February 6, 2016 (local time)
M_L-6.4 Meinong Earthquake
Kaohsiung City, Taiwan

2016/02/06 – Ver5.0
2016.02.06 Meinong Earthquake

- **M_L 6.4**, occurrence at 3:57:27.2 am, Feb. 6, 2016, local time (or, 7:57:27.2 pm, Feb. 5, 2016, UTC), CWB-defined Intensity Level 6 observed at TSMIP Caoling Station, Yunlin County.

- Epicenter located at 22.93° N Lat., 120.54° E Long., focal depth 16.7 km, (Meinong District, Kaohsiung City), 27.4 km Northeast of Pingtung County Hall.

Source: Central Weather Bureau, Taiwan.
Shaking Intensity Contour

(P-alert info provided by Y.M. Wu)
Waveforms recorded at Near-Fault Station

Caoling (CHN5) Intensity Level 6

Z Max
93.31 gal

NS Max
240.40 gal

EW Max
344.12 gal

PGA=344.12 gal

(Central Weather Bureau, Taiwan)
The focal mechanism solutions reported by CWB-Taiwan and USGS are similar

- Mixture of reverse and strike slip rupture
Activities of Aftershocks

- 7 aftershocks observed as of 6:00am, Feb 6 (local time) according to CWB
- Max. magnitude of aftershocks measures $M_L 4.9$; all 7 aftershocks were located west of the main shock and had deeper focal depths

(Source: CWB)
USGS Earthquake Hazards Program

- USGS reported the earthquake magnitude to be $M_w - 6.4$
- Epicenter located at 22.871° N, 120.668° E; focal depth 23 km
Major Historical Earthquake in Proximity

Epicenter, focal depth, and focal mechanism of the quake is similar to $M_w$-6.4 Jiasian, Kaohsiung Earthquake (高雄甲仙地震) on March 4, 2010

Source: CWB
2016 Meinong Main Shock, Aftershocks and 2010 Jiasian Earthquake Epicenters
Stations w/ Velocity Pulses

PGA Distribution calculated using NCREE + P-alert + CWB stations

Black triangle: station observing velocity pulses
Black cross: building damage sites reported
White square: NCREE & P-alert stations
White triangle: CWB stations
Correlation seemingly exists between velocity pulses observations and building damage sites.

<table>
<thead>
<tr>
<th>Station Code</th>
<th>PGV (cm/s)</th>
<th>Tp (pulse period)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHN5</td>
<td>46</td>
<td>0.84</td>
</tr>
<tr>
<td>TAI</td>
<td>35</td>
<td>2.38</td>
</tr>
<tr>
<td>SSH</td>
<td>62</td>
<td>2.07</td>
</tr>
<tr>
<td>SCK</td>
<td>41</td>
<td>1.15</td>
</tr>
</tbody>
</table>
Velocity Pulses

$T_p$ extracted using Shahi and Baker model (2014)
Shaking Intensity Contour

Database: CWB Real-Time Seismic Monitoring Network

**PGA**

2016/02/06 03:57:27
Location=120.54E / 22.93N
ML=6.4 / Depth=16.7km, Data: 98sites

**Sa(T=0.3s)**

2016/02/06 03:57:27
Location=120.54E / 22.93N
ML=6.4 / Depth=16.7km, Data: 98sites

**Sa(T=1.0s)**

2016/02/06 03:57:27
Location=120.54E / 22.93N
ML=6.4 / Depth=16.7km, Data: 98sites
## Recorded Accelerograms and Response Spectra

