



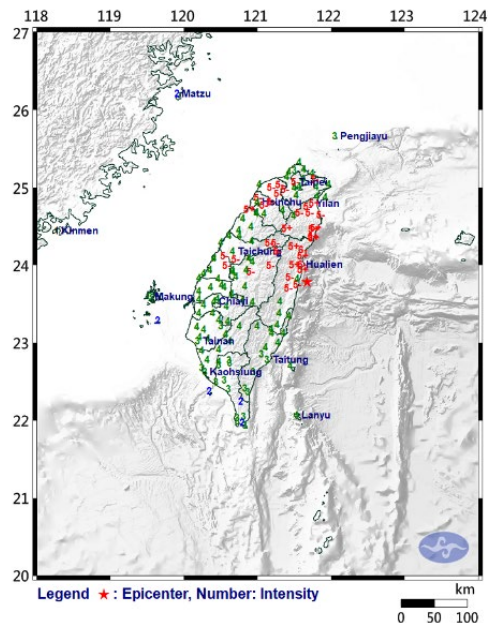
行政法人 國家災害防救科技中心
National Science and Technology Center
for Disaster Reduction

0403 Hualien Earthquake 4th Impacts Assessment Report at Central Emergency Operation Center

National Science and Technology Center for Disaster Reduction

2024.04.04 09:00

Geological profile near the hypocenters



CWA EARTHQUAKE REPORT

Earthquake No.: 113019

Origin time (Taiwan Standard Time: GMT+8):

4/ 3/2024 7:58: 9.9

Epicenter: 23.77°N, 121.67°E,
i.e. 25.0 km SSE of Hualien County Hall

Focal depth: 15.5 km

Magnitude (ML): 7.2

Legend 圖例

Hypocenter 震源



Fault 斷層線

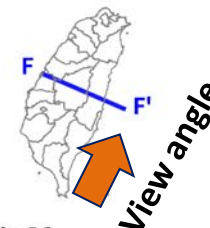


Cross-section 剖面位置



Historical events by magnitudes (ML)

- : $M_L \geq 6$
- : $M_L \sim 5$
- : $M_L \sim 4$

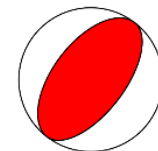
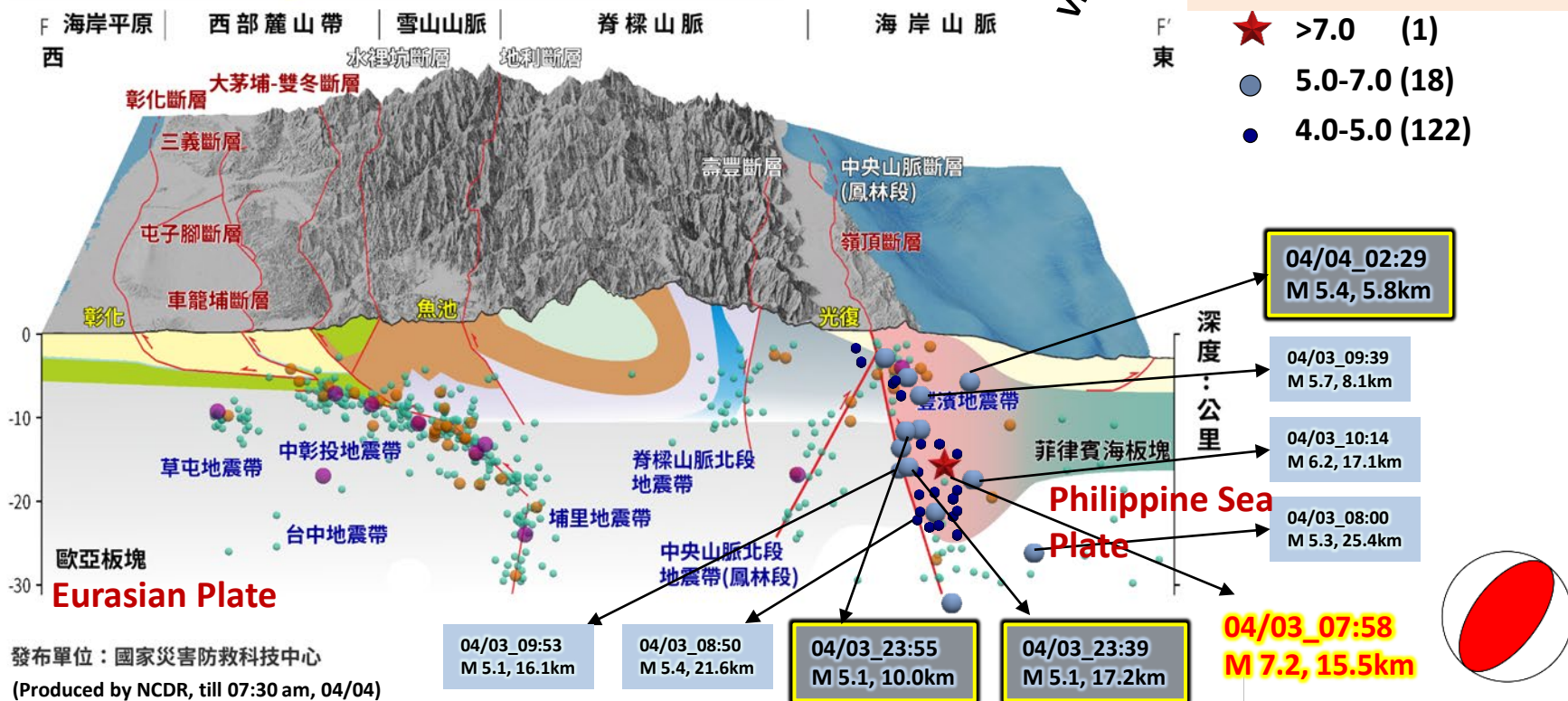


