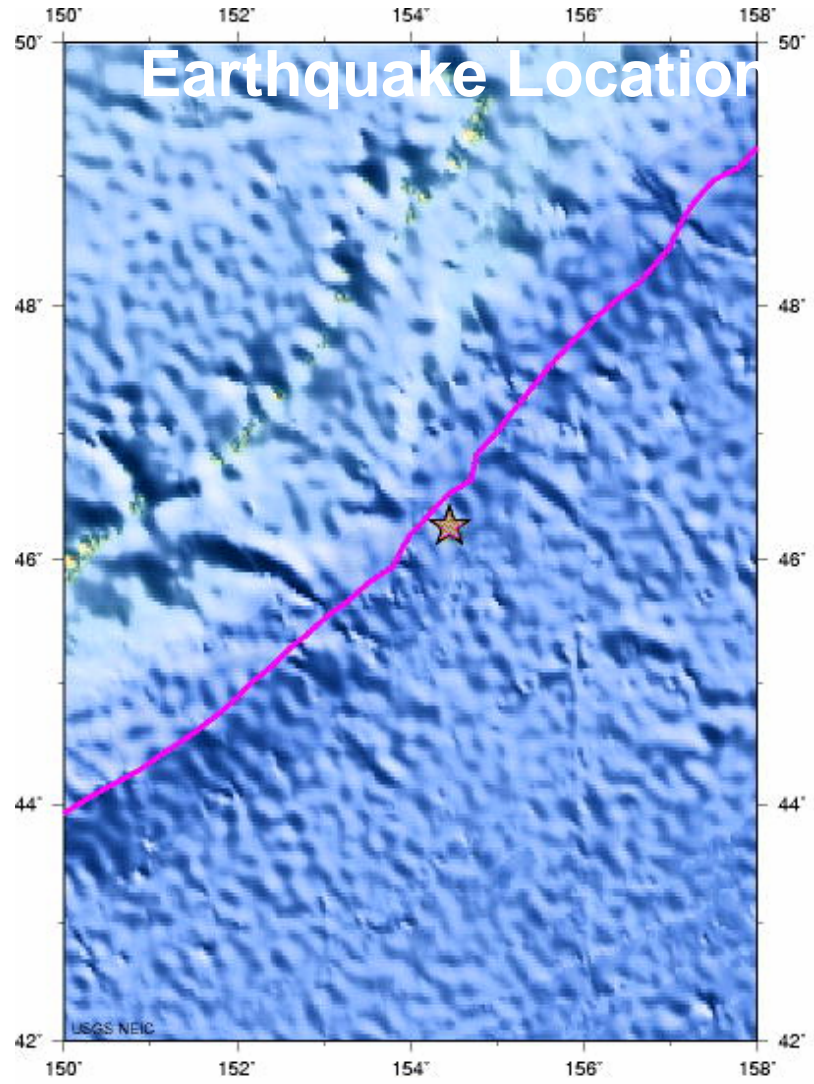


Kuril Island (Japan)
earthquake (M=8.3)
registered in Walferdange,
Luxembourg using
a gPhone gravity meter and a
superconducting gravity meter

January 13th, 2007



EAST OF THE KURIL ISLANDS
2007 01 13 04:23:20 UTC 46.27N 154.45E Depth: 10 km, Magnitude: 8.1
Earthquake Location



USGS Earthquake details

Magnitude 8.1 (Great)

Date-Time Saturday, January 13, 2007 at 04:23:20 (UTC)