### Stations observing PGA > 80gal

<table>
<thead>
<tr>
<th>Station Code</th>
<th>名稱</th>
<th>Long.</th>
<th>Lat.</th>
<th>Re (km)</th>
<th>PGA(V) (gal)</th>
<th>PGA(NS) (gal)</th>
<th>PGA(EW) (gal)</th>
<th>Max PGA (gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHN5</td>
<td>草嶺</td>
<td>120.68</td>
<td>23.6</td>
<td>75.7</td>
<td>93.31</td>
<td>240.4</td>
<td>344.12</td>
<td>344.12</td>
</tr>
<tr>
<td>TAI</td>
<td>臺南市</td>
<td>120.21</td>
<td>22.99</td>
<td>35</td>
<td>82.49</td>
<td>152.17</td>
<td>233.82</td>
<td>233.82</td>
</tr>
<tr>
<td>SCL</td>
<td>佳里</td>
<td>120.2</td>
<td>23.17</td>
<td>44.08</td>
<td>54.37</td>
<td>232.93</td>
<td>224.73</td>
<td>232.93</td>
</tr>
<tr>
<td>SSH</td>
<td>善化</td>
<td>120.29</td>
<td>23.14</td>
<td>34.65</td>
<td>65.44</td>
<td>229.04</td>
<td>225.09</td>
<td>229.04</td>
</tr>
<tr>
<td>CHN7</td>
<td>六腳</td>
<td>120.24</td>
<td>23.48</td>
<td>68.9</td>
<td>20.1</td>
<td>190.81</td>
<td>175.32</td>
<td>190.81</td>
</tr>
<tr>
<td>CHY</td>
<td>嘉義市</td>
<td>120.43</td>
<td>23.5</td>
<td>64.06</td>
<td>39.9</td>
<td>118.5</td>
<td>171.37</td>
<td>171.37</td>
</tr>
<tr>
<td>WSF</td>
<td>四湖</td>
<td>120.23</td>
<td>23.64</td>
<td>84.78</td>
<td>27.46</td>
<td>164.67</td>
<td>129.8</td>
<td>164.67</td>
</tr>
<tr>
<td>SCK</td>
<td>七股</td>
<td>120.09</td>
<td>23.15</td>
<td>52.41</td>
<td>31.76</td>
<td>103.48</td>
<td>163.18</td>
<td>163.18</td>
</tr>
<tr>
<td>TAI1</td>
<td>永康</td>
<td>120.24</td>
<td>23.04</td>
<td>33.34</td>
<td>44.98</td>
<td>105.16</td>
<td>148.34</td>
<td>148.34</td>
</tr>
<tr>
<td>CHN1</td>
<td>楠西</td>
<td>120.53</td>
<td>23.19</td>
<td>28.72</td>
<td>77.46</td>
<td>147.45</td>
<td>123.94</td>
<td>147.45</td>
</tr>
<tr>
<td>WGK</td>
<td>古坑</td>
<td>120.57</td>
<td>23.68</td>
<td>84.08</td>
<td>19.62</td>
<td>105.16</td>
<td>109.46</td>
<td>109.46</td>
</tr>
<tr>
<td>SSD</td>
<td>三地門</td>
<td>120.64</td>
<td>22.74</td>
<td>22.65</td>
<td>71.3</td>
<td>105.46</td>
<td>62.15</td>
<td>105.46</td>
</tr>
<tr>
<td>SGS</td>
<td>甲仙</td>
<td>120.59</td>
<td>23.08</td>
<td>17.92</td>
<td>72.38</td>
<td>104.86</td>
<td>63.82</td>
<td>104.86</td>
</tr>
<tr>
<td>CHN4</td>
<td>草山</td>
<td>120.59</td>
<td>23.35</td>
<td>47.46</td>
<td>55.93</td>
<td>104.68</td>
<td>88.95</td>
<td>104.68</td>
</tr>
<tr>
<td>TWM1</td>
<td>旗山</td>
<td>120.43</td>
<td>22.82</td>
<td>15.99</td>
<td>31.4</td>
<td>87.93</td>
<td>57.72</td>
<td>87.93</td>
</tr>
<tr>
<td>ALS</td>
<td>阿里山</td>
<td>120.81</td>
<td>23.51</td>
<td>70.37</td>
<td>34.16</td>
<td>84.04</td>
<td>71.42</td>
<td>84.04</td>
</tr>
</tbody>
</table>
Station CHN5 (Caoling)

CHN5, Distance = 75.54 km
PGA = 93.29 gal

CHN5

Z-Direction

PGA = 240.33 gal

NS-Direction

PGA = 344.03 gal

EW-Direction
Station TAI (Tainan City)

TAI, Distance = 35.23 km
PGA = 82.51 gal

PGA = 152.16 gal

PGA = 233.79 gal
Station SCL (佳里)
Station SSH (善化)
NCREE Real-Time Seismic Monitoring Network