Earthquakes > Magnitude 4 Since 07:58, 04/03

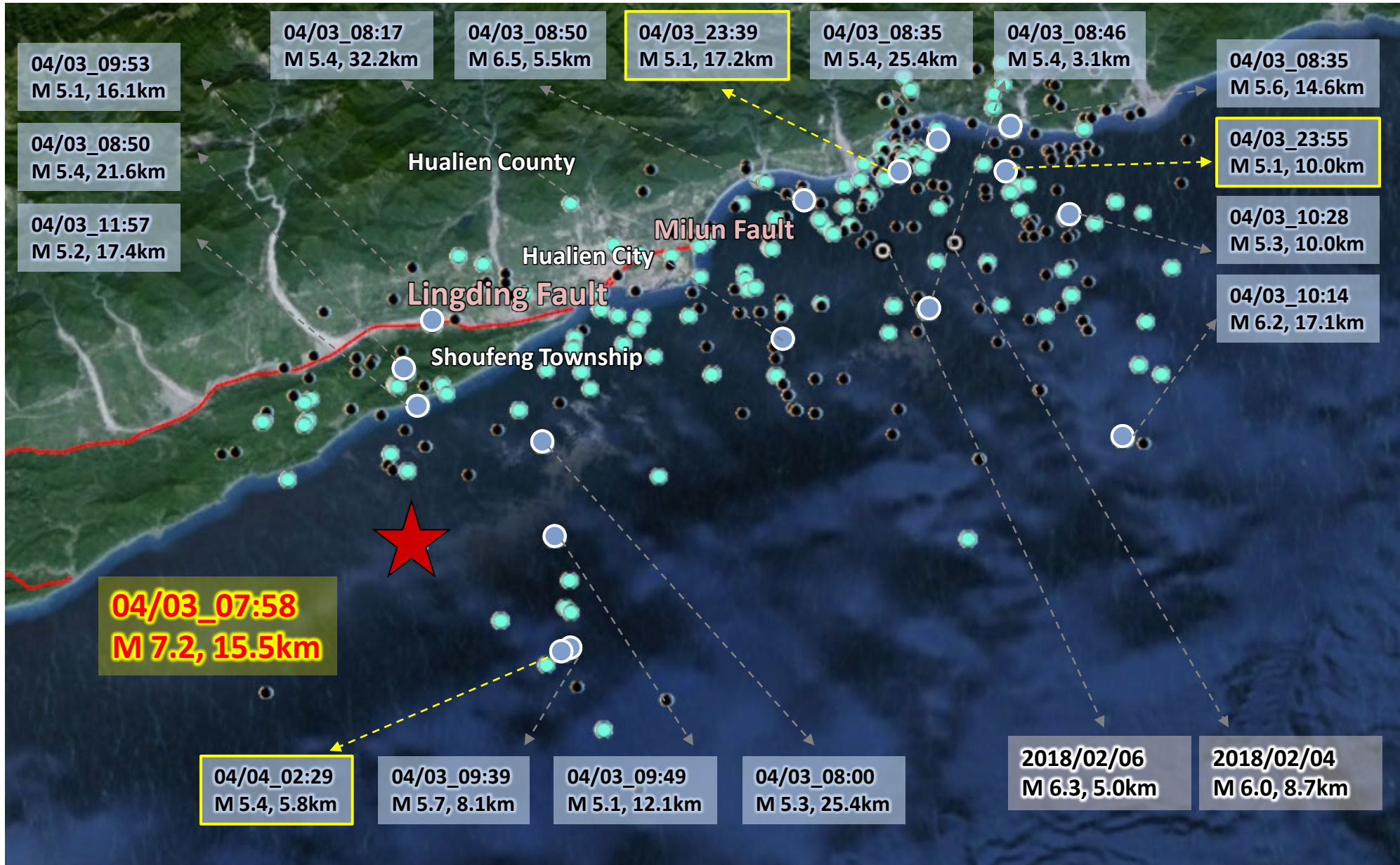
- ★ >7.0 (1)
- 5.0-7.0 (18)
- 4.0-5.0 (122)

