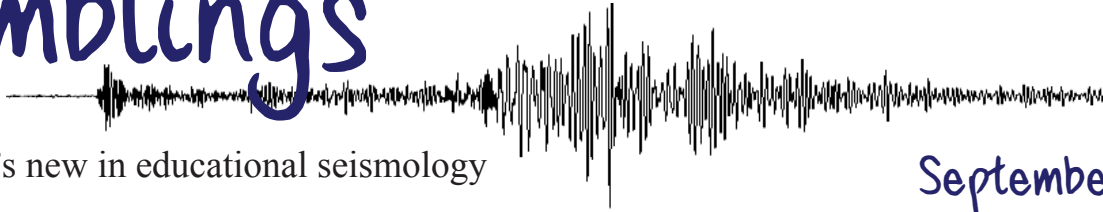


# Rumblings



...what's new in educational seismology

September 2010

## Check-in Time!

We need everyone to complete an annual station check-in designed to help us update our records and enable us to provide any offline stations with timely assistance to get them up and running again.

The survey is linked off the 'What's New' section of the SIS front page. <http://www.iris.edu/hq/sis>

This survey is especially important if you received your instrument on loan from IRIS.

We expect that over time, some instruments might fall out of use. If that is the case, we are happy to get the instrument back to place it in another classroom. If you are no longer in the classroom or your teaching assignment has changed and you are no longer using the instrument with students, please contact [sishelp@iris.edu](mailto:sishelp@iris.edu) for return instructions.

## Forum Relaunch

We have relaunched a streamlined version of the forum this fall. We hope that it will be easier to use and navigate.

Utilize the years of experience in our network - use the forum to share ideas, get ideas, or ask for help with any problems!

Check out the new Forum!

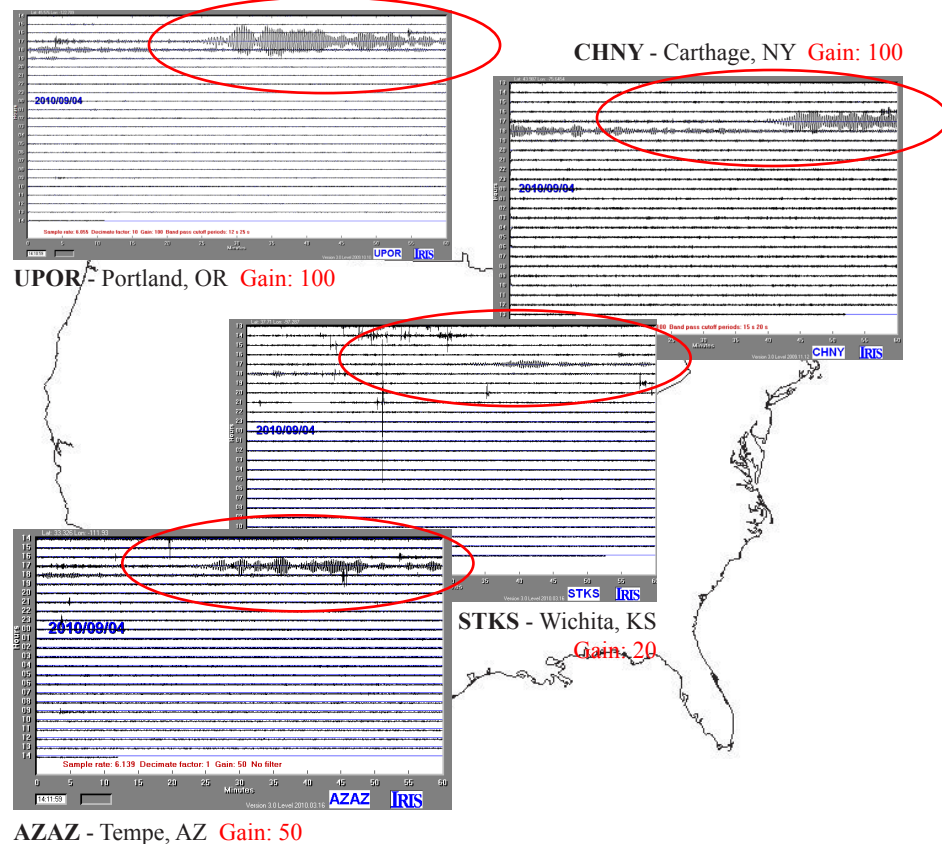
## First Earthquake of the Year!

