

For Immediate Release

Sumatra's Need for an Earthquake Early Warning System

Palo Alto, CA. (October 26, 2010)

The M7.7 earthquake that occurred yesterday, October 25 off the coast of Sumatra was another manifestation of the dangerous series of large earthquakes that continues to happen in that area. The warning for tsunami events has improved somewhat along the mainland, but was reported as missing from the smaller island nearest the epicenter. The earthquake also occurred at night when most people had retired for the evening.

This is another example of the need for short term earthquake forecasting in Sumatra, as well as other areas along the Pacific "Ring of Fire". QuakeFinder, a research and development group in Palo Alto, CA has built, installed and operated a network of induction magnetometers and air conductivity sensors in California over the past 10 years for the express purpose of determining if there are electromagnetic signals that could be the basis for a short term (days to weeks) earthquake forecasting system.

QuakeFinder has had some early successes in detecting strong magnetic pulses and large increases in air conductivity in the 2 weeks leading up to a M5.4 earthquake in Alum Rock, CA (Oct. 2007) and a M6.2 in Tacna, Peru (May 2010) More information is available at:

<http://www.quakefinder.com/research/techpapers.php>.

These electromagnetic signals are believed to be generated by high stress concentration changes in the hypocenter region prior to the actual event, and the instruments have shown they can detect the large underground electrical currents released by the rock under extreme stress (ref. F. Freund research, NASA Ames). These signals originate deep in the ground and appear to be detectable for approximately a 30 km radius from the ground-based instrument location. As such, California needs about 200 sensors to cover the main faults, and Sumatra would also need several hundred sensors along the length of their country.

Even though this work is in the early research stage, one wonders if a network of magnetometer sensors in Sumatra could have detected this large (M7.7) earthquake in time to get the residents prepared in the days prior to the quake.

QuakeFinder is attempting to increase the density of the network of sensors along the "Ring of Fire" to allow the capture and analysis of more earthquake events in order to determine if the patterns are repeatable. In an innovative approach to the expansion of the network, QuakeFinder invites private individuals, businesses and governments to sponsor or host sites. Anyone interested in becoming a host or sponsor can simply go to the website www.quakefinder.com to learn more about our research.

About QuakeFinder

QuakeFinder, the Humanitarian R&D division of Stellar Solutions, Inc., is located in Palo Alto, CA, and conducts pioneering research in the area of earthquake forecasting with the ultimate aim to develop, within the next decade, a global earthquake warning system. While every effort has been made to ensure that the information herein is accurate and has been prepared in accordance with reasonable standards of scientific endeavor, QuakeFinder does not accept liability for any error of fact or opinion contained herein nor for the consequences of any decision that may be taken based on this information.

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*For more information, contact Tom Bleier, VP and Chief Technology Officer, Phone (650) 473-9870,
Email tleier@quakefinder.com*