



Government of India
Ministry of Earth Sciences
India Meteorological Department



Date: 27th February, 2024
Time of Issue: 1230 hours IST

Special Message (No.- 1)

FROM: INDIA METEOROLOGICAL DEPARTMENT
TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS
CONTROL ROOM NDMA
SECRETARY, MOES
DIRECTOR GENERAL, DOORDARSHAN
DIRECTOR GENERAL, AIR
PIB MOES
CHIEF SECRETARY, GOVT. OF JAMMU & KASHMIR
CHIEF SECRETARY, GOVT. OF LADAKH
CHIEF SECRETARY, GOVT. OF HIMACHAL PRADESH
CHIEF SECRETARY, GOVT. OF UTTARAKHAND
CHIEF SECRETARY, GOVT. OF PUNJAB
CHIEF SECRETARY, GOVT. OF HARYANA
CHIEF SECRETARY, GOVT. OF CHANDIGARH
CHIEF SECRETARY, GOVT. OF DELHI
CHIEF SECRETARY, GOVT. OF UTTAR PRADESH
CHIEF SECRETARY, GOVT. OF RAJASTHAN
CHIEF SECRETARY, GOVT. OF MADHYA PRADESH

Subject: An active Western Disturbance likely to affect Western Himalayan Region from 29th February and plains of northwest India from 01st March to 03rd March, 2024.

Weather Systems and Forecast & Warnings during next 5 days:

- ❖ An active Western Disturbance likely to affect Western Himalayan Region from 29th February and plains of northwest India from 1st March to 3rd March with peak intensity on 1st & 2nd March, 2024. High moisture feeding from Arabian Sea to northwest India is also likely during 1st to 2nd March. Under its influence:
 - Fairly widespread to widespread light/moderate rainfall accompanied with **thunderstorms & lightning** very likely over **Western Himalayan Region** during 1st – 3rd March, 2024.
 - Scattered to fairly widespread light/moderate rainfall accompanied with **thunderstorms & lightning** very likely over Punjab, Haryana-Chandigarh-Delhi and isolated to scattered light/moderate rainfall over Uttar Pradesh, Rajasthan on 1st & 2nd March, 2024.
 - **Isolated heavy rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh on 1st and isolated heavy to very heavy rainfall/snowfall on 2nd March 2024. Isolated heavy rainfall/snowfall also very likely over Uttarakhand and isolated heavy rainfall over Punjab on 02nd March, 2024.**
 - Hailstorm activity also very likely at isolated places over Himachal Pradesh and Uttarakhand on 1st & 2nd March; Rajasthan on 1st March and over Haryana-Chandigarh, Punjab and West Uttar Pradesh on 2nd March, 2024.