- Stations observing PGA>20gal

<table>
<thead>
<tr>
<th>Station</th>
<th>Name</th>
<th>E</th>
<th>N</th>
<th>PGA_U,gal</th>
<th>PGA_N,gal</th>
<th>PGA_E,gal</th>
</tr>
</thead>
<tbody>
<tr>
<td>A730</td>
<td>南化埔仔</td>
<td>120.50</td>
<td>23.05</td>
<td>133.732</td>
<td>407.994</td>
<td>327.928</td>
</tr>
<tr>
<td>A800</td>
<td>茂林萬山</td>
<td>120.68</td>
<td>22.91</td>
<td>65.438</td>
<td>158.471</td>
<td>101.689</td>
</tr>
<tr>
<td>A660</td>
<td>六腳溪厝</td>
<td>120.28</td>
<td>23.50</td>
<td>36.330</td>
<td>138.891</td>
<td>184.579</td>
</tr>
<tr>
<td>A620</td>
<td>梅山圳北</td>
<td>120.57</td>
<td>23.58</td>
<td>31.837</td>
<td>79.585</td>
<td>96.053</td>
</tr>
<tr>
<td>A590</td>
<td>二林香田</td>
<td>120.37</td>
<td>23.87</td>
<td>24.072</td>
<td>60.057</td>
<td>72.547</td>
</tr>
<tr>
<td>A771</td>
<td>路竹北嶺</td>
<td>120.27</td>
<td>22.82</td>
<td>28.233</td>
<td>50.669</td>
<td>59.984</td>
</tr>
<tr>
<td>A601</td>
<td>豐山</td>
<td>120.75</td>
<td>23.59</td>
<td>17.975</td>
<td>39.016</td>
<td>42.083</td>
</tr>
<tr>
<td>A600</td>
<td>達邦特富野</td>
<td>120.76</td>
<td>23.47</td>
<td>24.155</td>
<td>33.905</td>
<td>35.178</td>
</tr>
<tr>
<td>A770</td>
<td>大寮林園</td>
<td>120.40</td>
<td>22.54</td>
<td>13.807</td>
<td>28.637</td>
<td>28.800</td>
</tr>
<tr>
<td>A530</td>
<td>魚池東光</td>
<td>120.96</td>
<td>23.89</td>
<td>9.855</td>
<td>28.097</td>
<td>23.062</td>
</tr>
<tr>
<td>A810</td>
<td>瑪家佳義</td>
<td>120.63</td>
<td>22.64</td>
<td>19.682</td>
<td>27.570</td>
<td>33.943</td>
</tr>
<tr>
<td>A560</td>
<td>南投永興</td>
<td>120.64</td>
<td>23.89</td>
<td>12.969</td>
<td>27.446</td>
<td>26.643</td>
</tr>
<tr>
<td>A860</td>
<td>枋寮瓦礫</td>
<td>120.61</td>
<td>22.38</td>
<td>13.049</td>
<td>25.783</td>
<td>29.582</td>
</tr>
</tbody>
</table>

Re = 21.5km
Station A730 (南化埔仔)

A730, Distance = 13.55 km
PGA = 133.73 gal

PGA = 407.99 gal

PGA = 327.93 gal
Shaking Intensity Contour

Database: CWB and NCREE Real-Time Seismic Monitoring Networks

PGA

2016/02/06 03:57:27
Location=120.54E / 22.93N
ML=6.4 / Depth=16.7km, Data: 104 sites

Geometric mean

I
II
III
IV
V
VI
VII

0.8
2.5
8.0
25
80
250
400 (gal)

Sa(T=0.3s)

2016/02/06 03:57:27
Location=120.54E / 22.93N
ML=6.4 / Depth=16.7km, Data: 104 sites

Geometric mean

I
II
III
IV
V
VI
VII

0.8
2.5
8.0
25
80
250
400 (gal)

Sa(T=1.0s)

2016/02/06 03:57:27
Location=120.54E / 22.93N
ML=6.4 / Depth=16.7km, Data: 104 sites

Geometric mean

I
II
III
IV
V
VI
VII

0.8
2.5
8.0
25
80
250
400 (gal)

Obersved PGA

Obersved Sa(0.3s)

Obersved Sa(1.0s)
PGA Distribution Estimated by TELES
Spectral Accelerations Estimated by TELES

