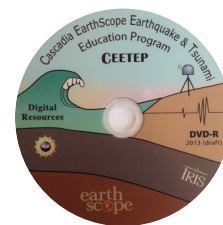


CEETEP – Related Digital Resources

The resources on the CEETEP DVD and USB drive include many items developed by or in collaboration with other organizations. Here we overview some of the partner and related organizations so you can access them directly.



1. IRIS – Integrated Research Institutes for Seismology

Many [IRIS educational resources](#). In particular:

[Animations](#) on plate tectonics, seismology, GPS, earthquakes, and tsunami are added periodically (many of the best existing ones are on your CEETEP DVD and USB drive).

We will sign you up to receive IRIS [Teachable Moments](#). These are earthquake notices sent out within 24 hours of all significant earthquakes. Let your colleagues know so they can sign up too.



2. UNAVCO – runs the >1100 GPS stations for EarthScope

Find your closest [GPS station using the Plate Boundary Observatory \(PBO\) network map](#). Zoom in and then click on station of interest. A small box will open up. Click on the station name to go to the station website with data and photos.

There is also a [Velocity Viewer](#) that shows velocity arrows, but not all the stations show automatically. You can select at the bottom to see all, but it is better to do after you zoom into the general area of interest.



3. EARTHSCOPE

[EarthScope's](#) site has some resources but UNAVCO and IRIS have more.



4. TOTLE – Teachers on the Leading Edge

Many of the same resources available on your CEETEP DVD. [TOTLE](#) was a previous K-12 teacher professional development program funded by EarthScope for Pacific Northwest. Great place to point colleagues to if you want to point colleagues towards resources.

In particular, if you cannot take your learners into the field but still wish to show them what is seen in the field, there are [Virtual Field Environments](#) for Oregon and Washington tsunami sites. You can find the Niawiakum River site that we visited is the Southwest Coastal Washington, Niawiakum Site #4. (The VFEs are also on your DVD.)

5. Red Cross Emergency Planning Guide

Resources to develop an [emergency plan](#) for you family or workplace.



6. SCEC – Southern California Earthquake Center

The [SCEC](#) is funded by the National Science Foundation and the USGS to develop a comprehensive understanding of earthquakes in Southern California and elsewhere, and to communicate useful knowledge for reducing earthquake risk. SCEC is part of the [Earthquake Country Alliance](#), a public-private partnership of people, organizations, and regional alliances that work together to improve preparedness, mitigation and resiliency.



7. SHAKE OUT EARTHQUAKE DRILLS

[Great ShakeOut](#) Earthquake Drills are an annual opportunity for people in homes, schools, and organizations to practice what to do during earthquakes, and to improve preparedness.

A collection of [ShakeOut-related visualizations](#).



8. RCTWG – Redwood Coast Tsunami Workgroup

[RCTWG](#) is an interagency group working to reduce earthquake and tsunami hazards and coordination mitigation activities on California's North Coast. It has been a leading organization in grassroots action and initiated the development of the [Living on Shaky Ground resources](#).



9. PNSN – Pacific Northwest Seismic Network

PNSN monitors the occurrence of Episodic Tremor and Slip (ETS) events throughout Cascadia. You can see [maps of tremor](#) on their site.

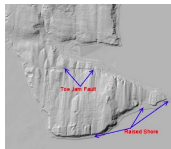
In order to follow the PNSN commentary about a given episode, visit the [event overview and blog page](#).



10. USGS – United States Geologic Survey

[National Earthquake Information Center](#) has information about and maps of earthquakes around the world.

[Did you feel it?](#) – if you feel an earthquake, input data about the shaking you felt there. This is valuable citizen science that helps USGS research correctly model expect shaking for future quakes.



11. LIDAR – very high-resolution topographic images that greatly aid in landslide and fault scarp identification

[Open Topography](#) has an [image library](#) from around the country that includes many shaded relief images in Google Earth format.

For state-specific images, you go to the [Puget Sound Lidar Consortium](#) and [Oregon Lidar Consortium](#).

12. Oregon Resources

[Oregon Tsunami Clearinghouse](#) - maps and apps and more

13. Washington Resources

[Tsunami evacuation maps](#) (same page has a number of other tsunami resources)

[Tsunami inundation maps](#)

[Interactive maps](#) including geologic formations, seismic scenarios, and natural hazards.



14. NOAA – National Oceanic and Atmospheric Administration

[NOAA](#) runs the tsunami warning system for the USA. Thus [distant](#) tsunami warnings come through the NOAA warning system as well as educational resources.



What's Shaking at SCEC?