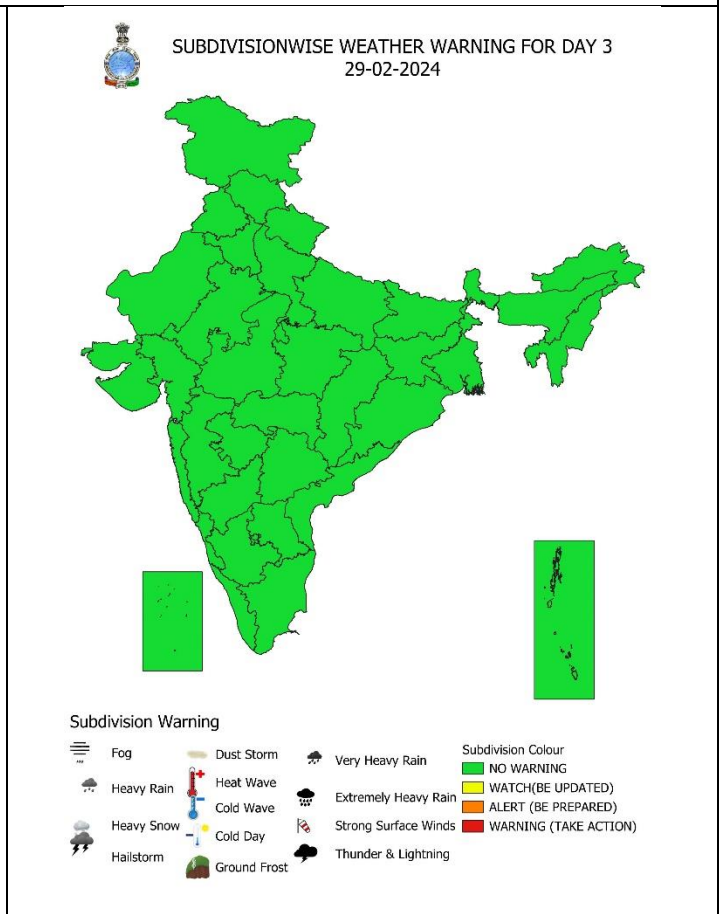
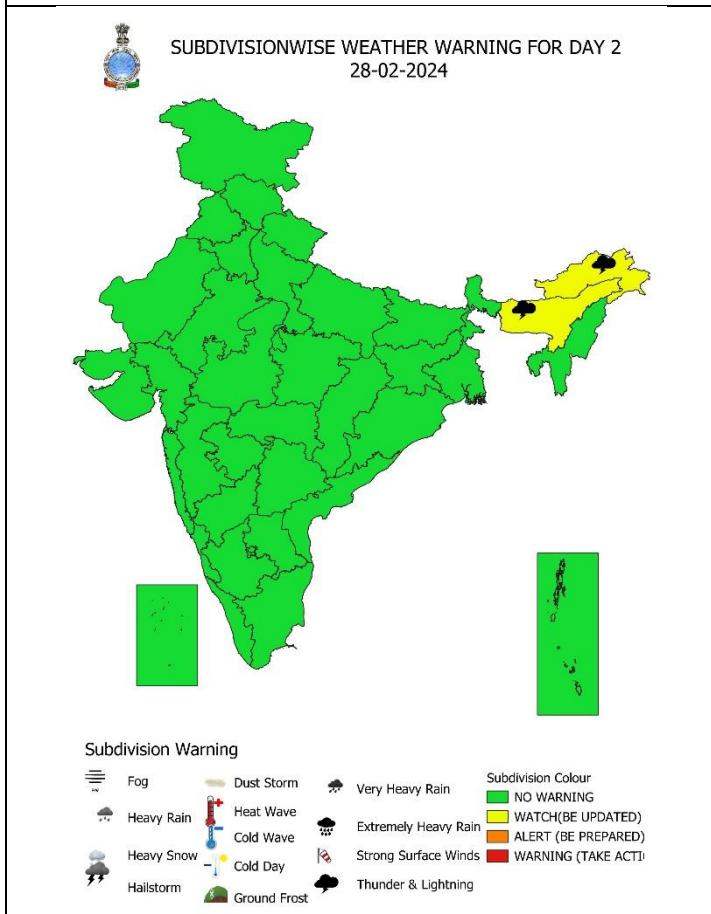
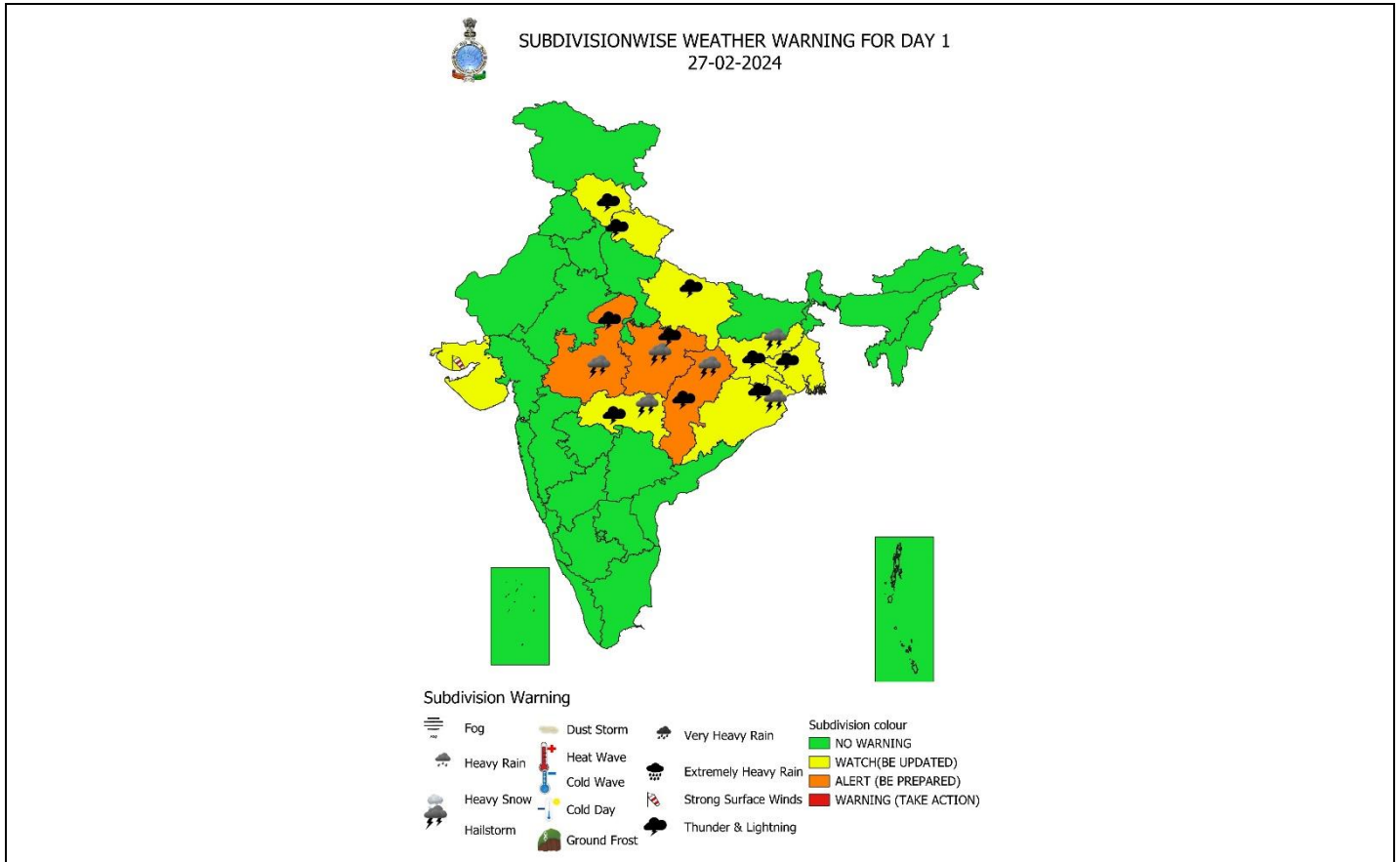
The state-wise forecast is given below: (Warning graphics are given at ANNEXURE-I)