Welcome back to school! The network has recorded the first earthquake of the new school year, and it is a great time to check to make sure that your instrument is working.



Use the 'Forward/Backward in time' button to jump back to 09/03/2010 where you should see the magnitude 7.0 New Zealand earthquake on the 16 -18 hour line. Your gain setting (and background noise) will determine how large the amplitude is, but every station should have recorded this.

Here are some examples from across the country.



If you have any questions about whether or not your station is recording please send us a screen shot of your 24 hour helicorder screen for September 3rd. If your station was not operating for the New Zealand earthquake, contact us after the next major earthquake at [sishelp@iris.edu](mailto:sishelp@iris.edu).

IRIS Seismographs in Schools Program  
<http://www.iris.edu/hq/sis>



# Rumblings

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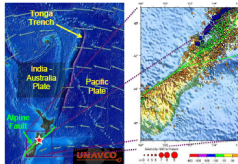
September 2010

## Teachable Moments

IRIS Education and Outreach provides educational resources about recent earthquakes on our Teachable Moments page. For all earthquakes of magnitude 7 or larger worldwide, an earthquake notice is posted within 24 hours of the event.

**Magnitude 7.0 Earthquake in South Island of New Zealand**  
 Friday, September 3, 2010 at 16:51:46 UTC (10:51:46 AM Local Time)  
 Depth: 12 kilometers

**Plate Tectonic Setting:**  
 The map of tectonic plates shows the plate tectonic setting with the epicenter of the September 3, 2010 earthquake indicated by the red star. The arrows on the map show the motion of the Pacific Plate with respect to the Australian Plate. The South Island of New Zealand is located on the Pacific Plate, which is moving northward relative to the Australian Plate. The map shows the location of the earthquake epicenter (red star) and the rupture zone (red line) along the South Island of New Zealand. The rupture zone is located on the Pacific Plate, which is moving northward relative to the Australian Plate.




**Historical Seismicity:**  
 The map on the right shows historical seismicity with the epicenter of the September 3, 2010 earthquake indicated by the red star. The map shows the location of the earthquake epicenter (red star) and the rupture zone (red line) along the South Island of New Zealand. The rupture zone is located on the Pacific Plate, which is moving northward relative to the Australian Plate.


For all major earthquakes, a two- or three-page PDF is posted that contains basic information about the earthquake and its plate tectonic setting. For major earthquakes in populated areas that have significant impact, a PowerPoint presentation is also developed and posted.

**IRIS Magnitude 7.0 SOUTH ISLAND OF NEW ZEALAND**  
 Friday, September 3, 2010 at 16:51:46 UTC

A powerful 7.0-magnitude earthquake shook much of New Zealand's South Island early Saturday morning local time.



A damaged building near Manchester St. New Zealand Herald Photo / Colin Cross



A car damaged by rubble from a building is seen following a 7.0-magnitude earthquake in central Christchurch, New Zealand, early Saturday, Sept. 4, 2010.

AP Photo/NZPA, David Alexander

Look for materials for the M7.0 New Zealand earthquake on IRIS's Teachable Moments website <http://www.iris.edu/hq/retm>

## Need Help?

Contact Us! [sishelp@iris.edu](mailto:sishelp@iris.edu)

## Recording Hurricanes

The majority of the vibrations that your seismograph records will be from "non-earthquake sources" such as people walking near the seismograph, large trucks passing by the building, and other natural "non-earthquake" vibrations, such as wind.

As Hurricane Earl was positioned off the US east coast on Friday September 3rd, it generated microseisms recorded by AS-1 stations into the US. These signals are created by the large ocean waves, built up by the hurricane winds, that are crashing into the coastline. Hurricanes are not the only such storms capable of creating seismic signals recorded by AS-1s, other large storms such as winter nor'easter can also create a noticeable signal.