Robert de Groot

**Manager – Office of Experiential Learning & Career Advancement
Southern California Earthquake Center (SCEC)**

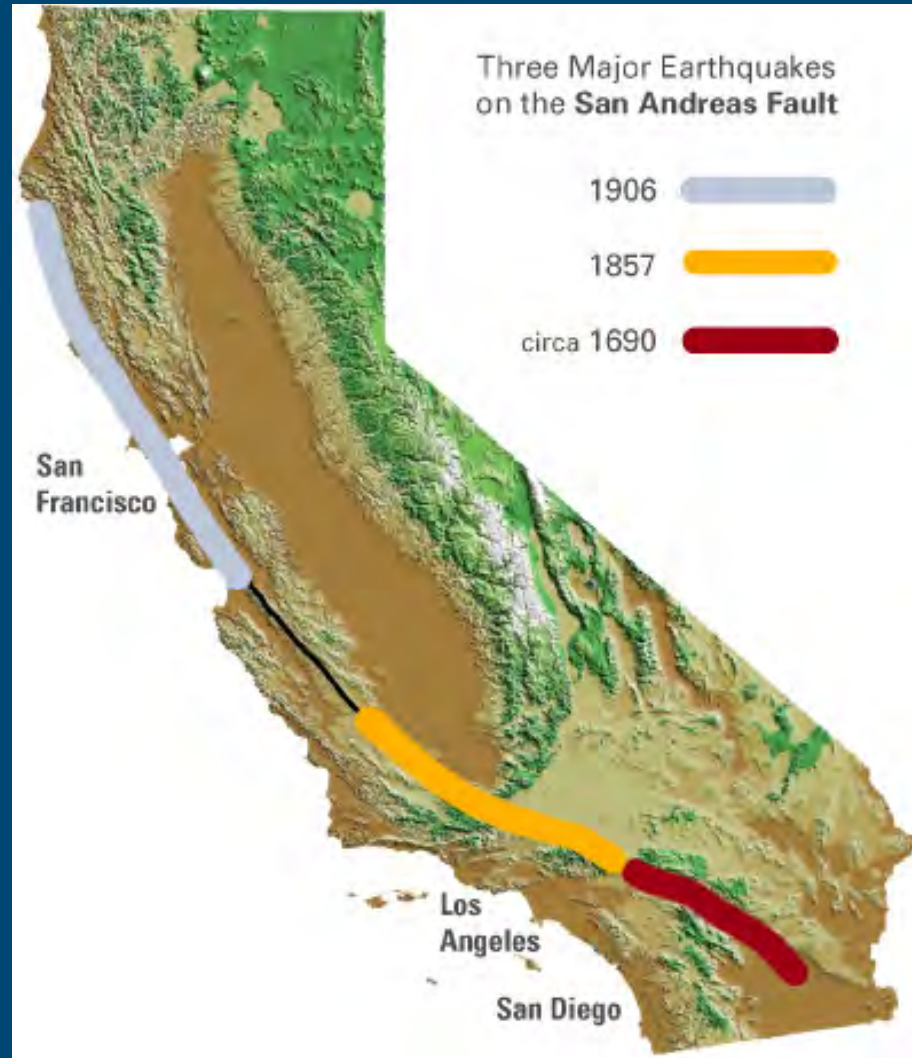
CEETEP – Astoria, OR

14 October 2013

degroot@usc.edu

Welcome to Earthquake Country!

California: A Natural Laboratory

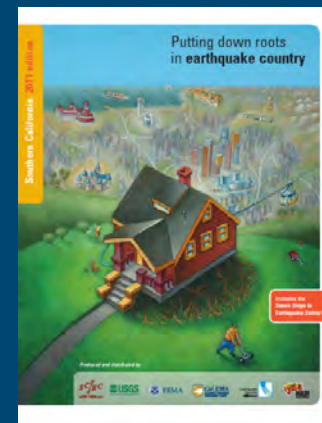


What is the Southern California Earthquake Center (SCEC)?

- 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. Oregon State University, University of Oregon, Caltech, MIT, Harvard, UC Davis, USC, University of Alaska-Fairbanks, UC Berkeley)

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.

www.scec.org



Earthquake Country Alliance

ECA is a public-private partnership of people, organizations, and regional alliances, founded in 2003 in Southern California and expanded in 2009.

Each regional alliance conducts its own activities and collaborates with the others

Statewide committees determine long-range plans, sector-based needs, and develop resources

The screenshot displays the Great Oregon ShakeOut website. At the top, there is a navigation bar with links: Home, Other ShakeOuts, Other Languages, Contact Us, Search, and Login. Below this is a banner for 'The Great Oregon ShakeOut' featuring a map of Oregon and a photo of a cliff. A secondary navigation bar includes links: Register Here!, Why Participate?, Who is Participating?, How to Participate, Resources, News & Events, Partners & Sponsors.

The main content area is divided into two columns. The left column is titled 'GET READY TO SHAKEOUT!' and contains text about the 2013 Great Oregon ShakeOut, including a registration link and a note about the drill date (October 17). The right column is titled 'LEARN THE LATEST' and includes links for 'How to Participate', 'Who is Participating?', 'ShakeOut Resources', 'ShakeOut Participant Updates', and 'Frequently Asked Questions'. A photo of a person in a red shirt crouching under a table is also present.

Below the main content area, a status bar shows 'Over 190,000 participants registered' and '6 days until ShakeOut on 10/17'. The bottom section is divided into three columns: 'PLAN YOUR DRILL' (with links for planning, ShakeOut Shop, Countdown to ShakeOut for Organizations, Recommended Earthquake Safety Actions, and Earthquake Guide for People with Disabilities), 'CHECK THE STATS' (showing 'Over 190,000 participants and counting!' and a map of Oregon), and 'PLAY AND SHARE' (with links for 'PLAY BEAT THE QUAKE' and 'QUAKE QUIZ').

The footer includes logos for the American Red Cross and FEMA.