- **Sa (0.3 sec)**
- **Sa (1 sec)**
Building Collapses and Nearly Collapses Estimated by TELES

<table>
<thead>
<tr>
<th>縣市</th>
<th>Low-Rise</th>
<th>Mid-Rise</th>
<th>High-Rise</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tainan</td>
<td>228</td>
<td>35</td>
<td>5</td>
<td>268</td>
</tr>
<tr>
<td>Kaohsiung</td>
<td>68</td>
<td>11</td>
<td>4</td>
<td>83</td>
</tr>
<tr>
<td>Pingtung</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Chiayi</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>302</td>
<td>46</td>
<td>9</td>
<td>357</td>
</tr>
</tbody>
</table>
台南多棟大樓倒塌國官警消全力救援
(News Radio, Broadcasting Corporation of China, 中廣新聞網, 5:57am, Feb 6, 2016)

● 台南市永康永大路維冠大樓，整棟十六樓高的建築，不堪強烈地震搖晃倒塌，橫倒在「永大」路上。國軍官兵以及警消人員都已經趕到現場，包括消防署南部特搜中心，以及屏東和高雄特搜人員正在進行救援。目前已經救出三十四人。
● 台南歸仁也有大樓倒塌，七樓變四樓。地點在台南市歸仁區大仁路與大通路路口，目前正在救援中。
● 山上區南洲里房屋傾斜，有多名民衆受困，在五點左右，先救出三人，之後再救出七人，目前屋內初步勘查，已經沒有人受困。
● 東區長東街市場附近有大樓傾斜無人受困。新化京城銀行大樓傾斜，無人受困。另有多起電梯受困狀況，目前都已經解除。
Building collapses in Yongkang District, Tainan
Sites of Severe Losses and Damages

1. Weikuan Jinlong (維冠金龍/燦坤) Complex, Yongkang District, Tainan City
2. King's Town Bank (京城銀行), Sinhua District, Tainan City
3. Dachih Market Place (大智市場), East District, Tainan City
4. Wind God's Temple (風神廟), West Central District, Tainan City
5. On Xinyi N. Rd. & Daren St., Gueiren District, Tainan City
6. Temple of Goddess Mazu, Cishan District, Kaohsiung City (旗山天后宮)
7. Lane 101, Taizi Rd. (太子路), Rende District, Tainan City
8. 205 Minzu Rd. (民族路), Yujing District, Tainan City
9. Tainan Municipal Yujing Junior High School (玉井國中)
10. Tainan Municipal Beimen Elementary School at Yuhu Branch (北門國小玉湖分校)
Sites of Losses and Damages

