Typhoon Maria During 9-11 Jul 2018

Purpose: Information
Submitted by: Chinese Taipei
Typhoon Maria
during Jul 09-11, 2018

Chinese Taipei

14th APEC Emergency Preparedness Working Group Meeting
Emergency preparedness for and impacts by Typhoon Maria

- **Phase 1, As the typhoon was approaching**
  - Report on July 09, 2018
  - *To identify disaster hotspots by impact assessment*

- **Phase 2, When the typhoon made a landfall**
  - Report on July 10, 2018
  - *To highlight focal issues like high tides, floods and landslides*

- **Phase 3, When the typhoon was about to leave**
  - Report on July 11, 2018
  - *To picture out current situations*
Phase 1

Situation Report # 01 on Typhoon Maria

2018.07.09  16:00
Strong Typhoon Maria continues heading directly to northern Chinese Taipei

- **Typhoon MARIA (201808)**, Center Location 22.30N 131.80E, Movement: WNW 31KM/HR. Minimum Pressure 915 hpa, Maximum Wind Speed 55m/s, Gust 68m/s, Radius of 15m/s 280km, Radius of 25m/s 100km.

07/09 14:00 visible light image

Predictions by regional weather agencies
Typhoon Maria to most threaten norther Chinese Taipei during 07/10 ~ 07/11

- Outskirt of Typhoon Maria will touch north-eastern Chinese Taipei at 17:00, July 10 and the severe impacts would possibly fall during night of July 10 and morning of July 11.

- Possible areas impacted by strong winds: Yilan, Keelung, Taipei, New Taipei, Taoyuan, Hsinchu, Miaoli, Taichung, Changhua.

Risk of strong winds

Predicted path of Typhoon Maria

wind speed at the level 10

wind speed at the level 7
Forecast on rainfalls concentrating in northern Chinese Taipei

- Rainfall concentrations in north-eastern, northern and central mountainous parts of Chinese Taipei
- At landfall phase: strong rains would fall on Yilan, Keelung, Taipei, New Taipei, Taoyuan, Hsinchu, Miaoli, Taichung, Changhua and Nantou

Risk of strong rainfalls

Estimate on rainfall
Approaching 7/9/08~7/10/08
Landfall 7/10/08~7/11/08
Leaving 7/11/08~7/12/08
Potential flood risks

Areas with potential risks

Historical sites of floods

Yilan

New Taipei

Taipei

Taoyuan

Hsinchua

Miaoli

Taiichung

Keelung

Taichung
Potential risks of slope-land hazards

- Areas with possible high risk: Yilan, Keelung, Taipei, New Taipei, Taoyuan, Hsinchu, Miaoli, Taichung
Phase 2

Situation Report # 02 on Typhoon Maria

2018.07.10  15:00
Strong Typhoon Maria continues heading directly to northern Chinese Taipei

Typhoon MARIA (201808), Center Location 23.90N 127.20E, Movement: WNW 28KM/HR. Minimum Pressure 920 hpa, Maximum Wind Speed 53m/s, Gust 65m/s, Radius of 15m/s 280km, Radius of 25m/s 100km
Typhoon Maria to most threaten northern Chinese Taipei during 07/10 ~ 07/11

- Outskirt of Typhoon Maria will touch north-eastern Chinese Taipei at 18:00, July 10 and the severe impacts would possibly fall during evening of July 10 and morning of July 11.

- Possible areas impacted by strong winds: Yilan, Keelung, Taipei, New Taipei, Taoyuan, Hsinchu, Miaoli, Taichung, Changhua

- Risk of strong winds
Observation and forecasts on tides at sea ports
Warning on storm surges
during night of 07/10 and early morning of 07/11 at NE and Nn parts

- Outskirt of Typhoon Maria is affecting north-eastern and northern seas. The estimated tidal high could be 8-10 meters.
Forecast on rainfalls concentrating in northern Chinese Taipei

- Rainfall concentrations in north-eastern, northern and central mountainous parts of Chinese Taipei
- At landfall phase: strong rains would fall on Yilan, Keelung, Taipei, New Taipei, Taoyuan, Hsinchu, Miaoli, Taichung

Estimate on rainfall

<table>
<thead>
<tr>
<th>Landfall</th>
<th>Leaving</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/10 20~7/11 08</td>
<td>7/11 08~7/12 08</td>
</tr>
</tbody>
</table>

Risk of strong rainfalls
### Potential flood risks

**City/County** | **Disaster hot spots**
---|---
Yilan County | Jiaosi, Jhuangwei, Dongshan, Wujie
Keelung City | Cidu, Ren-ai, Anle
Taipei City | Beitou
New Taipei City | Banciao, Sanchong, Yonghe, Sinjhuang, Shulin, Danshuei, Sijih, Rueifang, Tucheng, Lujhou, Taishan, Gongliao, Jinshan
Taoyuan City | Lujhu, Sinwu
Hsinchu County | Jhudong, Sinfong
Hsinchu City | Siangshan
Miaoli City | Yuanli, Tongsiao, Jhunan
Areas with possible high risk: Yilan, Keelung, Taipei, New Taipei, Taoyuan, Hsinchu, Miaoli, Taichung

- High-risk highways
- Slope-land disaster spots in 2017

<table>
<thead>
<tr>
<th>Area</th>
<th>Disaster hot spots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yilan</td>
<td>Su-ao, Datong, Nan-ao</td>
</tr>
<tr>
<td>Keelung</td>
<td>Nuannuan, Cidu, Jhongshan, Jhongjheng</td>
</tr>
<tr>
<td>Taipei</td>
<td>Shihlin, Neihu, Wunshan, Beitou</td>
</tr>
<tr>
<td>New Taipei</td>
<td>Sansia, Sindian, Pinglin, Wulai, Shihding, Shuangsi</td>
</tr>
<tr>
<td>Taoyuan</td>
<td>Fusing</td>
</tr>
<tr>
<td>Hsinchu</td>
<td>Wufong, Jianshih</td>
</tr>
<tr>
<td>Miaoli</td>
<td>Nanjhuang, Tai-an, Jhuolan</td>
</tr>
<tr>
<td>Taichung</td>
<td>Heping, Dongshih, Sinshe</td>
</tr>
</tbody>
</table>
Phase 3

Situation Report # 03 on Typhoon Maria

2018.07.11  08:00
Typhoon Maria has decrease strength and passed northern seas of Chinese Taipei. The main island of Chinese Taipei will be out from the storm.

- **Typhoon MARIA (201808)**, Center Location 26.10N 122.20E, Movement: WNW 30KM/HR. Minimum Pressure 930 hpa, Maximum Wind Speed 48m/s, Gust 58m/s, Radius of 15m/s 280km, Radius of 25m/s 100km.
Max. accumulation (354 mm) rainfall happened in Beitou, Taipei City

Rainfall @ 7/10 15:00 - 7/11 05:00

Beitou, Taipei City
- Max. accumulation: 354 mm
- 73 mm

Jianshih, Hsinchu County
- Max. accumulation: 268 mm
- 31 mm
Intense rainfalls have decreased, but rainfall amount in districts of Taoyuan City and Hsinchu County exceed threshold values already.

Situations reported along HW#8 and HW#20.
Thanks for your attention