

What is SCEC?

- A Multidisciplinary Research and Education Community
- Supported by the National Science Foundation and the U.S. Geological Survey
- Coordinates the efforts of over 60 institutions (e.g. USC - lead, UCLA, Caltech, Oregon State, U Oregon)
- Provides infrastructure for ShakeOut.

Mission: To gather new information about earthquakes in Southern California, combine knowledge into a comprehensive understanding of earthquake phenomena, and communicate this understanding to increase earthquake awareness, reduce economic losses, and save lives.



2010 Interns
scec.org/ internships
El Mayor-Cucapah
earthquake M7.2
04-04-2010

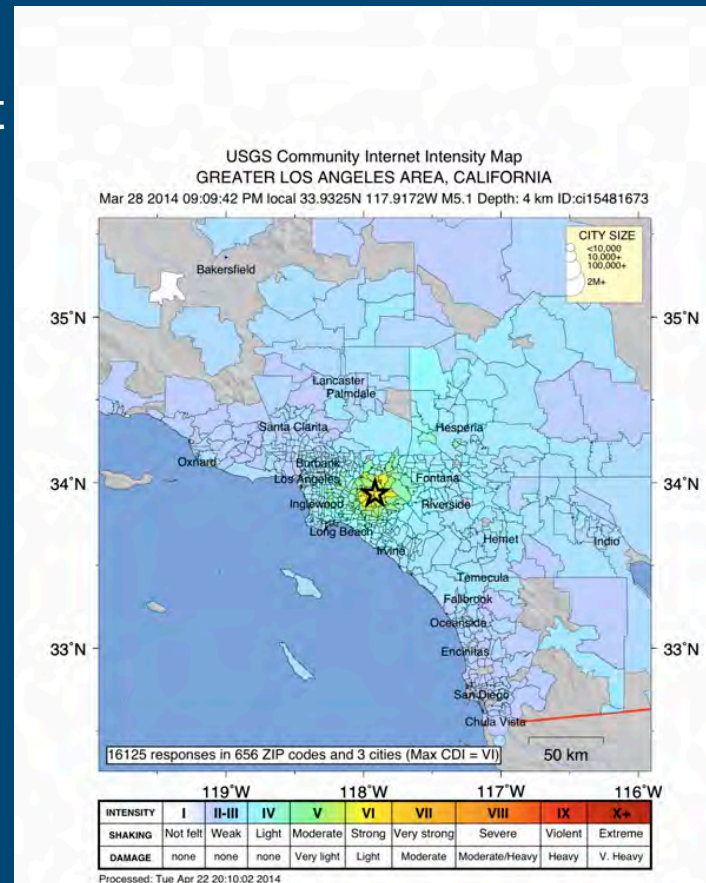
Citizen Scientist!

Quake Catcher Network: Increase the density of seismic observations to better detect earthquakes and mitigate hazard:

- New sensor technology
- Distributed sensing techniques
- Community participation

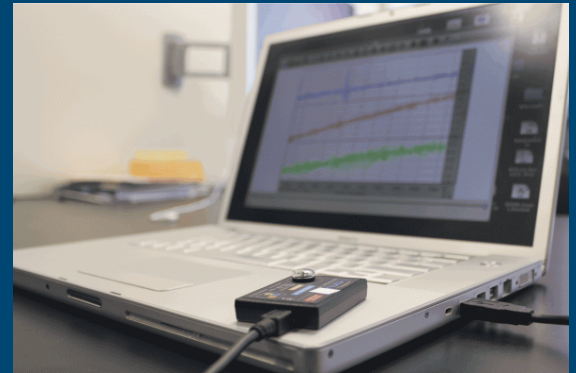
Did You Feel It?

Tap the abundant information available about earthquakes from the people who actually experience them.



Quake Catcher Network (QCN)

- Largest, low-cost strong motion seismic network utilizes sensors in and attached to Internet-connected computers.
- Collaborative initiative of Stanford Univ. & USGS
- Provides educational software that uses the sensors to teach about earthquakes and their hazards
- QCN and the SCEC/ECA EPIcenter Network are initiating a campaign to bring sensors and educational programming to free-choice learning environments. Partners include SCEC, NEES, IRIS, USGS, CA Geological Survey, UNAVCO, and EarthScope
- The QCN-EPIcenter Team has over 120 sensors installed in locations in AK, CA, ME, OR, and WA

