

NEWSLETTER

First Quarter, 2012

QuakeFinder wins NASA 3 year research grant

In February, NASA announced the award of a 3 year collaborative research agreement with QuakeFinder. We were awarded this grant based on our proposal to NASA's Research Opportunities in Space and Earth Sciences (ROSES-2010) Earth Surface and Interior focus area. This funding will augment the existing financial support from Stellar Solutions and the Musk Foundation to continue QuakeFinder's work in collecting and analyzing data from ground instruments in California and international locations. The NASA partnership will also add infra red (IR) monitoring of earthquake fault areas, using the GOES weather satellites, built by NASA and operated by NOAA. We will fuse this IR data with our ground magnetometer and air conductivity data to increase the likelihood of detecting pre-earthquake signals. If you are interested in becoming a sponsor, by providing financial support for the development of short term warnings for large earthquakes, please contact tbleier@quakefinder.com

First Anniversary of Japan Quake

March 11th marked the first anniversary of the <u>mega</u> <u>thrust M9 Tohoku, Japan quake</u>. This boat photo is a vivid reminder of the power and devastation of that quake and the following tsunami. The global economic cost is estimated at \$235 billion, making it the most expensive natural disaster in world history. Over 15,800 people died, 26,900 were injured, and 3,155 are missing. The warning system that Japan uses only provides a few seconds warning to take action. The people of Japan, like the rest of the world, need a system that would provide more than 30 seconds notice of a pending quake.

During March of 2012, a video documentary crew from the Japanese broadcasting company NHK toured the world to document the latest research that is taking place on earthquake forecasting. The crew, led by Hiro Koh from the NHK Los Angeles affiliate, interviewed Tom Bleier of QuakeFinder and Friedemann Freund of SETI to better understand the electromagnetic research efforts underway here at Stellar Solutions. The filming team spent two days with QuakeFinder. They were very interested in covering our complete process: manufacturing of the instrument, finding a site to host it, installation, and subsequent data collection and analysis. The complete documentary should be available in about six months.

2012 Network Expansion Started in California

During January and February QuakeFinder upgraded 18 old magnetometer sites to the new model. The team has now started fabricating and installing 50 new units for placement in California. Three new sites were installed in East Coalinga, Keene (Tehachapi), and California City (Mojave). The goal is to install six new units a month. These 50 new sites will bring the total installed in California to 105 and fill in the gaps of coverage across many of the larger faults in California. This places us on our way to an estimated 200 sites needed to adequately cover the state.

QuakeFinder is actively pursuing industry and government partners to help accelerate the completion of the California Magnetometer Network (CalMagNet). Contact <u>Tom Bleier</u> if you are interested in helping this project.

Meetings with USGS and NOAA

Stellar Solutions and QuakeFinder met with the Director of U.S. Geological Survey, Marsha McNutt, and her staff in Washington D.C. to inform them with the work that QuakeFinder has been doing on short term earthquake prediction.

The meeting was a first step toward the goal of establishing a public-private partnership. USGS is recommending validation of electromagnetic techniques by independent groups such as the <u>Collaboratory for the Study of Earthquake</u> <u>Predictability</u> (CESP) at University of Southern California.

Stellar also met with Mark Paese, Director, Office of Operational Systems at the National Weather Service. NOAA's focus is on coastal areas with emphasis on tsunami monitoring and alerts. A relationship with QuakeFinder is one way they can expand their coastal monitoring of all geophysical threats.



A tsunami-tossed boat rests on top of a building amid a sea of debris in Otsuchi, Japan, on March 14, 2011 Photograph by Yomiuri Shimbun, AFP/Getty Images



The NHK filming crew with Tom Bleier and Bob Camins

The world needs warning. Reliable earthquake forecasts will someday save lives. Help accelerate our work toward that goal. Your donation, in any amount, will help achieve these ambitious goals. Please <u>email us today</u> or call Tom Bleier at 650-473-9870 to contribute or to connect us with those who can offer major support.