= Coordinated Universal Time

Saturday, January 13, 2007 at 2:23:20 PM

= local time at epicenter

Time of Earthquake in other Time Zones

Location 46.272°N, 154.455°E

Depth 10 km (6.2 miles) set by location program

Region EAST OF THE KURIL ISLANDS

Distances 505 km (315 miles) SSW of Severo-Kuril'sk, Kuril Islands, Russia

525 km (325 miles) ENE of Kuril'sk, Kuril Islands

1710 km (1060 miles) NE of TOKYO, Japan

7260 km (4510 miles) NE of MOSCOW, Russia

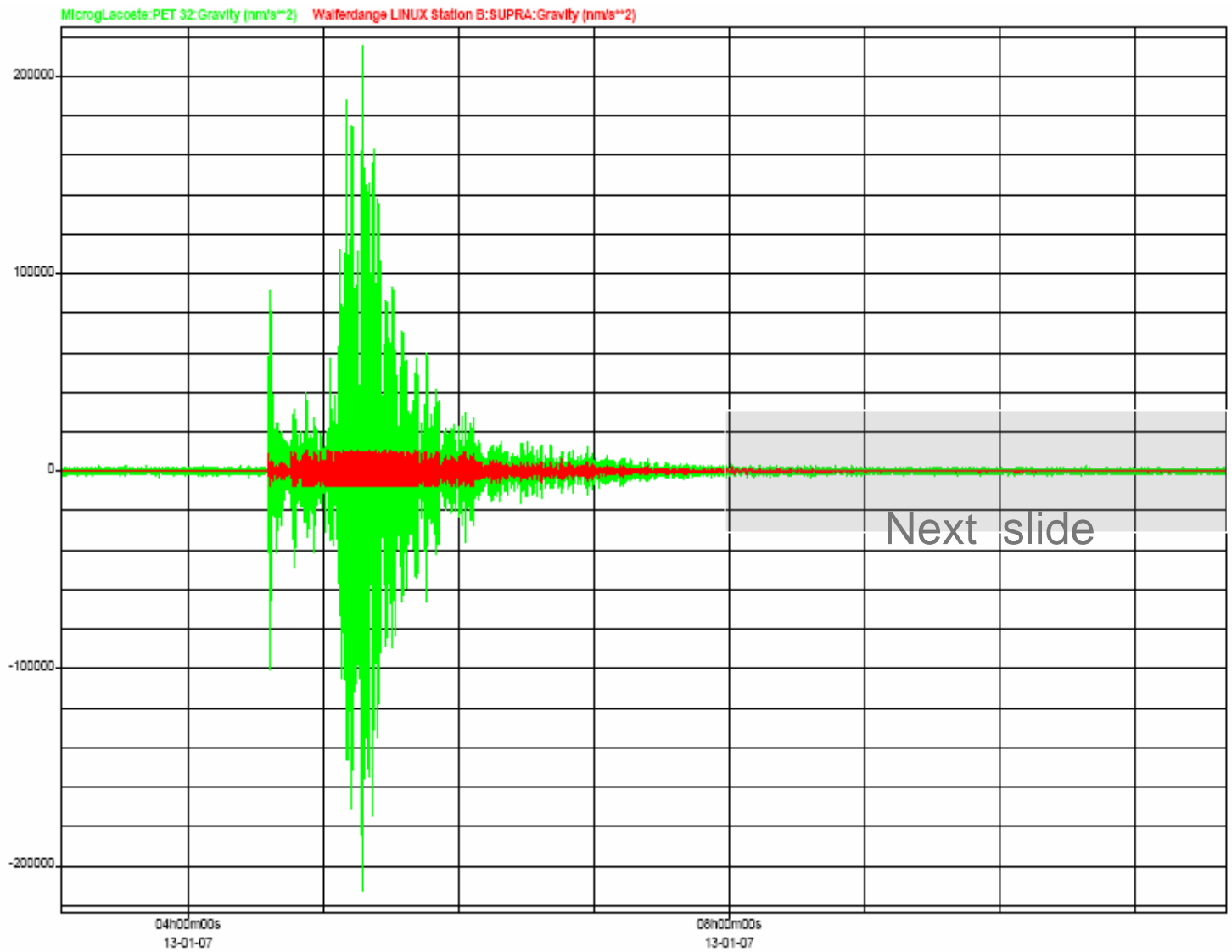
Location Uncertainty horizontal +/- 4.7 km (2.9 miles); depth fixed by location program

