Srinagar(CWC), Kotdwara-7 each; Rudraprayag-10,
 - **Tamil Nadu:** BASL Manampoondi (dist Villupuram) 27, RSCL-2 Soorappattu (dist Villupuram) 21, BASL Mugaiyur (dist Villupuram) 20, RSCL-2 Kedar (dist Villupuram) 15, Vellore (dist Vellore) 9, RSCL-2 Mundiyampakkam (dist Villupuram) 8, BASL Manalurpet (dist Kallakurichi) 7,
 - **West Uttar Pradesh:** Sambhal (dist Sambhal) 21, Bijnor (dist Bijnor) 15, Saharanpur (dist Saharanpur) 13, Jansath (dist Muzaffarnagar) 13, Meerut Teh (dist Meerut) 11,
 - **East Uttar Pradesh:** Safipur (dist Unnao) 12, Hasanganj (dist Unnao) 9, Mehdawal (dist Sant Kabir Nagar) 7, Malihabad (dist Lucknow) 7,
 - **West Madhya Pradesh:** Bhimpur (dist Betul) 21, Nasrullahganj (dist Sehore) 13, Kalapipal (dist Shajapur) 13, Khirkiya-arg (dist Harda) 12, Shajapur (dist Shajapur) 10,
 - **Bihar:** Kishanganj: Galgalia-12, Thakurganj-8, Supaul: Birpur-12, West Champaran: Ramnagar-11
 - **Haryana:** Tajewala (dist Yamuna Nagar) 12, Sadhaura (dist Yamuna Nagar) 10, Bilaspur (dist Yamuna Nagar) 7, Naraingarh (dist Ambala) 7, Jagadhari (dist Yamuna Nagar) 7,
 - **East Rajasthan:** Deeg Sr (dist Bharatpur) 9, Pahari Sr (dist Bharatpur) 7,
 - **Saurashtra & Kutch:** Amreli (dist Amreli) 15, Amreli_kvk Aws (dist Amreli) 13,
 - **Odisha :** Kaptipada (dist Mayurbhanj) 12, Hatadihi (dist Keonjhargarh) 6,
 - **Gujarat Region:** Chikhli (dist Navsari) 12, Gandevi (dist Navsari) 8, Khergam (dist Navsari) 7, Navsari (dist Navsari) 7, Umerpada (dist Surat) 7,
 - **Coastal Karnataka:** Gersoppa (dist Uttara Kannada) 13, Manki (dist Uttara Kannada) 12, Kadra (dist Uttara Kannada) 10, Kota (dist Udupi) 10,
 - **Coastal Andhra Pradesh:** Seethanagaram (dist Parvathipuram Manyam) 11, Masulipatnam Cdr (dist Krishna) 10, Avanigada (dist Krishna) 8, Repalle (dist Bapatla) 8, Peddapuram (dist Kakinada) 7,
 - **Telangana:** Julurpad (dist B. Kothagudem) 11, Sathupalle (dist Khammam) 11, Aswaraopeta (dist B. Kothagudem) 10,
 - **South Interior Karnataka:** Linganamakki Hms (dist Shivamogga) 8, Thalaguppa (dist Shivamogga) 7, Sringeri Hms (dist Chikkamagaluru) 7,
 - **Vidarbha:** Khamgaon (dist Buldhana) 9, Barshtakli (dist Akola) 8, Warud (dist Amravati) 7,
 - **Arunachal Pradesh:** Pasighat_Aero (dist East Siang) 9, Tezu (dist Lohit) 9, Namsai Kvk Aws (dist Lohit) 8,
 - **Himachal Pradesh:** Sirmaur-7
 - **Konkan & Goa:** Wada (dist Palghar) 9, Devgad (dist Sindhudurg) 6,
 - **Madhya Maharashtra:** Yaval (dist Jalgaon) 8, Taloda (dist Nandurbar) 7,





Agromet advisories for rainfall likely over various parts of the country:

- ❖ Drain out excess water from crop fields to avoid water stagnation in Himachal Pradesh, Uttarakhand, Haryana, Uttar Pradesh, Sub Himalayan West Bengal & Sikkim, Bihar, Madhya Pradesh, Gujarat state, Konkan & Goa, Tamil Nadu, Kerala, Coastal and South Interior Karnataka, Coastal Andhra Pradesh, Telangana and Arunachal Pradesh, Assam, Meghalaya, Nagaland and Manipur.
- ❖ Postpone transplanting of rice in Meghalaya and Uttarakhand.
- ❖ Postpone sowing of maize, soybean and vegetables in Uttarakhand.
- ❖ Provide staking to vegetables.

Impact & Action Suggested due to very heavy/extremely heavy rainfall and likely Flash Flood (for Flash Flood details, refer below)

13th July: Uttarakhand, Uttar Pradesh, West Madhya Pradesh, Sub-Himalaya West Bengal & Sikkim, Bihar, Arunachal Pradesh and Assam & Meghalaya

14th July: Uttarakhand, Uttar Pradesh, Sub-Himalaya West Bengal & Sikkim and Assam & Meghalaya

A. 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
- ❖ 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).

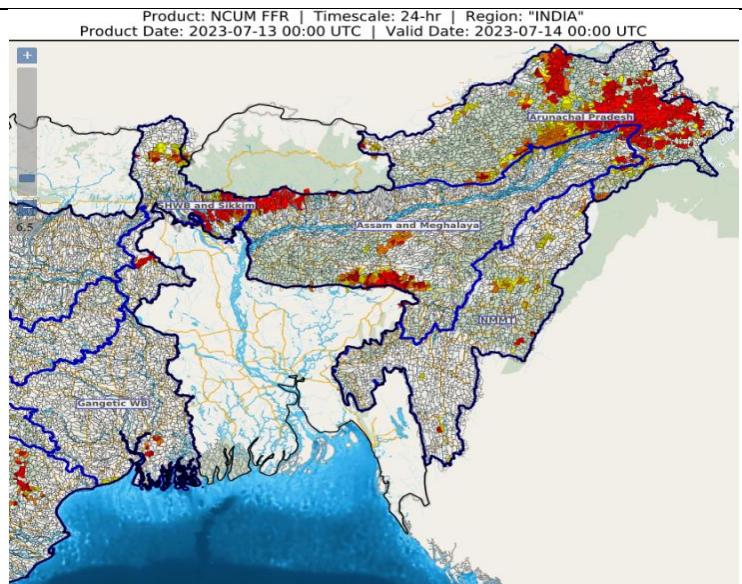
B. Action Suggested

- ❖ 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.

24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 14-07-2023 :

Moderate flash flood risk likely over few watersheds & neighbourhoods of southern parts of SHWB & Sikkim adjoining Assam & Meghalaya and north eastern parts of Arunachal Pradesh 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:

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **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-Himalaya 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 Marathwada.
 - **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 Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)

Subdivision Warning	Dust Storm	Subdivision color
Heavy Rain	Strong Surface Winds	NO WARNING
Heavy Snow	Heat Wave	WATCH(BE UPDATED)
Thunderstorms & Lightning	Cold wave	ALERT (BE PREPARED)
Hailstorm	Fog	WARNING (TAKE ACTION)

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