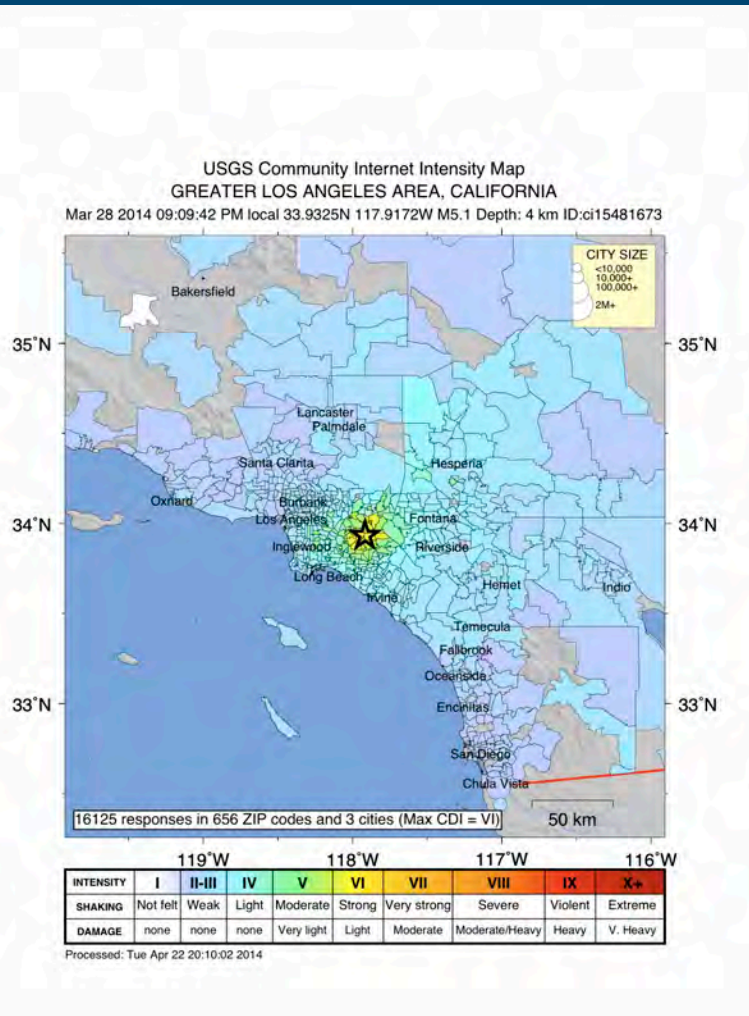


<http://qcn.stanford.edu>

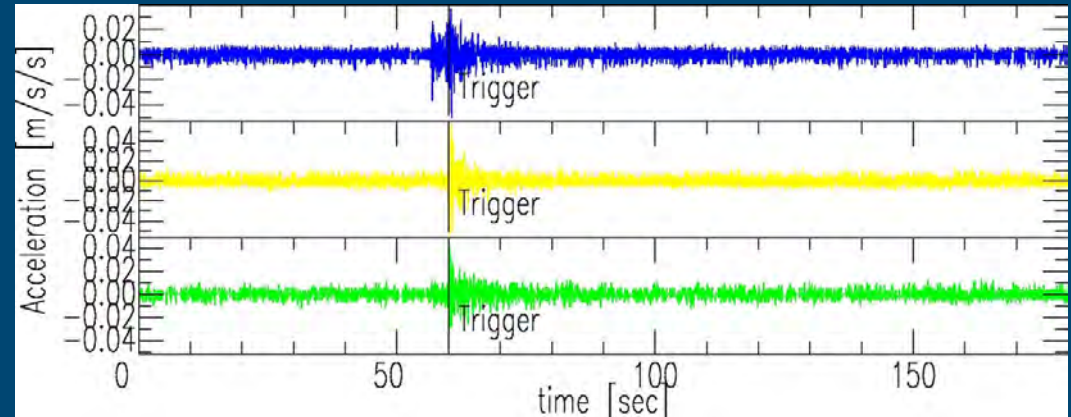


Shake
Out

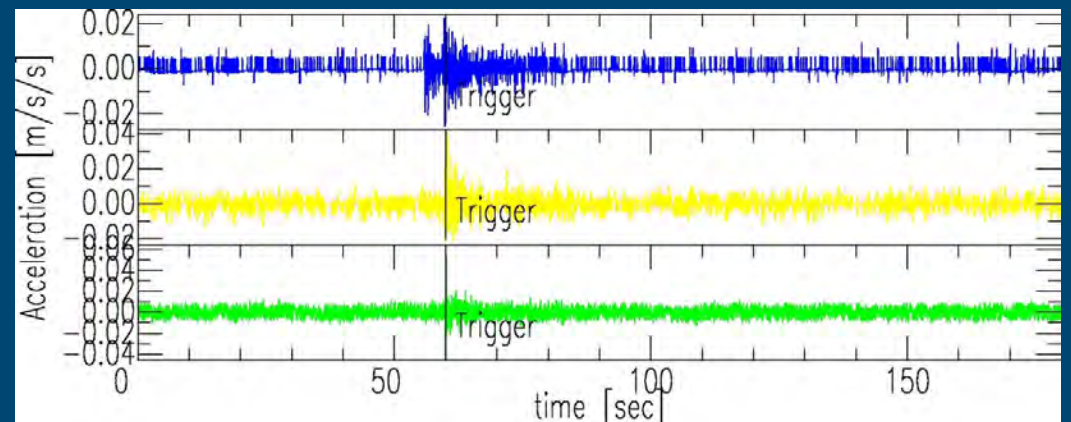
M 5.1 La Habra Earthquake 3/28/14



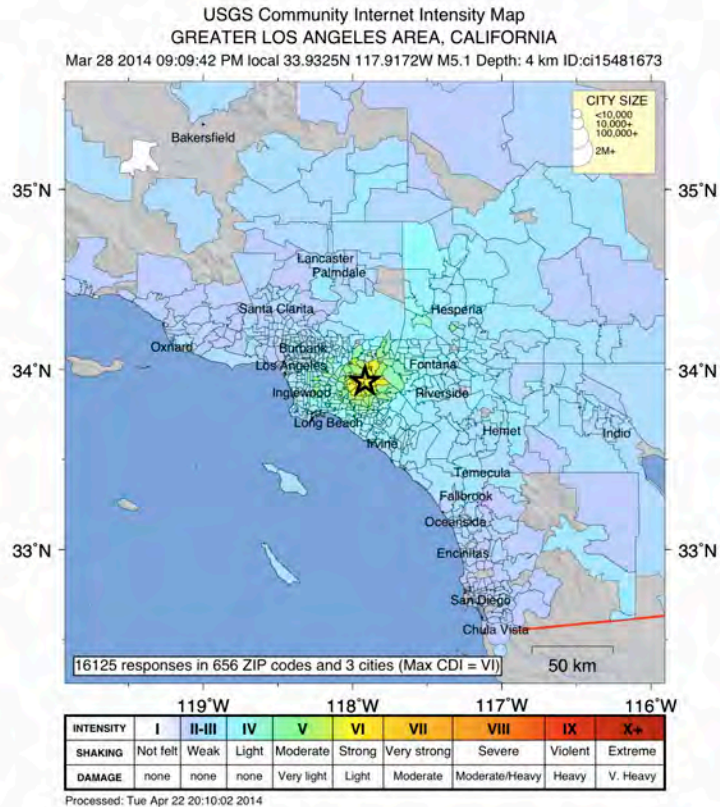
Recorded at Montclair High School



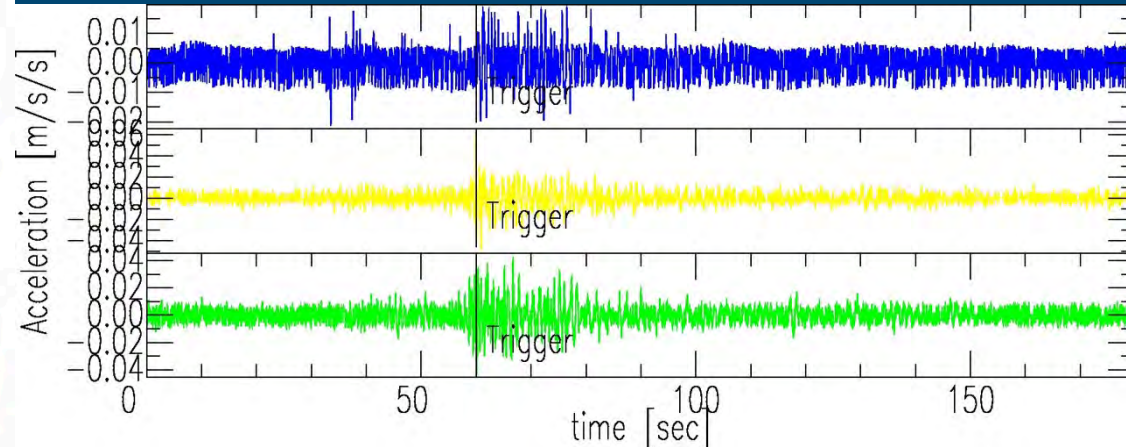
Recorded at Colony High School



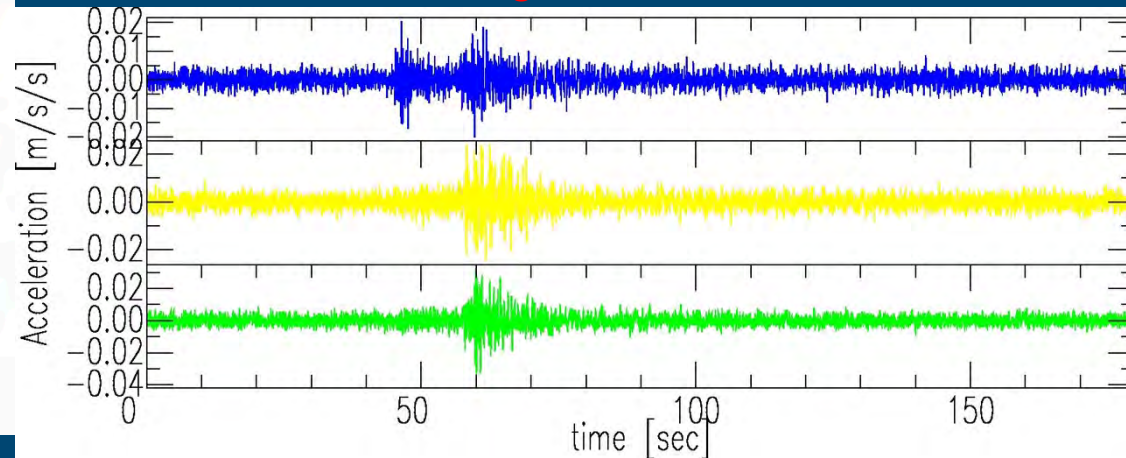
M 5.1 La Habra Earthquake 3/28/14



Recorded at Salton Sea SRA – Visitor Center



Recorded at Morongo Reservation School



The QCN-EPIcenter Team is Growing!

Join over 120 schools and free choice learning institutions in CA, WA, OR, AK and even as far east as Maine!

Summer 2014: 28 New QCN Stations in Alaska and Washington!

Taholah School, Taholah (Quinault Indian Reservation), WA

Aberdeen Museum of History, Aberdeen, WA

Eagle River Middle School, Eagle River, AK

Mears Middle School, Anchorage

Coastal Interpretive Center, Ocean Shores, WA

UAF Experiment Farm, Palmer, AK

Mears Middle School, Anchorage, AK

Ravenwood Elementary School, Anchorage, AK

Ocosta High School, Westport, WA





As people become take part in seismic monitoring, they feel more safe and educated about SFIP operations



