

Data note for paper “**Surface Coseismic Displacement and GPS-derived Seismic Ground Shaking Associated with the 2006  $M_L=6.96$  and  $M_L=6.99$  Pingtung Earthquake Doublet, offshore Southern Taiwan**” by *Chen et al., 2008*

### 1. Data sets

We utilize part of the Taiwan CORS which is a cooperative program operated by Central Weather Bureau (CWB), Ministry of Interior (MOI), Institute of Earth Sciences, Academia Sinica (IESAS), and several other Institutes and Universities.

### 2. Station category

CWB stations: CLON, CTOU, DAWN, FALI, HENC, JLUT, LIUC, NJOU, SGAN

MOI stations: KDNM, TMAM

IESAS stations: DONA, S01R, S103, TSHO, YENC

### 3. Coseismic displacement

#### 3.1. Daily solution

Table 1. Total coseismic displacements combined two main shocks of the 2006 Pingtung earthquakes computed by daily solution.

Stations	Latitude (°)	Longitude (°)	Height (m)	dN (mm)	dE (mm)	dh (mm)
CLON	22.430	120.579	49.350	-2.0±1.1	-2.0±1.6	-9.7±24.6
CTOU	22.754	120.277	25.643	-0.5±0.6	-0.2±1.1	-4.1±24.7
DAWU	22.340	120.890	41.023	1.5±0.7	-4.3±1.3	-10.7±25.1
DONA	22.915	120.703	522.704	3.0±0.8	0.9±0.9	-2.6±25.4
FALI	22.365	120.593	41.708	-4.6±0.6	-4.3±1.2	-12.9±27.1
HENC	22.003	120.746	46.659	-1.7±1.1	<b>-48.6±2.0</b>	-45.4±30.4
JLUT	22.329	120.622	29.966	-6.0±0.8	-6.4±1.1	-13.2±31.4
KDNM	21.949	120.782	58.297	3.5±1.5	-37.7±1.6	-30.2±32.2
LIUC	22.346	120.369	62.114	<b>-38.4±0.7</b>	-0.3±1.1	-12.0±33.4
NJOU	22.503	120.571	52.207	0.4±1.0	-0.4±1.1	-7.1±35.3
S01R	23.655	119.592	49.835	-0.3±0.0	0.6±0.1	0.0±37.1
S103	23.564	120.475	125.362	0.0±0.5	1.5±1.1	-0.1±37.2
SGAN	22.581	120.349	30.243	-1.5±3.7	-4.2±4.9	-6.2±38.4
TMAM	22.616	121.007	58.744	2.3±0.8	1.1±1.2	-3.1±42.1
TSHO	22.904	120.351	68.233	0.9±0.4	1.2±1.0	1.7±50.2
YENC	22.763	120.376	70.949	-0.5±0.6	-1.0±1.1	-2.2±44.1

### 3.2 Kinematic positioning

Table 2. Individual coseismic displacements of two main shocks associated with the 2006 Pingtung earthquakes computed by 1 Hz data

Stations	EQ1 (UTC: 12 <sup>h</sup> 26 <sup>m</sup> 21.0 <sup>s</sup> )			EQ2 (UTC: 12 <sup>h</sup> 34 <sup>m</sup> 15.3 <sup>s</sup> )		
	dN (mm)	dE (mm)	dh (mm)	dN (mm)	dE (mm)	dh (mm)
CLON	-2.6±9.1	14.7±5.7	17.3±14.8	-2.0±6.6	-6.5±5.0	-9.7±14.1
CTOU	-12.5±8.3	6.9±6.2	-0.6±15.1	0.3±7.6	0.3±6.2	-14.0±13.2
DAWU	-1.1±8.4	16.7±6.1	-2.4±15.3	0.1±6.9	-16.4±4.9	1.2±13.1
DONA	-3.0±8.1	12.7±5.2	6.4±13.3	4.7±6.9	-4.7±5.1	-16.1±12.4
FALI	-14.5±8.5	17.7±5.5	7.6±15.9	0.0±7.4	-11.7±5.0	0.0±13.7
HENC	-19.6±8.6	<b>-16.2±5.0</b>	-14.5±14.4	6.3±8.1	<b>-23.8±5.3</b>	4.3±13.3
JLUT	-8.4±8.3	16.0±6.0	28.6±16.5	-9.4±7.4	-16.0±5.7	-19.8±15.7
KDNM	-8.5±5.1	-5.2±5.1	1.6±10.6	14.3±7.5	-19.3±6.8	6.3±14.2
LIUC	<b>-15.2±9.1</b>	-1.2±5.7	6.3±13.7	<b>-28.3±8.6</b>	1.5±6.8	-25.4±13.1
NJOU	-12.5±9.2	17.9±4.9	-7.6±12.0	-0.8±7.1	-4.0±5.8	5.2±13.3
S01R	-9.0±10.4	5.3±3.9	10.8±13.7	-3.2±6.1	0.2±4.0	-13.5±12.7
S103	1.1±7.6	4.9±4.1	1.1±11.9	4.7±6.7	0.3±4.3	4.7±12.4
SGAN	-5.6±7.6	15.0±5.2	32.3±15.3	6.1±7.1	-0.2±5.9	-13.7±14.7
TMAM	-1.8±7.5	17.5±4.3	2.0±12.6	6.5±6.4	-3.5±4.5	13.2±12.3
TSHO	-8.8±9.1	5.2±5.7	-4.0±16.7	-0.8±8.8	0.4±5.9	-10.4±16.1
YENC	-14.5±8.6	6.8±6.0	-5.3±15.1	5.1±7.4	1.7±5.4	2.1±13.5