• 12 Lane 27, Sec. 5 Fuan Rd., Annan Dist., Tainan City (building tilt and displaced)
• 93 Lane 141, Dade St., South Dist., Tainan City (broken water pipeline, possibly elevator shaft damage or drop, wounded civilians, building damages)
• 104 Nanzhou, Shanshang Dist., Tainan City (Building collapse)
• 18 Alley 9, Lane 100, Heping Rd., Guanmiao Dist., Tainan City (unoccupied 1-story building collapse)
• 13 Nanxing St., Gueiren Dist., Tainan City (collapse of a 3-story RC building)
• 17 Shenkeng 3rd St., Guanmia o Dist., Tainan City (top story collapse of a 3-story RC building)
<table>
<thead>
<tr>
<th>No.</th>
<th>Location of Major Damages</th>
<th>Long._WG S84</th>
<th>Lat._WGS 84</th>
<th>Long._TW D67</th>
<th>Lat._TWD 67</th>
<th>Estimated PGA (gal) GeoMean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Weikuan Jinlong (維冠金龍/燦坤) Complex, Yongkang District, Tainan</td>
<td>120.261</td>
<td>23.00523</td>
<td>120.253</td>
<td>23.00697</td>
<td>144</td>
</tr>
<tr>
<td>2</td>
<td>King's Town Bank (京城銀行), Tainan</td>
<td>120.301</td>
<td>23.03636</td>
<td>120.2929</td>
<td>23.0381</td>
<td>171</td>
</tr>
<tr>
<td>3</td>
<td>Dachih Market Place (大智市場), Tainan</td>
<td>120.231</td>
<td>22.96216</td>
<td>120.2225</td>
<td>22.9639</td>
<td>163</td>
</tr>
<tr>
<td>4</td>
<td>Wind God’s Temple (風神廟), Tainan</td>
<td>120.196</td>
<td>22.99711</td>
<td>120.1876</td>
<td>22.99885</td>
<td>219</td>
</tr>
<tr>
<td>5</td>
<td>On Xinyi N. Rd. &amp; Daren St., Tainan</td>
<td>120.298</td>
<td>22.96727</td>
<td>120.2895</td>
<td>22.96901</td>
<td>220</td>
</tr>
<tr>
<td>6</td>
<td>Temple of Goddess Mazu, Cishan (旗山天后宮)</td>
<td>120.482</td>
<td>22.88667</td>
<td>120.4742</td>
<td>22.88842</td>
<td>303</td>
</tr>
<tr>
<td>7</td>
<td>Lane 101, Taizi Rd. (太子路), Tainan</td>
<td>120.267</td>
<td>22.98984</td>
<td>120.2593</td>
<td>22.99158</td>
<td>151</td>
</tr>
<tr>
<td>8</td>
<td>205 Minzu Rd. (民族路), Tainan</td>
<td>120.468</td>
<td>23.1238</td>
<td>120.4598</td>
<td>23.12555</td>
<td>217</td>
</tr>
<tr>
<td>9</td>
<td>Yujing Junior High School, Tainan</td>
<td>120.47</td>
<td>23.12379</td>
<td>120.4615</td>
<td>23.12554</td>
<td>220</td>
</tr>
<tr>
<td>10</td>
<td>Beimen Elementary School at Yuhu Branch, Tainan</td>
<td>120.139</td>
<td>23.2616</td>
<td>120.1311</td>
<td>23.26333</td>
<td>141</td>
</tr>
<tr>
<td>11</td>
<td>Beimen Elementary School (北門國小), Tainan</td>
<td>120.125</td>
<td>23.26509</td>
<td>120.1171</td>
<td>23.26682</td>
<td>126</td>
</tr>
</tbody>
</table>
Locations of Major Damages
20160206主要災情座標.kmz
Tainan Municipal Beimen Elementary School and its Yuhu Branch
Tainan Municipal Yujing Junior High School
(1) Weikuan Jinlong (維冠金龍/燦坤) Complex

- On Section 2, Yongda Rd. and Guoguang 5th St., Yongkang District, Tainan City
- 16-story RC building collapse
Before Earthquake (Google Street View)
Before Earthquake (Google Street View)
After Earthquake

Source: https://sketchfab.com/models/5dca0c84762e4b58b63614bbe1aa70e1
After Earthquake
After Earthquake
After Earthquake
(2) King's Town Bank (京城銀行), Sinhua District

- 586 Zhongshan Rd., Sinhua District, Tainan City
- 10-story
Before Earthquake (Google Street View)
Before Earthquake (Google Street View)
Photographical View of King's Town Bank (京城銀行) after Earthquake
Photographical View of King’s Town Bank (京城銀行) after Earthquake
(3) Dachih Market Place, East District

- Lane 103, Changdong St., East Dist., Tainan City
- Commercial-residential complex building (4-story above ground, 1-story underground)
- Soft 1st story collapse, some of 4-story buildings became 3-story
After Earthquake

台南市東區大智里菜市場倒了!!二樓變一樓，裡面還有人沒出來，希望平安!
After Earthquake
After Earthquake
(4) Wind God’s Temple (風神廟), West Central District

- 8, Lane 143, Section 3 Minquan Rd., West Central District, Tainan City

Map info from Google
After Earthquake
(5) On Xinyi N. Rd. & Daren St., Guiren Dist.