Parameters Nst=241, Nph=241, Dmin=810 km, Rmss=0.92 sec, Gp= 29°,

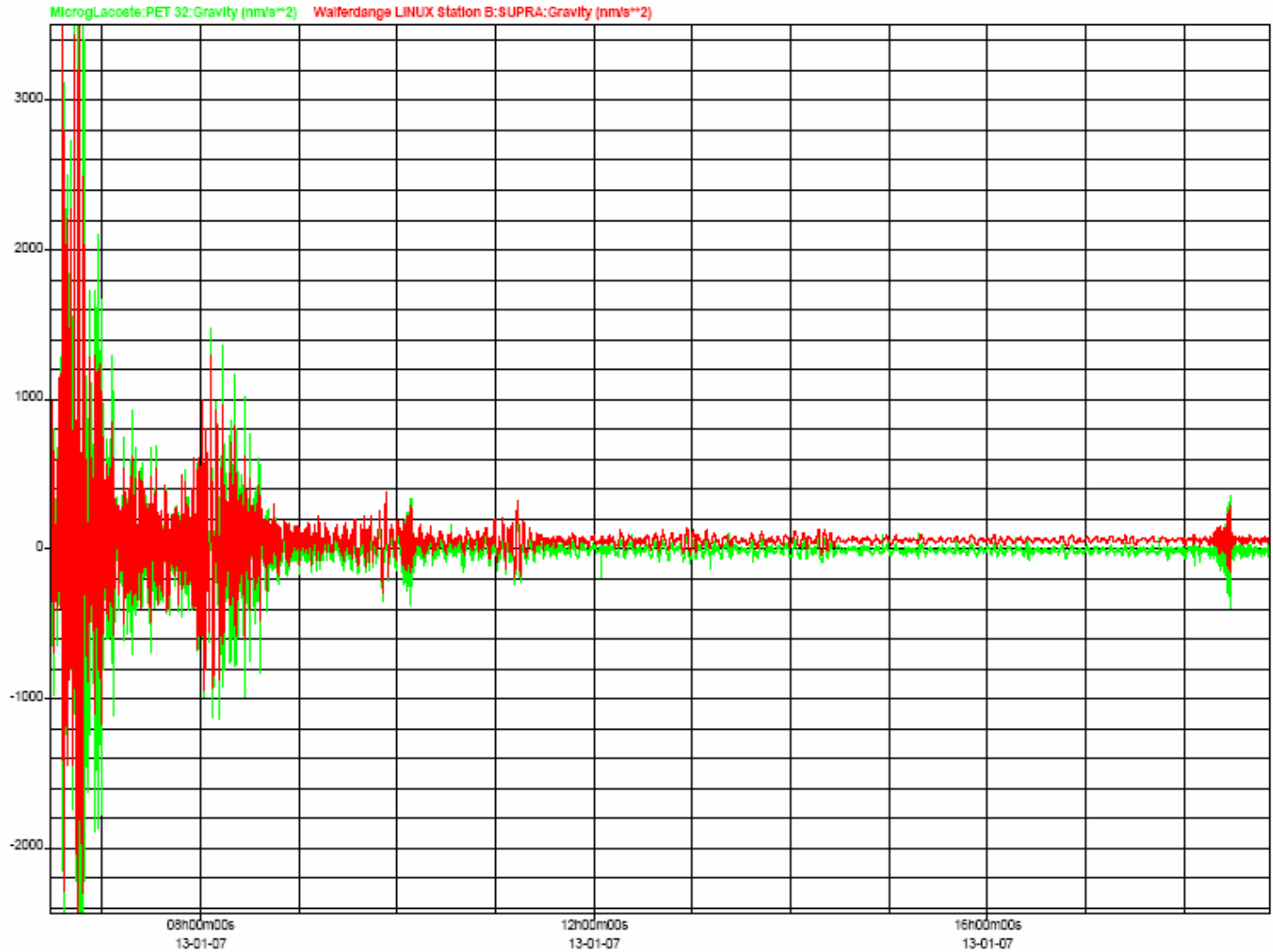
M-type=moment magnitude (Mw), **Version=**Q

Source USGS NEIC (WDCS-D)