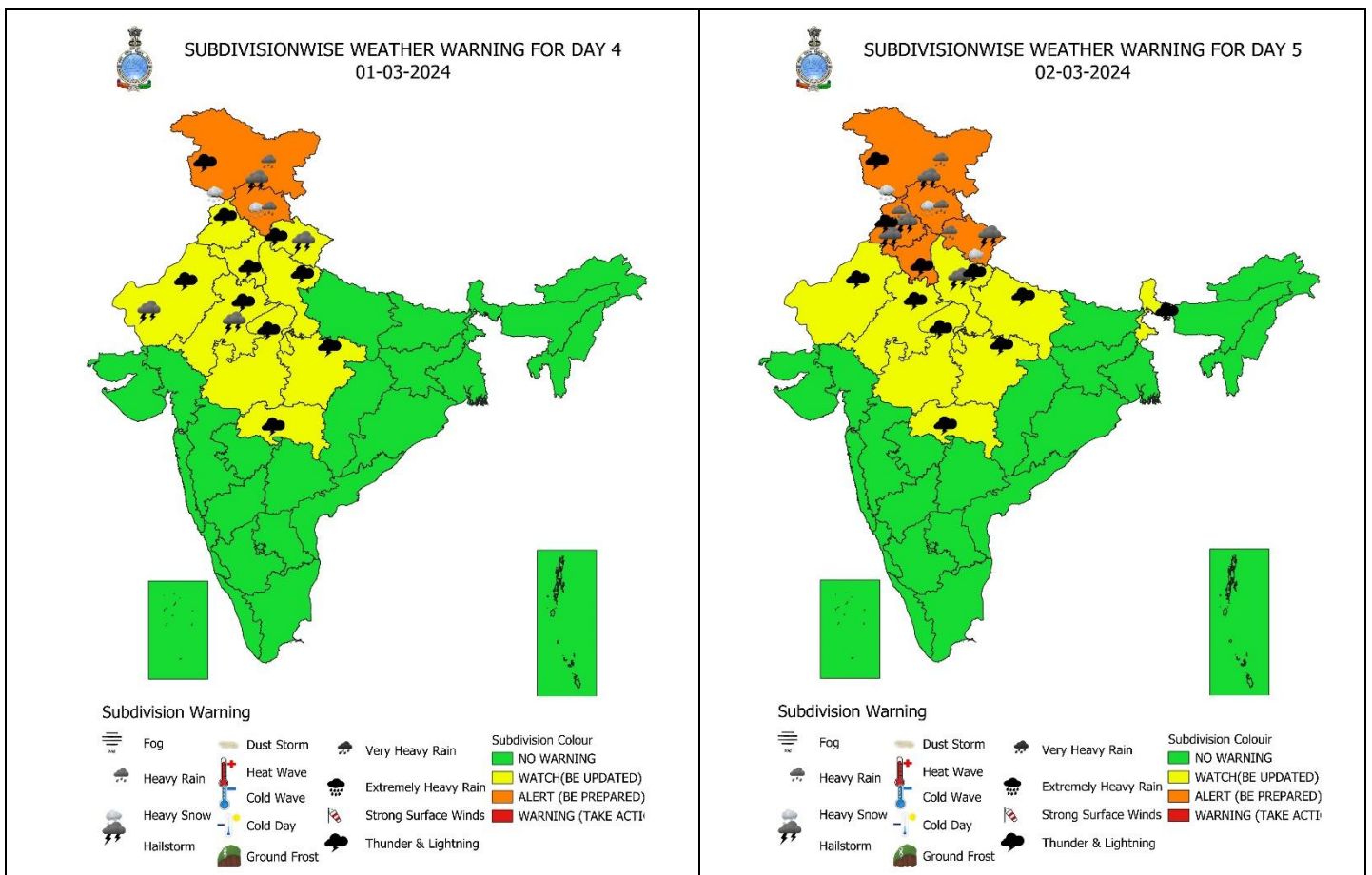
S. No.	State/sub-division	Forecast
1.	Jammu, Kashmir and Ladakh	<ul style="list-style-type: none"> • Light to moderate rain/snowfall accompanied with thunderstorm & lightning at most places on 01st & 02nd March; at a few places on 29th February & 3rd March and at isolated places on 27st February & 04th March. • Heavy to very heavy rainfall/snowfall very likely at isolated places on 02nd March; Heavy rainfall/snowfall at isolated places on 01st March.
2.	Himachal Pradesh	<ul style="list-style-type: none"> • Light to moderate rain/snowfall accompanied with thunderstorm, lightning and gusty winds (speed reaching 40-50 kmph gusting to 60 kmph) at most places on 01st & 02nd March; at many places on 03rd march; at a few places on 27th February and at isolated places on 29th February & 04th March. • Heavy to very heavy rainfall/snowfall very likely at isolated places on 02nd March; Heavy rainfall/snowfall at isolated places on 01st March. • Light to moderate hailstorm is likely at isolated places on 01st & 02nd March.
3.	Uttarakhand	<ul style="list-style-type: none"> • Light to moderate rain/snowfall accompanied with thunderstorm & lightning at most places on 02nd March; at many places on 01st & 03rd march; at a few places on 27th February and at isolated places during 04th March. • Heavy rainfall/snowfall at isolated places likely on 02nd March. • Light to moderate hailstorm is likely at isolated places on 01st & 02nd March.
4.	Punjab	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm, lightning and gusty winds (speed reaching 40-50 kmph gusting to 60 kmph) at many places on 01st & 02nd March; and at isolated places on 27th February and 03rd March. • Heavy rainfall/snowfall at isolated places likely on 02nd March. • Light to moderate hailstorm is likely at isolated places on 02nd March.
5.	Haryana, Chandigarh & Delhi	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm, lightning and gusty winds (speed reaching 30-40 kmph gusting to 50 kmph) at many places over 02nd March; at a few places during 01st March; at isolated places on 27th February & 03rd March. • Light to moderate hailstorm is likely at isolated places on 02nd March.
6.	West Uttar Pradesh	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning at a few places over 01st march; with gusty winds (speed reaching 30-40 kmph gusting to 50 kmph) at a few places on 02nd March; at isolated places on 27th February & 03rd March. • Light to moderate hailstorm is likely at isolated places on 02nd March.
7.	East Uttar Pradesh	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning at a few places on 02nd March; at isolated places on 27th February, 01st, 03rd & 04th March.