Local Largest Intensity:

Hualien County	6+	Hsinchu City	4
Yilan County	5+	Tainan City	4
Miaoli County	5+	Keelung City	4
Taichung City	5-	Pingtung County	4
Changhua County	5-	Penghu County	3
Hsinchu County	5-	Lienchiang County	2
Nantou County	5-	Kinmen County	1
Taoyuan City	5-		
New Taipei City	5-		
Taipei City	5-		
Taitung County	4		
Chiayi County	4		
Yunlin County	4		
Kaohsiung City	4		
Chiayi City	4		



Distribution of major quake and aftershocks (1/2)



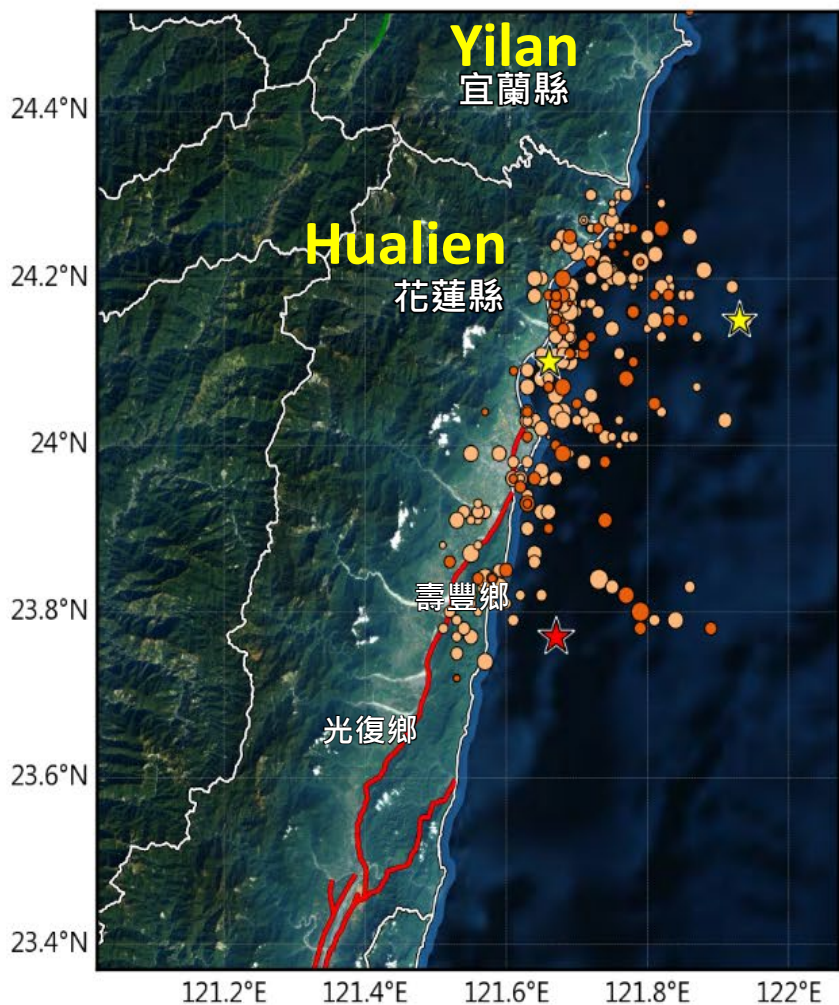
Duration
2024/04/03-04
Earthquakes > Magnitude 4
Since 07:58, 04/03