Event ID us2007xmae

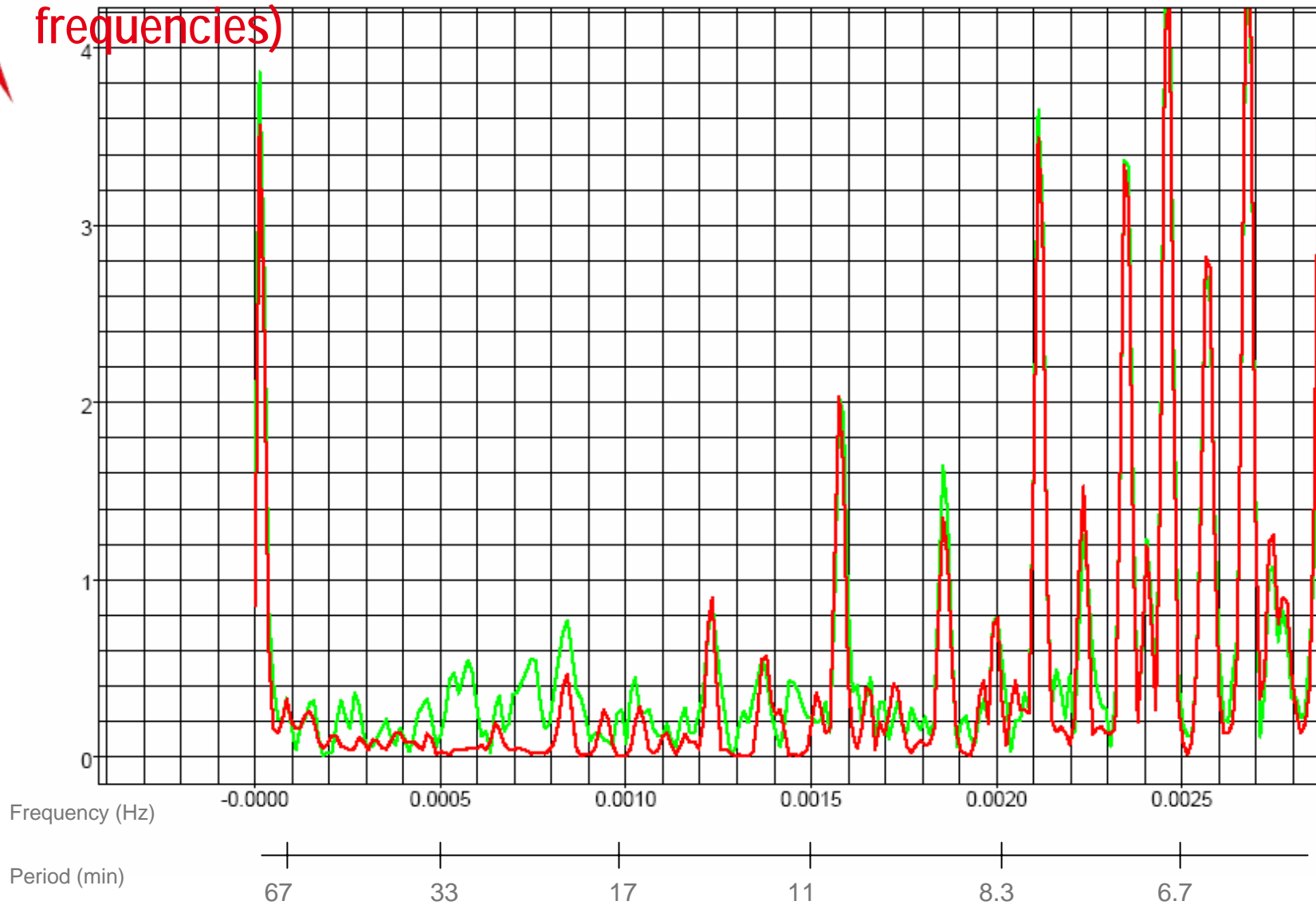


- Superconducting gravimeter
- gPhone gravimeter



- Three and ½ hours after initial registration of earthquake
- Two meters have good correlation

Overlap of SG and gPhone Frequency Spectrum (Low frequencies)





Conclusions

- Large gravity variations caused by an earthquake were simultaneously registered by two different types of gravity meters in Walferdange, Luxembourg
- Significant activity is visible even 24 hours after the first shock
- Good correlation between different types of gravimeters is observed