Join today: www.earthquakecountry.org/alliance



ECA Activities

The Great NorthEast ShakeOut

Register today at www.ShakeOut.org

Tsunami Awareness week

<http://nthmp.tsunami.gov/taw/tsunami-awareness-week.html>

Development of consistent, statewide messaging and resources via sector-based committees
www.earthquakecountry.org

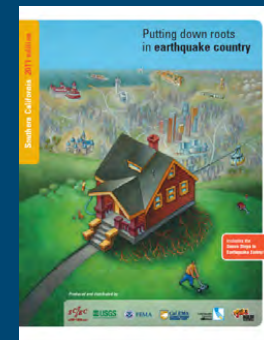
ECA EPIcenters

60+ museums, parks, libraries, ShakeOut events and other pro

Speakers Bureau

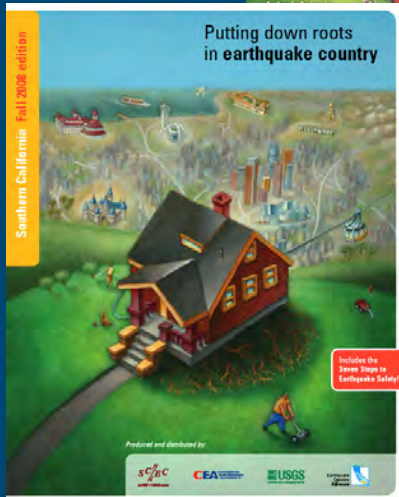
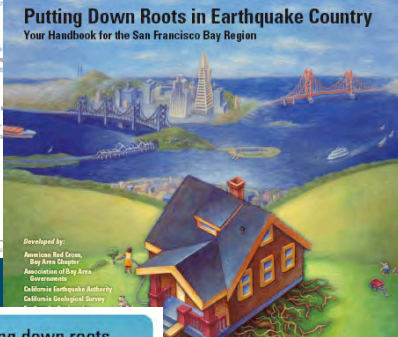
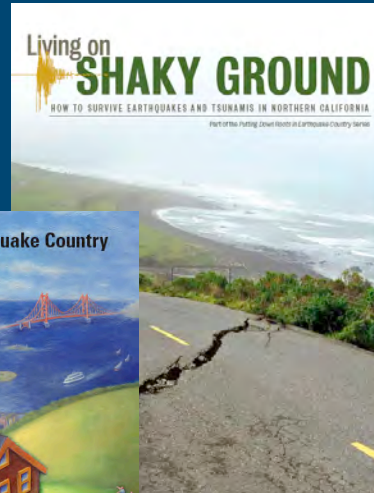
Presentations & booths at fairs,

Coordination among ECA Associates



Shake
Out

ECA Preparedness Resources



- www.earthquakecountry.org
- *Putting Down Roots in Earthquake Country*
 - Includes “Seven Steps to Earthquake Safety”
 - Online to read, download, or order free printed copies
 - So. Cal. English & Spanish
 - Bay Area (also multi-language special versions)
- *North Coast: Living on Shaky Ground* (similar content)
- *7 Steps to an Earthquake Resilient Business*
- www.Terremotos.org

PREPARE

Before the next big earthquake we recommend these four steps that will make you, your family, or your workplace better prepared to survive and recover quickly:

Step 1:

Secure your space by identifying hazards and securing moveable items.



Step 2:

Plan to be safe by creating a disaster plan and deciding how you will communicate in an emergency.



Step 3:

Organize disaster supplies in convenient locations.



Step 4:

Minimize financial hardship by organizing important documents, strengthening your property, and considering insurance.



SURVIVE AND RECOVER

During the next big earthquake, and immediately after, is when your level of preparedness will make a difference in how you and others survive and can respond to emergencies:

Step 5:

Drop, Cover, and Hold On when the earth shakes.



Step 6:

Improve safety after earthquakes by evacuating if necessary, helping the injured, and preventing further injuries or damage.



After the immediate threat of the earthquake has passed, your level of preparedness will determine your quality of life in the weeks and months that follow:

Step 7:

Reconnect and Restore

Restore daily life by reconnecting with others, repairing damage, and rebuilding community.



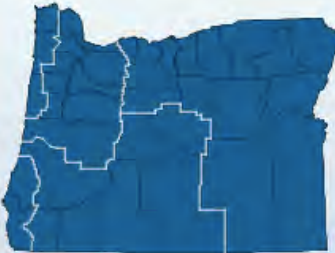


Great ShakeOut

Earthquake Drills

Over 190,000
participants
and counting!
(Over 23.1 million worldwide)

Click the map for
details about each area



2012 Participants: Over 160,000
Click Map for Area Total:

Over 750,000
participants and counting!
(Over 23.1 million worldwide)

Click the map for
details about each area



2012 Participants: Over 710,000
Click Map for Area Total:

9.3 million
participants
and counting!
(Over 23.1 million worldwide)

Click the map for
details about each area



2012 Participants
Total: 9.4 Million

Click Map for
Area Total

October 17, 2013 @ 10:17 am
Register today at ShakeOut.org



ShakeOut.org/resources

Get Ready to Shake Out.

10.20.11
Register Now at
www.shakeout.org

The Great California
Shake Out



Shake Out The Great California ShakeOut
Annual Disaster Earthquake Drill

Individuals and Families
Get Ready to ShakeOut

Register today at ShakeOut.org

At 10:20 a.m. on October 20, 2011, millions of Californians will "Drop, Cover, and Hold On" to The Great California ShakeOut, the largest earthquake drill ever. Everyone is encouraged to participate in the drill whenever you are at 10:20 a.m. on 10/20/11.