- 46 Xinyi N. Rd., Guiren Dist., Tainan City
- 6-story RC building

Source: Google Street View
(6) Temple of Goddess Mazu, Cishan District (旗山天后宮)

- 16 Lane 23, Yongfu St., Chishan District, Kaohsiung City
- Collapse of decorated archway
(7) Lane 101, Taizi Rd. (太子路), Rende District, Tainan City
南台灣地震 台南仁德區太子路樓房傾斜
雲林四湖搖晃3.34秒

台南又發生規模4.0地震

仁德太子路101巷建物傾斜 鐵皮壓車

黃珮茹 記者

南台大震 南市維冠金龍大樓倒塌 已知127人獲救
(8) 205 Minzu Rd. (民族路), Yujing District, Tainan City
205 Minzu Rd. (民族路), Yujing District, Tainan City
205 Minzu Rd. (民族路),
Yujing District, Tainan City
## School Buildings

<table>
<thead>
<tr>
<th>County</th>
<th>School</th>
<th>Building</th>
<th>Assessment Result</th>
<th>Estimated PGA (gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tainan City</td>
<td>Yujing Junior High School</td>
<td>Junior College Building</td>
<td>CDR=1.08</td>
<td>220.3745</td>
</tr>
<tr>
<td></td>
<td>Beimen Elementary School (Yuhu Branch)</td>
<td>West Building</td>
<td>Is=222(?)</td>
<td>125.5235</td>
</tr>
<tr>
<td>Pingtung County</td>
<td>Gaoshu Township (高樹鄉) Tianzi Elementary School (田子國小)</td>
<td>Classroom Building</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sandimen Township (三地門鄉) Cingye Elementary School (青葉國小)</td>
<td>Dancing Classroom</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
震損校舍
Junior College Building, Yujing Junior High School (玉井國中)
before Earthquake

Built in 1998
Age of bldg: 28 yrs.
3-story
1. 窗台柱均出现X剪力裂缝（B4）
2. 长柱无损，或挠曲裂缝（B6）
3. A7, B9 裂缝可见主筋
4. 圆形开孔处裂缝（X 裂缝）
5. Y向有斜向裂缝（11 line）（6 line）（2 line）
Damage of Junior College Building, Yujing
Junior High School (玉井國中)
Damage of Junior College Building, Yujing Junior High School (玉井國中)
Damage of Junior College Building, Yujing Junior High School (玉井國中) (A7 Column)
Damage of Junior College Building, Yujing Junior High School (玉井國中)
Activity Center, Yujing Junior High School (before Earthquake)

Built in 1997
Age of bldg: 29 yrs.
Damage of Activity Center, Yujing Junior High School
Damage of Activity Center, Yujing Junior High School
Damage of Activity Center, Yujing Junior High School
Damage of Activity Center, Yujing Junior High School
Damage of Yujing Junior High School
Plan of Beimen Elementary School at Yuhu Branch

震損校舍
C

A

B

73年建·1F

B2重做胶

B4、B5、B6: 强化过（钢板焊强）
West Building, Beimen Elementary School at Yuhu Branch (before Earthquake)
Damage of West Building, Beimen Elementary School at Yuhu Branch (北門國小玉湖分校)
Damage of West Building, Beimen Elementary School at Yuhu Branch
Plan of Beimen Elementary School (北門國小)

震損校舍

震損校舍
北門國小
1 2 3 4 5 6 7 8 9

C
B
A

○ 67年 1F

B4

○ B2  B6 垂直向裂縫

○ A23現有及主筋（推測非此地震造成）
West Building, Beimen Elementary School (北門國小) before Earthquake
Damage of West Building, Beimen Elementary School (北門國小)
West Building, Beimen Elementary School (北門國小) after Earthquake
Highway Bridges

- 10 cm settlement and ruptures on pavement surface were observed of the Tungshipu Bridge deck (東勢埔橋) on Provincial Highway #3, Neimen District, Kaohsiung, and was emergency closed.
- Water pipeline broke at 12k+150 on Provincial Highway #20 (urban area of Sinhua Dist, Tainan), and 10 m of pavement surface sustained ruptures on the West Bound Fast Lane, road closed for traffic, and water supply was cut off.
- Pavement buckles (20 cm uplift) on Provincial Highway #3 in Cishan District (旗山)
There were 69 major electric power line outages in Tainan City, affecting 12,1672 households

Power outage in 467 households, Kaohsiung City

Shutdown of Unit 2, Hsinta Coal-fired Power Plant (興達發電廠), Cieding District (茄萣區), Kaohsiung City

Maanshan NPP’s two nuclear units remained operational (unaffected)

Shutdown of one distribution substation (D/S) in mountain area of Tainan, and shutdown of Longtien Secondary Substation (隆田二次變電所, S/S)
Nanpao (南寶) Golf Course