The Information of Ping Ding Station

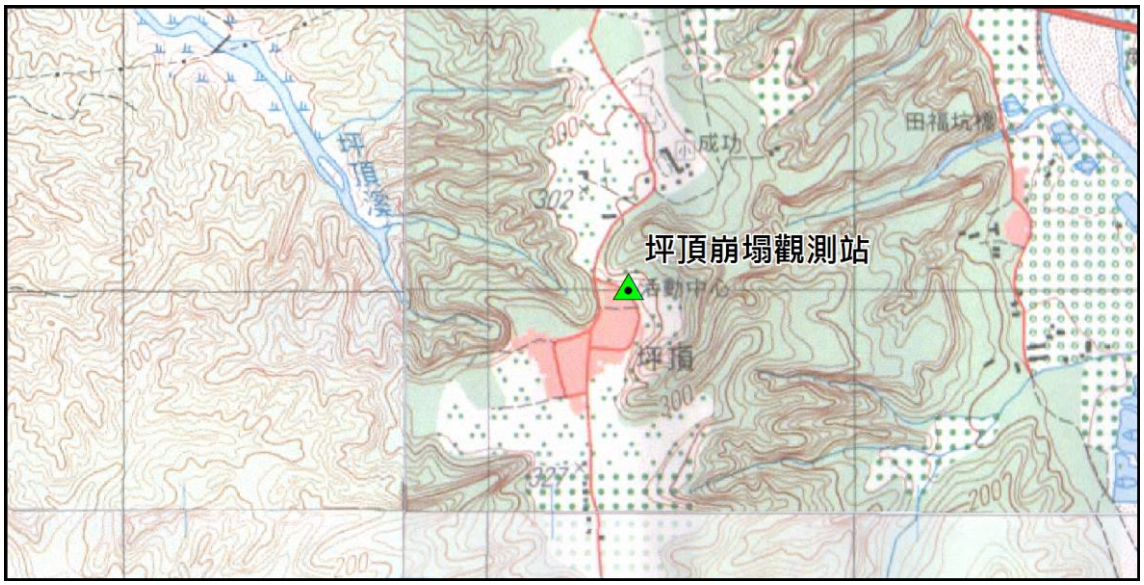
In 2008, typhoon Kalmaegi caused Pingding Village slope collapse. In order to monitor the slope deformation at the front and back of collapse, and continuously observe whether the slope has slide, Soil and Water Conservation Bureau completed the construction of the Ping Ding station in Pingding Village, Linnei Township, Yunlin County in 2008.

<table>
<tr><th colspan="4">The information of station　Last updated：2023/06/30</th></tr>
<tr><td>District</td><td>Pingding Village, Linnei Township, Yunlin County</td><td>Debris Number</td><td>None</td></tr>
<tr><td>Drainage</td><td>Upstream catchment in Zhuoshui river</td><td>River</td><td>Pingding river</td></tr>
<tr><td>The value of rainfall warning</td><td colspan="3">50mm rainfall per hour or 200mm daily accumulated precipitation</td></tr>
<tr><td>Disaster</td><td>Collapse</td><td>River length</td><td>626.67 km</td></tr>
<tr><td>Catchment area</td><td>692 hectares</td><td>Geology</td><td>Quaternary Period</td></tr>
<tr><td>Slope</td><td>30~50°</td><td>Hazards</td><td>Collapse</td></tr>
<tr><td>Elevation</td><td>306 m</td><td>Coordinate (TWD97)</td><td>X coordinate：213215
Y coordinate：2627817</td></tr>
<tr><td rowspan="2">Protected object</td><td>Residential</td><td>Public building</td><td>Transportation facilities</td></tr>
<tr><td>5~15</td><td>Yes</td><td>Roads</td></tr>
<tr><td>Historical disaster</td><td colspan="3">The Jiji earthquake in 1999. Typhoon Mindulle and typhoon Aere in 2004. The extremely heavy rain on June 9, 2006. The rainfall on May 22, 2007.</td></tr>
<tr><td>Monitoring results</td><td colspan="3">1. In April 18, 2012 (22:13). Ping Ding accumulated precipitation risen to the yellow warning (30mm rainfall per hour and 100mm daily accumulated precipitation), but did not occur collapse.
2. In May 28, 2012 (00:42). Ping Ding accumulated precipitation risen to the yellow warning (30mm rainfall per hour and 100mm daily accumulated precipitation), but did not occur collapse.
3. In May 28, 2012 (01:03). Ping Ding accumulated precipitation risen to the red warning (50mm rainfall per hour and 250mm</td></tr>
</table>