- ★ >7.0 (1)
- 5.0-7.0 (18)
- 4.0-5.0 (122)

(Produced by NCDR, till 07:30 am, 04/04)

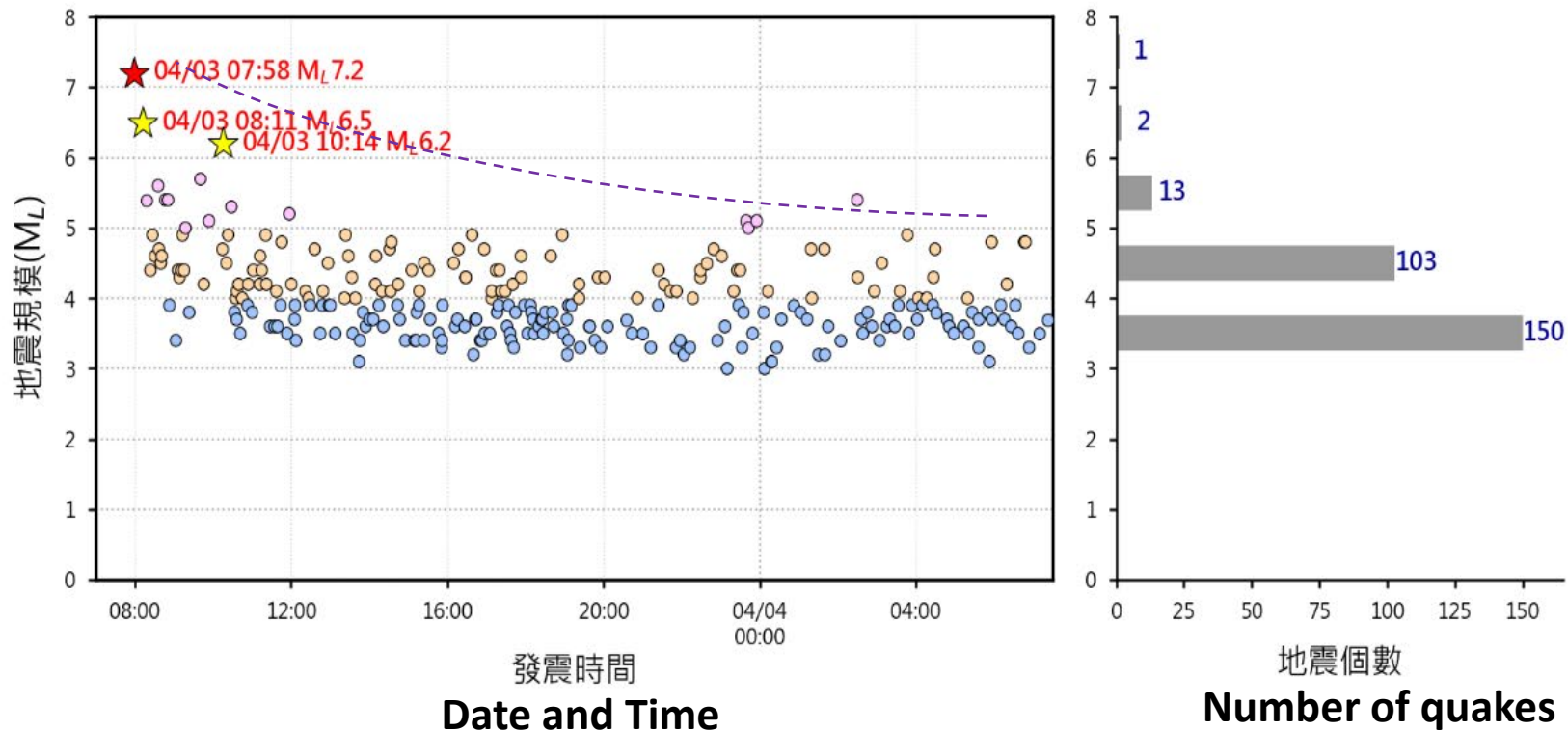
◎ Major events in 2018

Distribution of major quake and aftershocks (2/2)