#### 4. Kinematic positioning

##### 4.1 HENC (text file see attachment "henc.txt" )

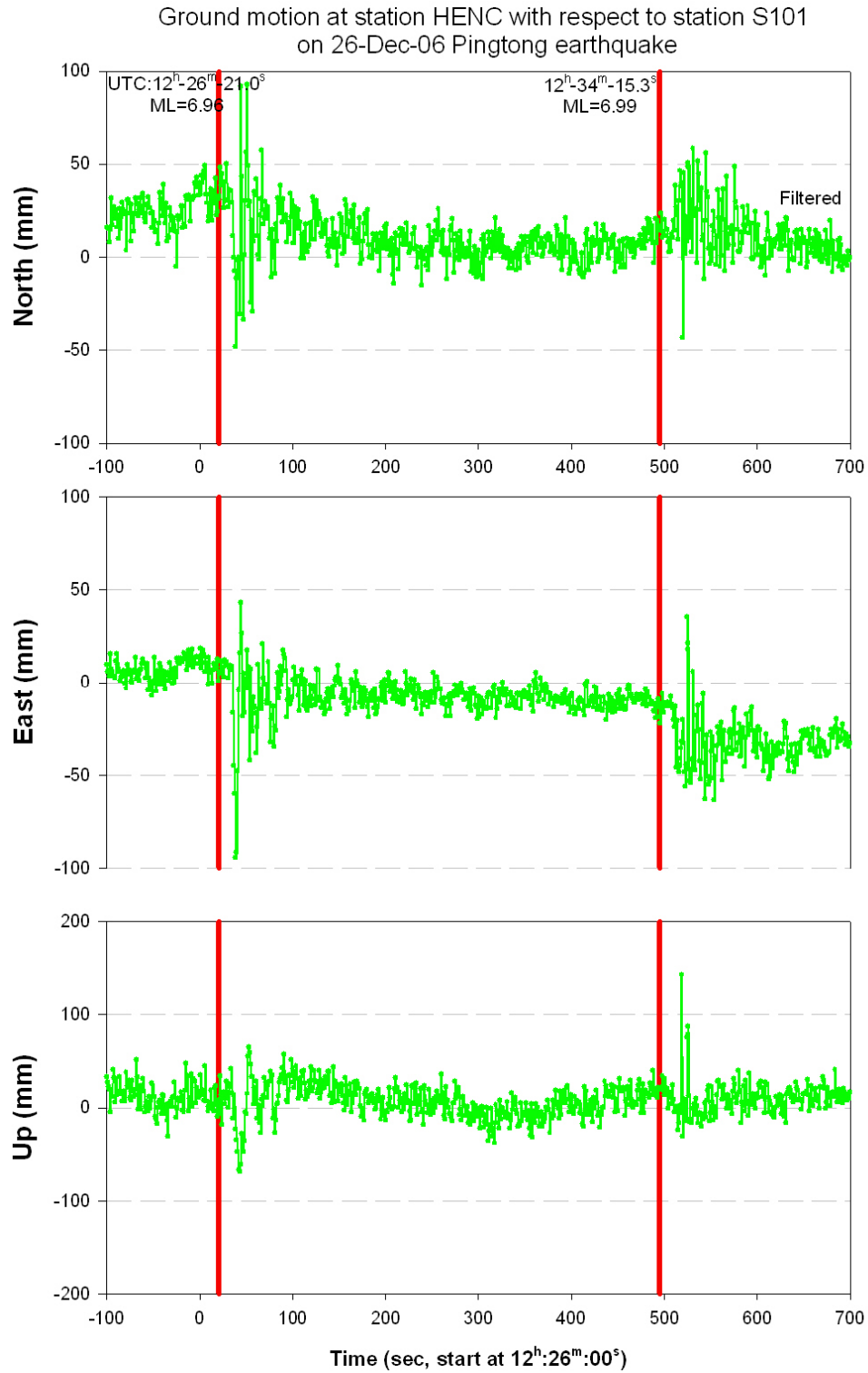


Figure 1. 1Hz GPS data by kinematic positioning algorithm at station HENC