Major earthquakes may happen anytime you work, live, or travel in California. The ShakeOut is an exercise to practice how to protect ourselves, and for everyone to become prepared. The goal is to prevent disaster from becoming a catastrophe.

Why is a "Drop, Cover, and Hold On" drill important? As with anything, it's not quickly you must practice often. You may only have seconds to protect yourself in an earthquake before strong shaking sends you down, or something falls on you.

Nearly 5.5 million businesses in California participate in the 2011 ShakeOut. New businesses, the Great California ShakeOut will be held on the third Thursday of October each year.

Everyone can participate: Individuals, families, businesses, schools, colleges, government agencies, and organizations are all invited to register.

As a registered ShakeOut participant you will:

- Learn what you can do to get prepared
- Receive ShakeOut resources for your earthquake drill event
- Be at the table

Drop! Cover! Hold On!

Shake Out The Great California ShakeOut
Annual Disaster Earthquake Drill

Businesses
Get Ready to ShakeOut

Register today at ShakeOut.org

At 10:20 a.m. on October 20, 2011, millions of Californians will "Drop, Cover, and Hold On" to The Great California ShakeOut, the largest earthquake drill ever. All businesses are encouraged to participate in the drill for a plan a more earthquake event.

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Everyone can participate: Individuals, families, businesses, schools, colleges, government agencies, and organizations are all invited to register.

As a registered ShakeOut participant you will:

- Learn what you can do to get prepared
- Be at the table in the largest earthquake drill event
- Not an example that includes others to get involved

Drop! Cover! Hold On!

The Great Shake Out
Are You Ready to ShakeOut?

We're all in this together...

- On the third Thursday of October each year, you can join the millions of Californians who will "Drop, Cover, and Hold On" to The Great California ShakeOut, the largest earthquake drill ever.
- As described below, major earthquakes may happen where you work, live, or travel in California. The ShakeOut is our chance to practice how to protect ourselves, and for everyone to become prepared. The goal is to prevent disaster from becoming a catastrophe.
- Why is a "Drop, Cover, and Hold On" drill important? As with anything, it's not quickly you must practice often. You may only have seconds to protect yourself in an earthquake before strong shaking sends you down, or something falls on you.
- Other preparatory information is on the back of this flyer and is online at www.shakeout.org.
- Everyone can participate! Individuals, families, businesses, schools, government agencies, community groups, and other organizations are all invited to register.
- Register now! www.ShakeOut.org

California is earthquake country!

- California experienced earthquakes no larger than the 1861 Northridge or 1994 Loma Prieta quakes for nearly 100 years, on average.
- All areas of California have experienced earthquakes in the past and will do so again in the future. There are hundreds of faults throughout the state that have been active recently.
- There is a 30% chance of a magnitude 7.5 or greater earthquake somewhere in California in the next 30 years (www.seis.csi.cmu.edu).
- While some major and minor faults have a higher chance of earthquakes than others, the risk anywhere in California is high when compared to most areas of the country.

The annual Great ShakeOut drill is held in California on the third Thursday of October each year. The drill is held at the same time as the annual Great ShakeOut drill in the United States. The drill is held at the same time as the annual Great ShakeOut drill in the United States. The drill is held at the same time as the annual Great ShakeOut drill in the United States.



Official Participant



Join Us
for the Largest
Earthquake Drill
in U.S. History.



The Great
Shake Out

October 20, 10:20 a.m.

Register at www.ShakeOut.org

Shake Out "Countdown to ShakeOut" for Businesses

Use the following countdown to ensure everyone in your business takes part in The Great California ShakeOut drill on October 20, 2011, to prepare for the next big earthquake. All businesses are invited to participate at work, and at home!

Register your business as an official participant in the 2011 ShakeOut drill at www.ShakeOut.org

- Register the number of people participating business-wide
- Encourage employees to also participate if at home and register as an individual or as a family, invite friends and neighbors to register as individuals or organizations

Meet with department heads to review plan and obtain their buy-in, if necessary, and determine what level of drill your business will conduct and who will participate. Consider drilling at a higher level to engage staff to be more effective during a disaster. (Drill manuals are available at www.ShakeOut.org/resources/index.html#manuals)

- Level 1 - Simple: Drop, Cover and Hold On
- Level 2 - Basic: Life Safety Drill
- Level 3 - Intermediate: Decision-Making Drill
- Level 4 - Advanced: Business Operations Simulation Drill

Create a drill/exercise plan that includes overview of what your drill will consist of (even if just Drop, Cover and Hold On), who you expect to happen during the drill, and a feedback session after the drill to identify strengths and weaknesses.

- Inform employees/staff participants of date and time of drill, your expectations for their participation, and the benefits of the drill

Encourage suppliers, vendors, contractors, partnering businesses, and others in your business network to participate - as a means of protecting your business - and share ShakeOut resources with them. (Consider other tasks that can protect your business, such as having Service Level Agreements in place to ensure that the services or products you rely on will be available after disaster.)

Create employee awareness campaign:

- Hang ShakeOut banners and signs throughout your business to encourage and remind employees, vendors, and customers to participate
- Initiate an email campaign to employees, staff, and customers with information and tips on how to prepare at home and work. (See <http://www.shakeout.org/resources/> for examples)
- Encourage employees to post a ShakeOut-related safety message on outgoing email messages, such as "Participate in the 2011 Great California ShakeOut on 10/20 at 10:20am!"