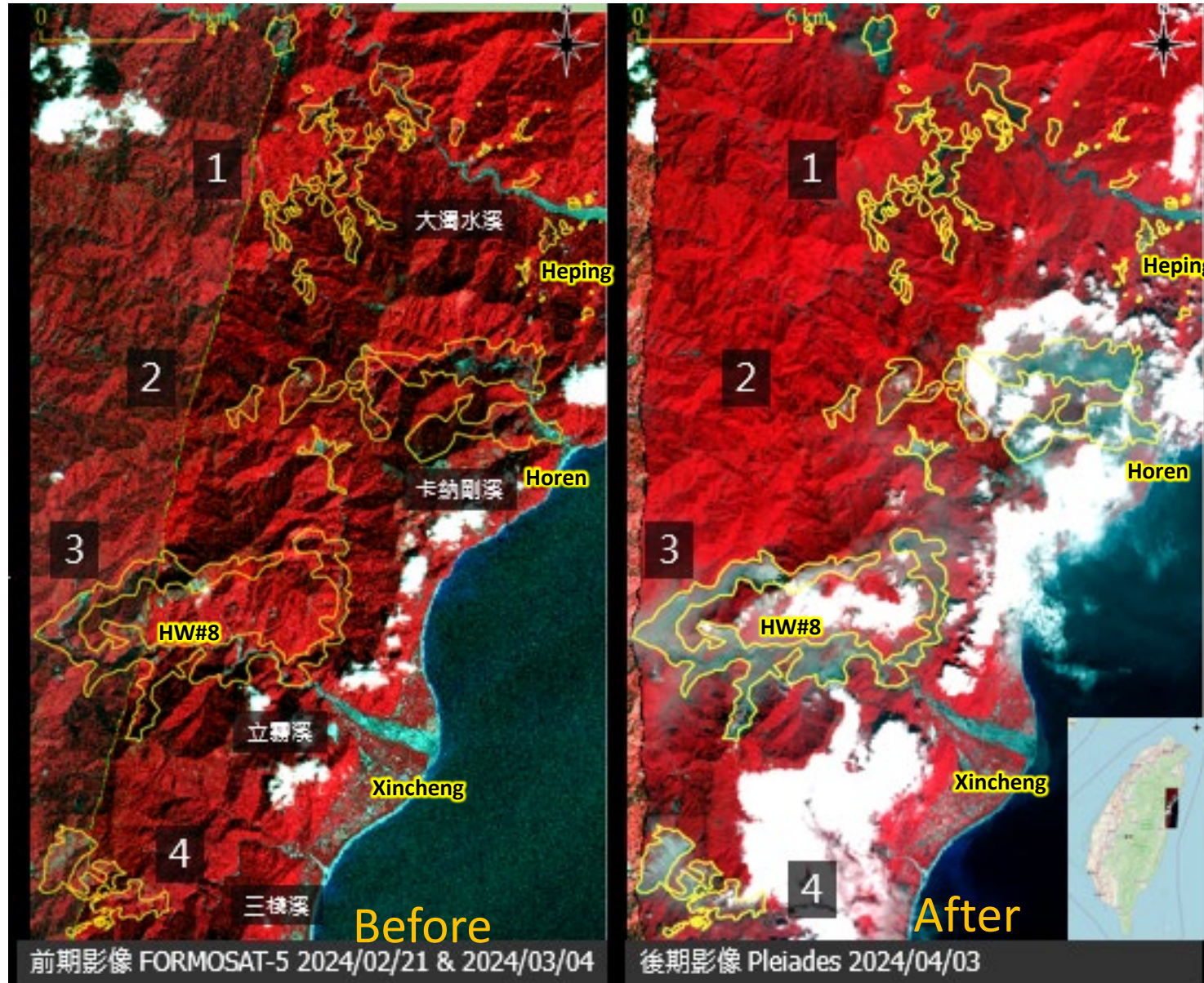
- ★ 規模7 Magnitude > 7
- ★ 規模6 Magnitude > 6
- 0403 (203 起) (203 quakes in 04/03)
- 0404 (66 起) (66 quakes in 04/04)