	daily accumulated precipitation or 400mm accumulated precipitation), but did not occur collapse. 4. In July 19, 2012 (17:38). Ping Ding accumulated precipitation risen to the warning, but did not occur collapse. 5. In July 24, 2012 (17:04). Ping Ding accumulated precipitation risen to the warning, but did not occur collapse. 6. In 2012, typhoon Saola caused Ping Ding accumulated precipitation risen to the warning (11:52), but did not occur collapse. 7. The extremely heavy rain on May 20, 2015. Ping Ding accumulated precipitation risen to the warning (05/24 19:00), but did not occur collapse. 8. In 2015, typhoon Soudelor caused Ping Ding accumulated precipitation risen to the warning (08/08 21:53), but did not occur collapse. 9. In July 30, 2016 (16:19). Ping Ding station accumulated precipitation risen to the warning (50mm rainfall per hour), but did not occur collapse. 10. In September 4, 2016 (00:39). Ping Ding station accumulated precipitation risen to the warning (50mm rainfall per hour), but did not occur collapse. 11. In September 17, 2016 (03:54). Ping Ding station accumulated precipitation risen to the warning (50mm rainfall per hour), but did not occur collapse. 12. The extremely heavy rain on June 1, 2017. Ping Ding accumulated precipitation risen to the warning (06/03 06:34), but did not occur collapse. 13. In August 23, 2018. Tropical Depression caused Ping Ding accumulated precipitation risen to the warning (08/23 13:34), but did not occur collapse.