Review and use ShakeOut resources for drills at www.ShakeOut.org/resources/index.html

- Drill manuals, Drill broadcast, banners, signs, triangle of life rebuttal, PowerPoint presentations, 7 Steps to an Earthquake Resilient Business booklet, ShakeOut Shop, etc.

Hold your drill at 10:20 a.m. on October 20th (or an alternative time, if necessary)

- Hold post-drill discussions to hear what people learned and plan next steps

Shake Out Shop

Shake Out. October 20, 2011
Don't Freak Out.

The Great California
Shake Out

www.shakeout.org

Earthquake Education and Public Information Center (EPIcenter) Network

- **EPIcenters** include a variety of public venues such as museums, science centers, libraries, aquaria, park visitor centers, and universities
- Share a commitment to demonstrating and encouraging earthquake and tsunami preparedness
- Help coordinate activities in their region (including the ShakeOut), lead presentations or organize events in their communities, or in other ways demonstrate leadership in earthquake and tsunami education and risk reduction.



A Virtual Field Excursion to Pallett Creek – A new educational product of the San Bernardino County Museum's Hall of Geological Wonders *Discover Your Backyard* Field Guide Series.

[illegible]

SCEC Plate Tectonics Puzzle Map

- Large, two-sided version of the USGS *This Dynamic Planet* poster map along with an accompanying lesson plan with a map legend, instructions, most commonly lost plates template, and suggested discussion questions.
- Back is printed with plate outlines to guide cutting
- Provides educators with a tool to teach students about Earth science topics through interaction and visualization.
- Map includes volcanoes, mountains, earthquakes, and meteorite impacts as well as vector arrows that show direction and speed of plate movement.
- Email degroot@usc.edu for ordering information (\$15)



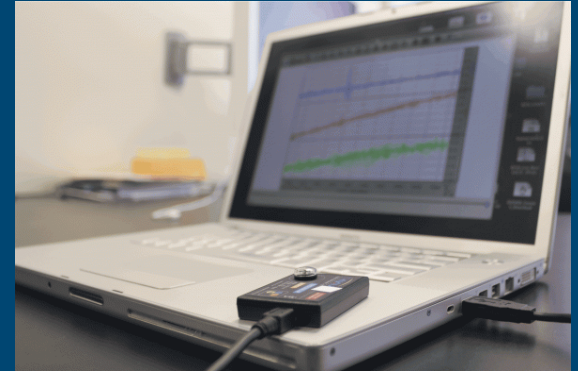
California Science Center Live Earthquake Program

- Developed by SCEC SURE interns and Science Center staff
- 15-minute program performed on the Creative World *Tech Review* Stage at the California Science Center in Los Angeles
- Debuted in Spring 2012 as a *Science Spectacular!™* Program and will be offered weekly to school groups, families, and other visitors
- Covers earthquake science and preparedness basics
- Program will be shared with and performed by other members of the EPIcenter Network (and other free choice learning institutions).
- Will be shared on the web in spring 2014.
- www.californiasciencecenter.org



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 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



<http://qcn.stanford.edu>



Shake
Out

QCN-EPIcenter Network



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0



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QCN and Education and Public Information Centers (EPIcenters)

The Quake-Catcher Network's (QCN) collaboration with the Earthquake Country Alliance (ECA) Earthquake and Public Information Centers (EPIcenters) is a 'network within a network' that supports the missions of the QCN, the ECA-EPIcenter network, as well as its collaborating partners (e.g. USGS, SCEC, NEES, IRIS, NSF, EarthScope, and UNAVCO). This joint network will assist participating free-choice learning institutions in engaging broad and diverse audiences in QCN activities, by providing program materials and products for implementation and use. Overall, through access to these cutting-edge technologies, participating institutions will increase public awareness of earthquake science, participation in earthquake data collection, and earthquake preparedness of their communities throughout the United States.

Earthquake Country Alliance

EPIcenter
EDUCATION & PUBLIC INFORMATION CENTER



EPIcenter Network Website

The EPIcenter community shares a commitment to demonstrate and encourage earthquake and tsunami preparedness. They coordinate the Earthquake Country Alliance (ECA) activities in their county or region (e.g. ShakeOut), lead presentations or organize events in their communities, or in other ways demonstrate leadership in earthquake education and risk reduction. EPIcenters are found in a variety of free-choice learning venues, such as museums, science centers, libraries, and universities.

QCN-EPIcenter Kit

The QCN-EPIcenter Kit aims to ensure that we are helping institutions meet their education and research goals, appeal and encourage partners (e.g. NEES, IRIS, CGS, and USGS) to help promote QCN by incorporating their ideas, serve as a medium to promote the QCN and EPIcenter networks, and foster education in earthquake science, while also promoting research in the field. In addition, you can find how YOUR participation is crucial to the success of the QCN-EPIcenter network. Details on how to install and how to perform demonstrations with the sensor are included.

Join Our Team!

- 5) Founders Hall - Humboldt State University EPIcenter
- 6) Palm Springs Aerial Tramway Mountain Station
- 7) Morongo Tribal Administration Building - Banning, CA
- 8) Rancho Mirage Public Library - Emergency Information Center
- 9) Schoodic Education & Research Center Station - Acadia National Park, Maine
- 10) Morongo Environmental Department Trailer Station - Banning, CA
- 11) Morongo School (preK-9) Station - Banning, CA
- 12) Sherman Indian High School - Riverside, CA
- 13) Temescal HS - Lake Elsinore (SBCM Hub)
- 14) California State University Los Angeles - EPIcenter
- 15) Santa Monica College Earth Science Department Station - Santa Monica, CA
- 16) Etiwanda High School Station 1, Rancho Cucamonga, CA
- 17) Friends of the Desert Mountains
- 18) Mt. Tabor Middle School Station - Portland, Oregon

Join over 30
institutions in
the Western US
and even as far
away as Maine!