## 4.2 KDNM (text file see attachment "kdnm.txt")

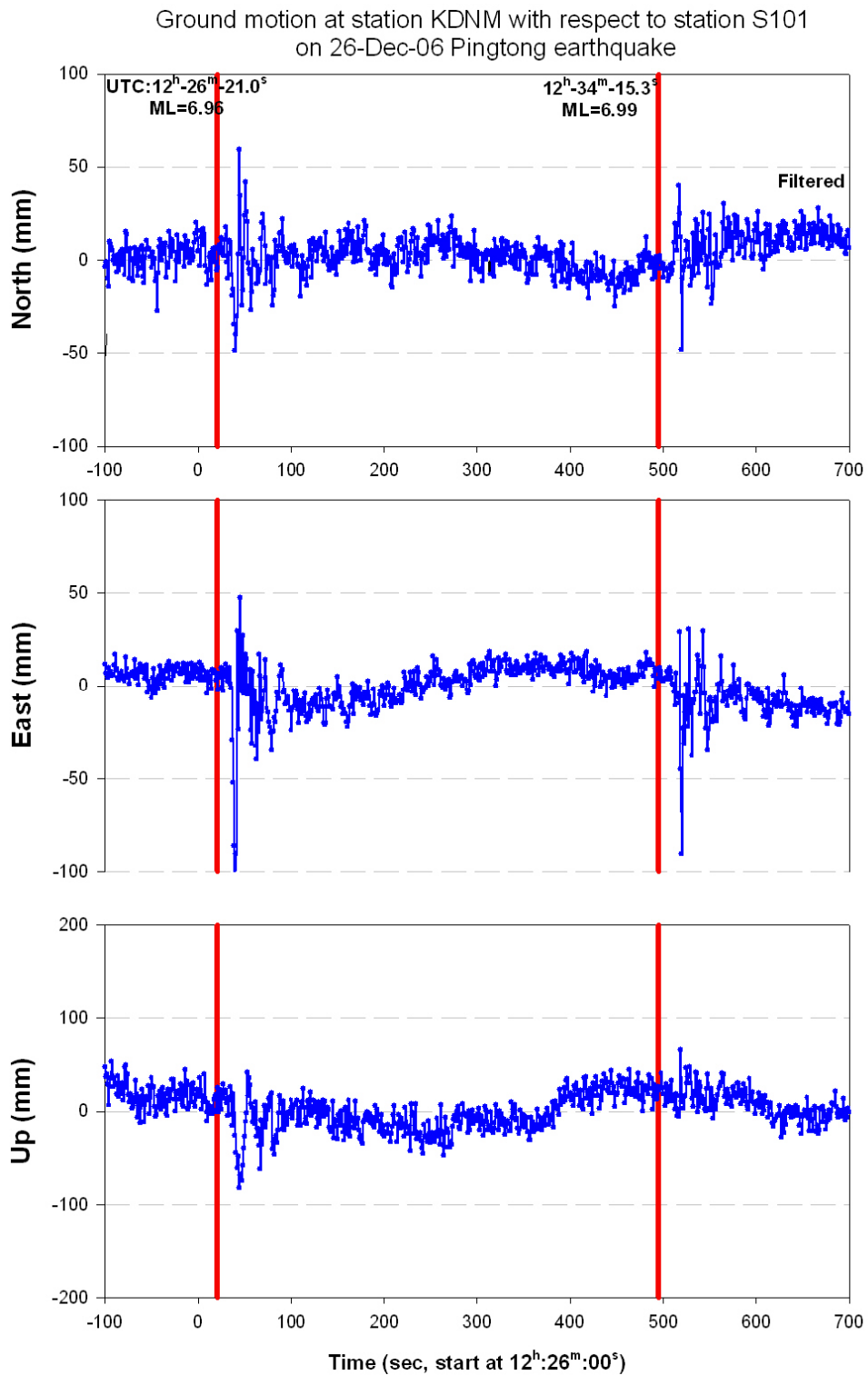


Figure 2. 1Hz GPS data by kinematic positioning algorithm at station KDNM