Geographical position map

Basic topographic map



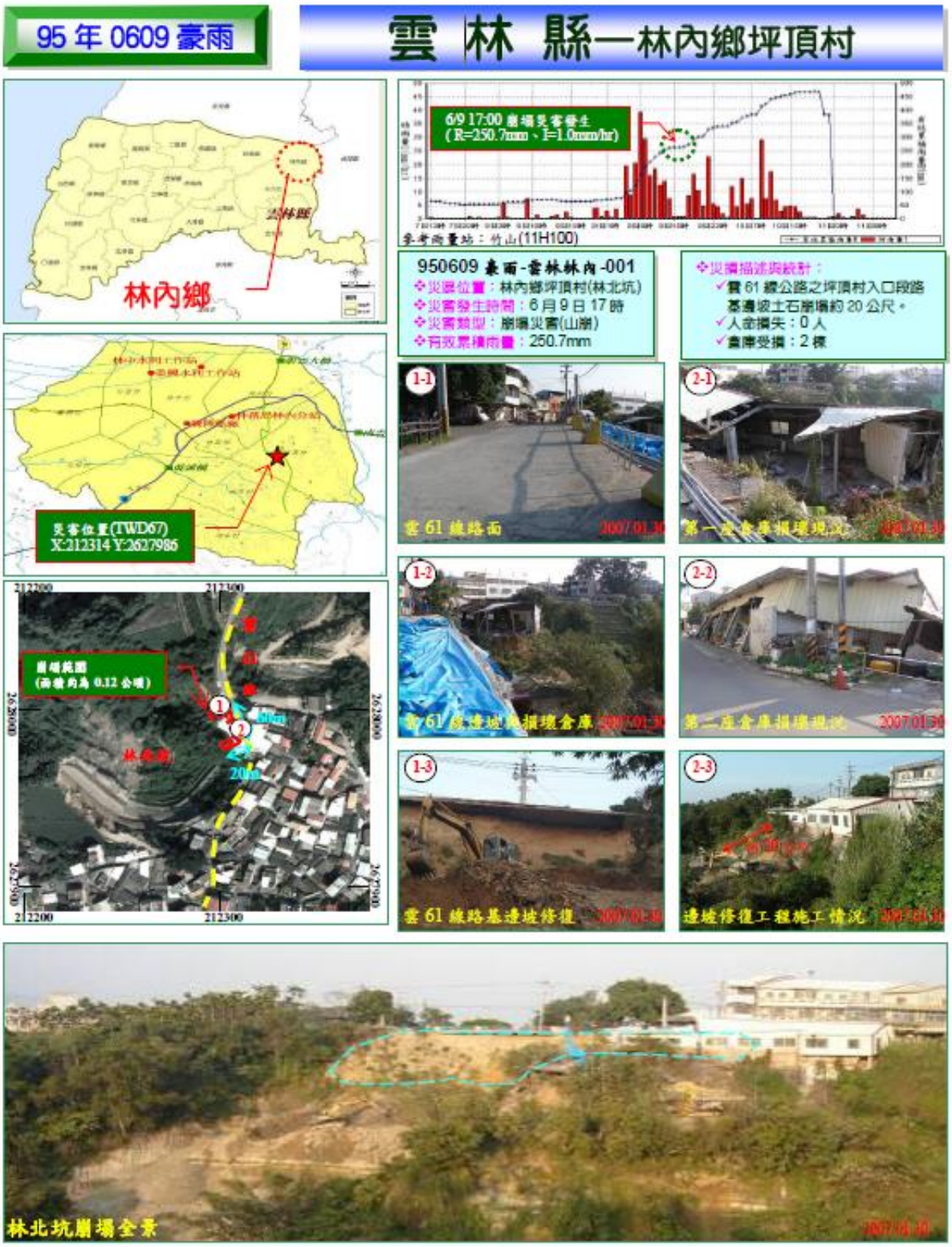
Three-dimensional map

The instrument erection of Ping Ding station

Position map of instrument erection

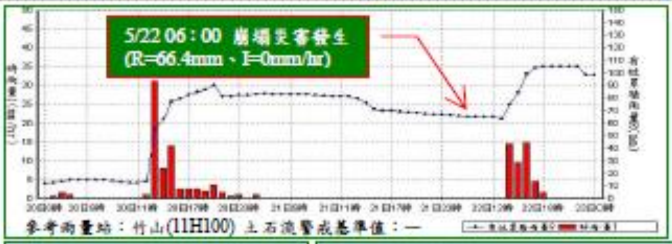
Instrument description of Ping Ding station

Instrument name	Purpose	Quantity
CCTV	Monitoring the live situation of river, gather the information of real-time image on site.	3
Rain gauge	Measuring the local rainfall of monitoring station to be an important basis for release the debris flow warning.	2
Soil moisture meter	The soil moisture meter can record the water saturation of soil, provide the different soil and the relationship between moisture content with debris flow analysis research.	1
Extensometer	The extensometer is mainly used to monitor the sliding of the surface slope in a large area. When the slope is unstable, the displacement will occur between non-move point and sliding area, then can know the situation of slope displacement.	4
Tiltmeter	It is mainly used to monitor the lateral displacement and displacement direction of slope soil or retaining wall facilities, then can know the status of displacement.	4


95 年 0609 豪雨
雲 林 縣—林內鄉坪頂村
林內鄉
6/9 17:00 崩塌災害發生
(R=250.7mm、I=1.0mm/hr)
參考雨量站：竹山(11H100)
950609 豪雨-雲林林內-001
災區位置：林內鄉坪頂村(林北坑)
災害發生時間：6月9日 17時
災害類型：崩塌災害(山崩)
有效累積雨量：250.7mm
災損描述與統計：
雲61線公路之坪頂村入口段路基邊坡土石崩塌約 20 公尺。
人命損失：0人
產牌受損：2棟
災害位置(TWD67)
X:212314 Y:2627985
崩塌範圍
(面積約為 0.12 公頃)
雲 61 線路面
第一座倉庫損壞現況
雲61線邊坡與損壞倉庫
第二座倉庫損壞現況
雲 61 線路基邊坡修復
邊坡修復工程施工情況
林北坑崩塌全景

96 年其他

雲 林 縣—林內鄉坪頂村



❖災區位置：雲林縣林內鄉坪頂村
❖災害發生時間：5月22日6時
❖災害類型：崩塌災害
❖有效累積雨量：66.4mm

❖災情描述與統計：
✓雲 61 線公路之坪頂村入口段路基邊坡土石崩塌，路基流失約 40 公尺。