THE BBC COMES TO MARQUEZ!

DURING SPRING BREAK, THANKS TO ARIKO AREVALO ELIZABETH COCHRAN, GEOPHYSICIST, AND THE BBC CAME TO 4TH GR. SCIENCE AT MARQUEZ TO TALK ABOUT EARTHQUAKES.



WHAT HAPPENS WHEN THERE'S AN EARTHQUAKE?

MOST EARTHQUAKES OCCUR ON FAULT LINES.



TECTONIC PLATES GRIND TOGETHER.

1, 2, 3 JUMP!
SIMULATING SEISMIC ACTIVITY



READING THE SEISMIC ACTIVITY RECORDED ON THE QUAKE CAPTURING NETWORK (QCN) CONNECTED IN THE UPPER GRADE SCIENCE LAB.

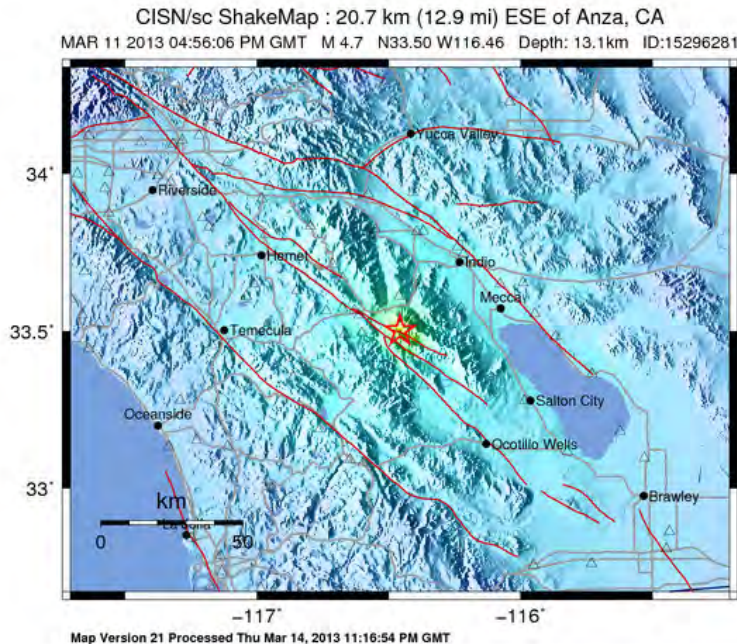


WHOA!

In April 2013, the BBC came to Marquez Charter School (Pacific Palisades, CA) to see QCN in action!

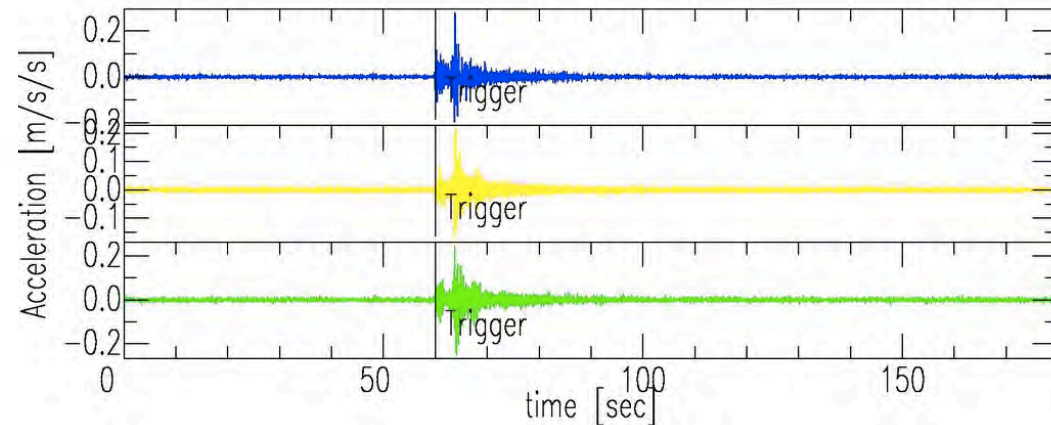
M 4.7 Anza Earthquake 3/11/13

Recorded at Rancho Mirage Public Library



PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	none	none	none	Very light	Light	Moderate	Mod./Heavy	Heavy	Very Heavy
PEAK ACC. (%g)	<0.05	0.3	2.8	6.2	12	22	40	75	>139
PEAK VEL. (cm/s)	<0.02	0.1	1.4	4.7	9.6	20	41	86	>178
INSTRUMENTAL INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+