Produced by NCDR, till 07:30 am, 04/04



Satellite Imagery Interpretation Analysis on Hualien Mountain Area

- Landslides happened in the water catchments in Hualien Mountain Area



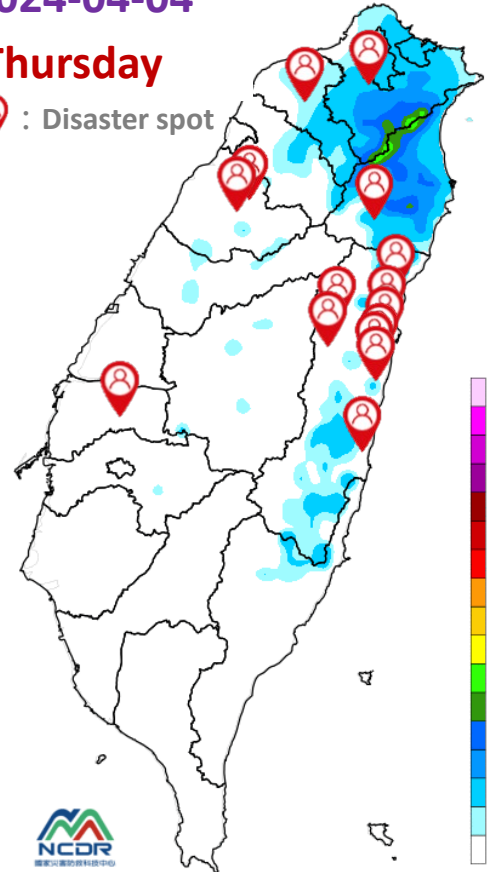
Source:
NSTC TAST

From 04/04, Taiwan is affected by two fronts during long-weekend

- From 04/04, as the first front is passing, there are localized brief showers in the northern, eastern, and central mountainous areas
- During 04/06~07, another front might affect and bring brief showers or thunderstorms throughout Taiwan