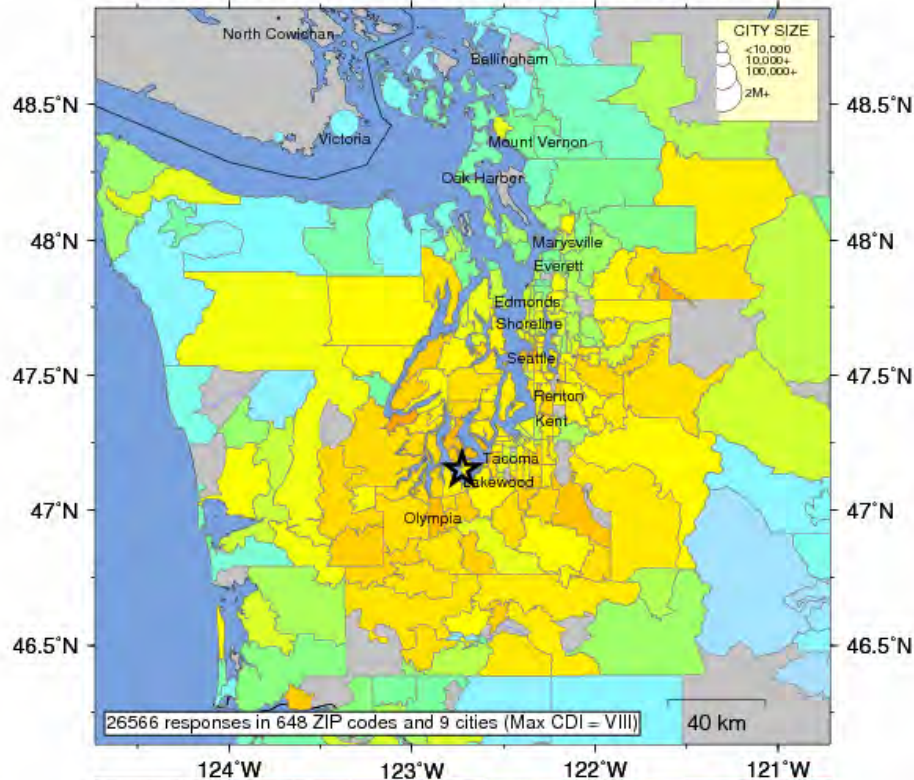
Two Types of Intensity

ShakeMap - Instrumental

USGS Community Internet Intensity Map

Nisqually

Feb 28 2001 10:54:33 PST 47.1489N 122.7266W M6.8 Depth: 52 km ID:uw02281854

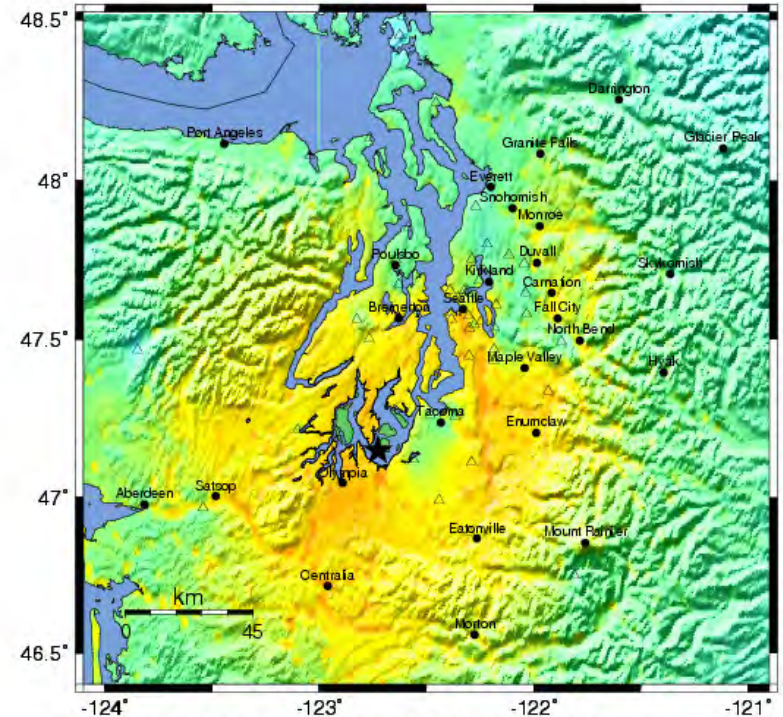


| INTENSITY | I | II-III | IV | V | VI | VII | VIII | IX | X+ |
|-----------|----------|--------|-------|------------|--------|-------------|----------------|---------|----------|
| SHAKING | Not felt | Weak | Light | Moderate | Strong | Very strong | Severe | Violent | Extreme |
| DAMAGE | none | none | none | Very light | Light | Moderate | Moderate/Heavy | Heavy | V. Heavy |

Processed: Fri Aug 8 23:30:49 2014

PNSN Rapid Instrumental Intensity Map Epicenter: 17.0 km NE of Olympia, WA

Wed Feb 28, 2001 10:54:00 AM PST M 6.8 N47.15 W122.73 Depth: 51.9km ID:0102281854



PROCESSED: Mon Oct 13, 2003 06:47:37 AM PDT, - NOT REVIEWED BY HUMAN

| PERCEIVED SHAKING | Not felt | Weak | Light | Moderate | Strong | Very strong | Severe | Violent | Extreme |
|------------------------|----------|---------|---------|------------|--------|-------------|----------------|---------|------------|
| POTENTIAL DAMAGE | none | none | none | Very light | Light | Moderate | Moderate/Heavy | Heavy | Very Heavy |
| PEAK ACC (%g) | < .17 | .17-1.4 | 1.4-3.9 | 3.9-9.2 | 9.2-18 | 18-34 | 34-65 | 65-124 | >124 |
| PEAK VEL (cm/s) | <0.1 | 0.1-1.1 | 1.1-3.4 | 3.4-8.1 | 8.1-16 | 16-31 | 31-60 | 60-116 | >116 |
| INSTRUMENTAL INTENSITY | I | II-III | IV | V | VI | VII | VIII | IX | X+ |

Did You Feel It? - Community

Demons escape from crack in

WEEKLY WORLD

NEWS

February 22, 1994

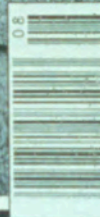
99¢/\$1.09 CANADA 70p UK

**Exclusive
photo!**

California freeway!

L.A. QUAKE OPENS GATES OF HELL!

*President puts
National Guard
on red alert!*



**Shake
Out**