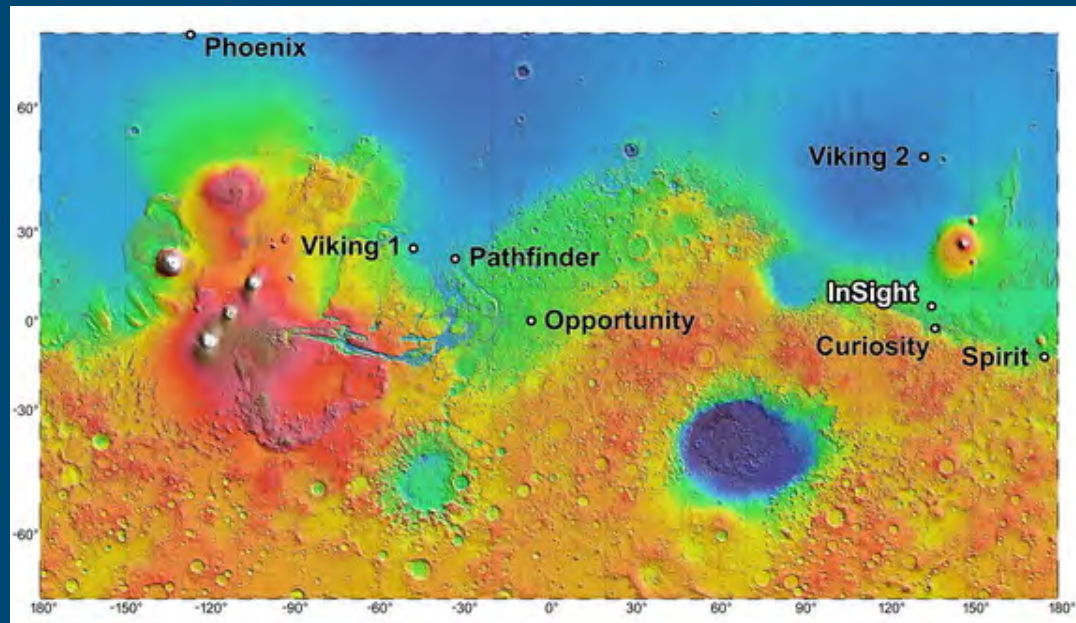
Scale based upon Worden et al. (2011)



NASA InSight



Interior Exploration using
Seismic Investigations,
Geodesy and Heat
Transport



NASA/JPL

Shake
Out

InSight 2013 Activities

2013 *Vital Signs of the Planet* Educator Fellows:

- Were immersed into the science of Caltech, JPL, QCN, SCEC
- Conducted 5 days of survey-mode GPS research (UNAVCO)
- Developed 4 Research Lessons and kits using Lesson Study (Mars data for RL in 2016 – IRIS)
- Will test teach the Research Lessons twice
- Will facilitate the installation of a QCN seismometer at their school site
- Will participate in the 2013 Great California ShakeOut Drill



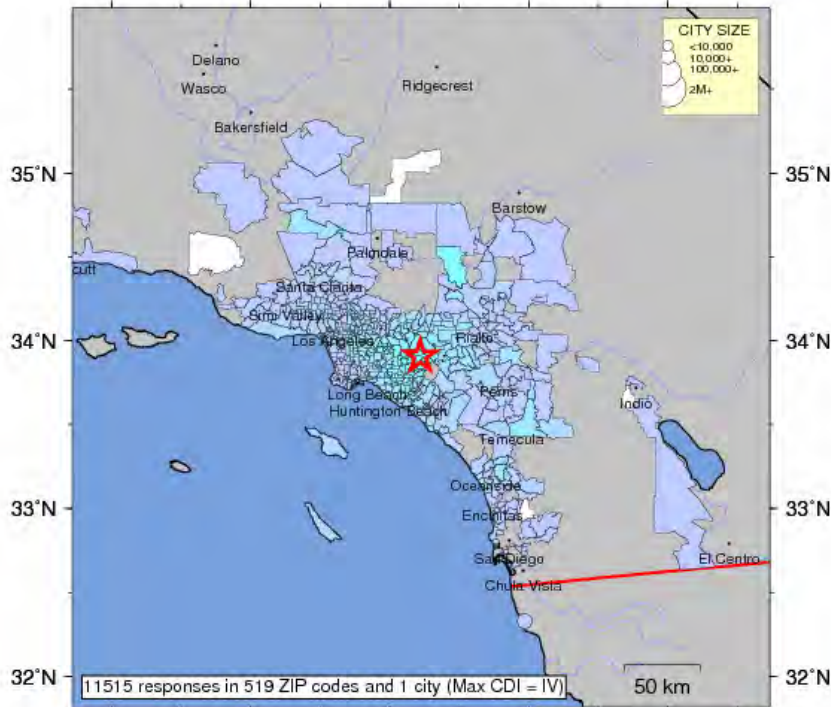
UNAVCO

**IRIS**

**Shake
Out**

USGS Community Internet Intensity Map GREATER LOS ANGELES AREA, CALIFORNIA

Aug 7 2012 11:23:34 PM local 33.9065N 117.7807W M4.4 Depth: 8 km ID:ci15189073



	120°W	119°W	118°W	117°W	116°W				
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