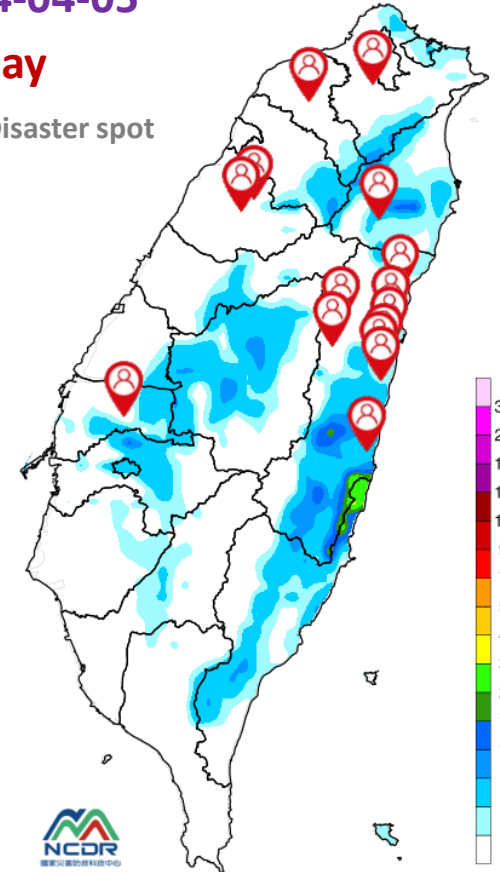
2024-04-04
Thursday

 : Disaster spot



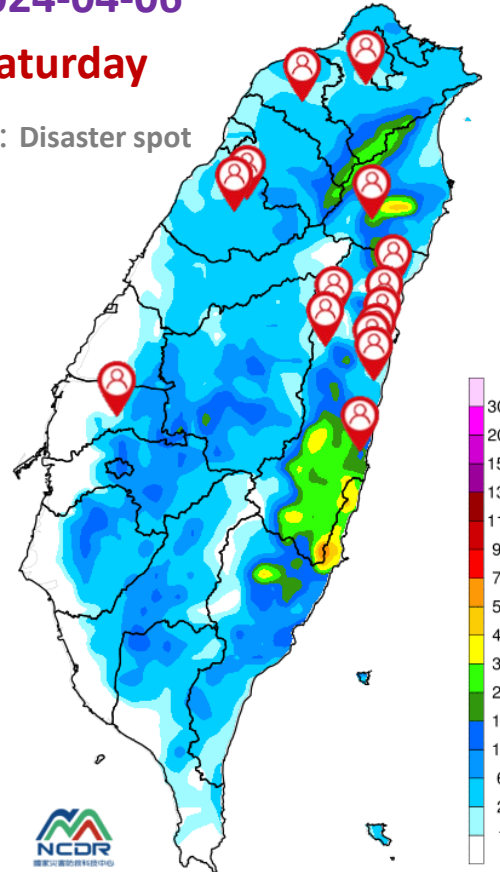
2024-04-05
Friday

 : Disaster spot



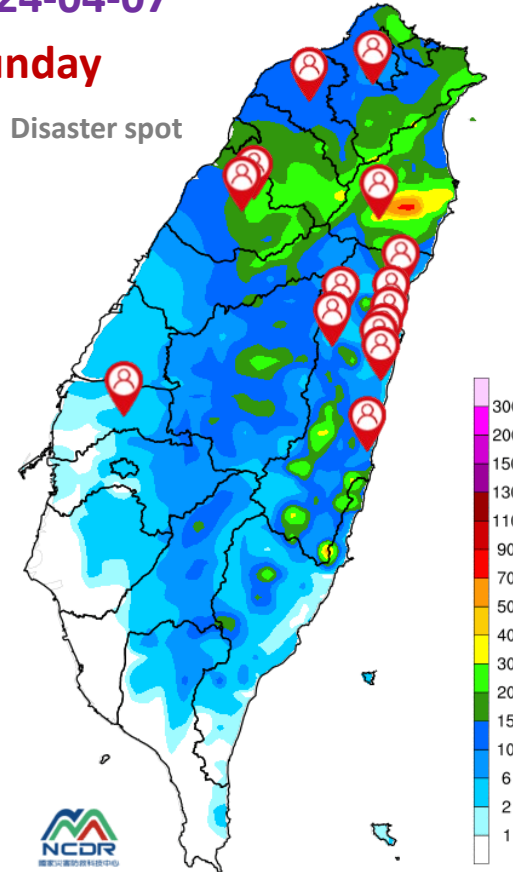
2024-04-06
Saturday

 : Disaster spot



2024-04-07
Sunday

 : Disaster spot



Recommendations

- Because of frequent aftershocks happening and up-coming fronts, **all rescue efforts must pay attention to the possible impacts** of damaged buildings, as well as the potential secondary disasters caused by falling rocks and landslides on slopes.