8.	West Rajasthan	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning with gusty winds (speed reaching upto 40-50 kmph gusting to 60 kmph) at isolated places on 27th February, 01st & 02nd March. • Light to moderate hailstorm is likely at isolated places on 01st March.
9.	East Rajasthan	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning with gusty winds (speed reaching upto 30-40 kmph gusting to 50 kmph) at isolated places on 27th February, 01st & 02nd March. • Light to moderate hailstorm is likely at isolated places on 01st March.
10	West Madhya Pradesh	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning with gusty winds (speed reaching upto 30-40 kmph gusting to 50 kmph) at isolated places on 27th, 29th February, 01st & 02nd March
11	East Madhya Pradesh	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning at isolated places on 28th, 29th February; with gusty, squally winds (speed reaching upto 50-60 kmph gusting to 70 kmph) at many places on 27th February; with gusty winds (speed reaching upto 30-40 kmph gusting to 50 kmph) at a few places on 02nd March, at isolated places on 01st, 02nd, 04th March.

For more details, kindly refer: [https://mausam.imd.gov.in/responsive/all india forcast bulletin.php](https://mausam.imd.gov.in/responsive/all%20india%20forcast%20bulletin.php)

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Impact & Action Suggested due to heavy/very heavy rainfall/snowfall: Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh on 1st & 2nd and Uttarakhand on 2nd March, 2024.

Impacts Expected:

- Disruption of Electricity.
- Landslide, rock fall and mudslides, Blocking/washout of roads/highways/bridges Nallahs.
- Disruption of traffic flow.
- Damage to Kuccha and unsecured structures.

Action Suggested:

- Avoid roadway underpasses, drainage ditches, low lying areas and areas where water collects – they can unexpectedly flood or overflow.
- Stay away from power lines or electrical wires.
- Don't stay in kuchcha houses during heavy rainfall as it may collapse anytime soon
- Drive carefully.

Impact expected and action suggested due to thunderstorm with lightning/gusty winds & Hailstorm: over Madhya Pradesh on 27th February and over Himachal Pradesh, Uttarakhand on 01st & 02nd March; Rajasthan on 01st March and over Haryana-Chandigarh, Punjab and West Uttar Pradesh on 02nd March, 2024.

Impact expected:

- ❖ Strong wind/hail may damage plantation, horticulture and standing crops.
- ❖ Hail may injure people and cattle at open places.
- ❖ Partial damage to vulnerable structures due to strong winds.
- ❖ Minor damage to kutcha houses/walls and huts.
- ❖ Loose objects may fly.

Action suggested:

- ❖ Stay indoors, close windows & doors and avoid travel if possible.
- ❖ Take safe shelters; do not take shelter under trees.
- ❖ Do not lie on concrete floors and do not lean against concrete walls.
- ❖ Unplug electrical/ electronic appliances.
- ❖ Immediately get out of water bodies.
- ❖ Keep away from all the objects that conduct electricity.














Agromet advisories for rainfall accompanied with Heavy rainfall, Gusty winds and hailstorms likely over various parts of the country

- Drain out excess water from crop fields to avoid water stagnation in Jammu & Kashmir and Himachal Pradesh.
- Make necessary arrangements to drain out excess water from the crop fields in Uttarakhand, Punjab, Arunachal Pradesh and Sub Himalayan West Bengal & Sikkim.
- Remove snow immediately from the branches and crotches in Jammu & Kashmir and Himachal Pradesh.
- Postpone sowing of French bean & Potato in Uttarakhand and direct sowing of vegetables in Jammu & Kashmir.
- Use hail nets or hail caps in fruit orchards to protect them from mechanical damage in Himachal Pradesh, Uttarakhand, Punjab, Haryana, West Uttar Pradesh and north Rajasthan.
- Keep harvested produce in safe places.
- Provide mechanical support to horticultural crops and staking to vegetables.




Legends & abbreviations:

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation; **PTO:** Part Time Office.
- ❖ **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 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 Widespread (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

Flash Flood Risk	
	High Risk (Take Action)
	Moderate Risk (Be Prepared)
	Low Risk (Be Updated)