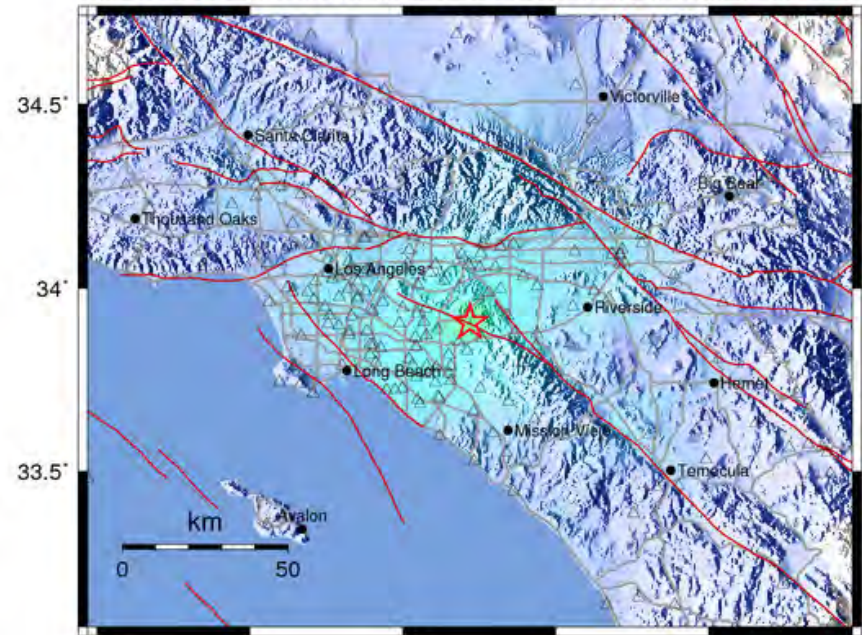
Processed: Wed Aug 8 12:03:27 2012

Intensity & Magnitude

ShakeMap

CISN/sc ShakeMap : 3.5 km (2.2 mi) NE of Yorba Linda, CA

AUG 8 2012 06:23:34 AM GMT M 4.4 N33.91 W117.78 Depth: 8.2km ID:15189073



Map Version 5 Processed Wed Aug 8, 2012 08:25:39 AM GMT

PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	none	none	none	Very light	Light	Moderate	Mod./Heavy	Heavy	Very Heavy
PEAK ACC. (%g)	<0.05	0.3	2.8	6.2	12	22	40	75	>139
PEAK VEL. (cm/s)	<0.02	0.1	1.4	4.7	9.6	20	41	86	>178
INSTRUMENTAL INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+

Scale based upon Worden et al. (2011)

Did You Feel It?

ShakeOut Scenario for Southern California

M7.8 Scenario Earthquake
Time = 000.0 s



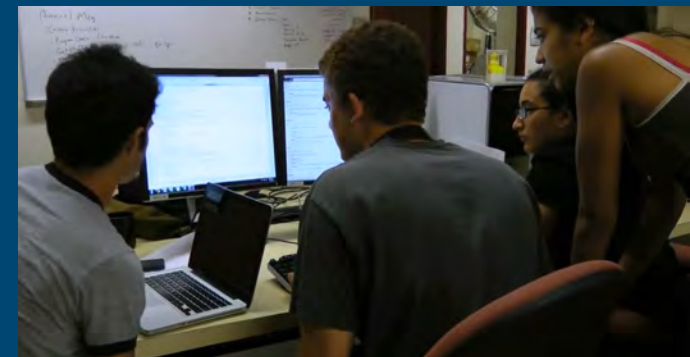
Source: USGS - <http://earthquake.usgs.gov/regional/nca/simulations/shakeout>

Shake
Out

SCEC/USEIT: Undergraduate Studies in Earthquake Information Technology

Students develop technical tools for scientists, educators, and policy makers about faults, earthquakes, seismic hazard mitigation, and earthquake risk reduction.

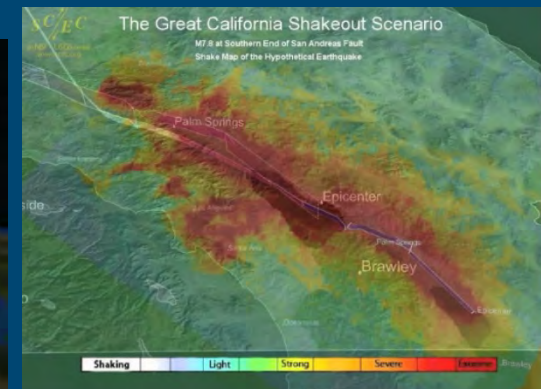
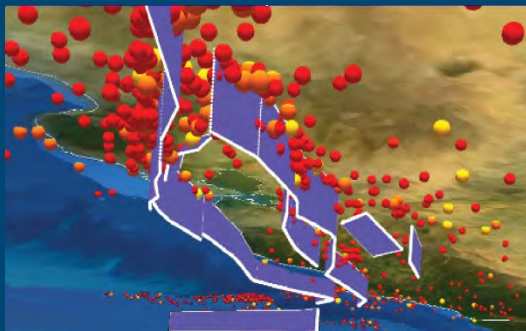
- Began in 2002
 - striving for diversity
 - Over 242 interns to date
- Interdisciplinary, Team-Based Program
 - primarily computer science and computer engineering
 - nearly 3 dozen majors represented
 - many freshmen and sophomores
 - organized around a “Grand Challenge”
- Succeeds in attracting new students
 - from other majors
 - from industry career plans



www.scec.org/useit

SCEC Virtual Display of Objects (SCEC-VDO)

- An open source software tool developed by SCEC USEIT interns to visualize geo-referenced datasets for analysis, presentations, and publications.
- Includes useful datasets such as fault systems, earthquake events, three-dimensional surface imaging, and space-time displays.
- Continually improved to fulfill the requests of the user community.
- Many examples at: <http://scec.usc.edu/internships/useit/scec-vdo>





Thank You!

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Earthquake Country Alliance
We're all in this together.