

New Magnetometer Installations:

This quarter was dedicated to installing 3 new sites in northern California, at East Petaluma, East Gilroy, and Watsonville. These three new QF-1007 units (circled on map at right) fill in critical gaps in the coverage of the faults in the area, and provide a test bed for 2 more units that are planned for Peru, later this year.

The picture below shows the electronic portion of the installation at Watsonville, and includes the computer, signal processing electronics, 24 bit A/D, and (WiFi).



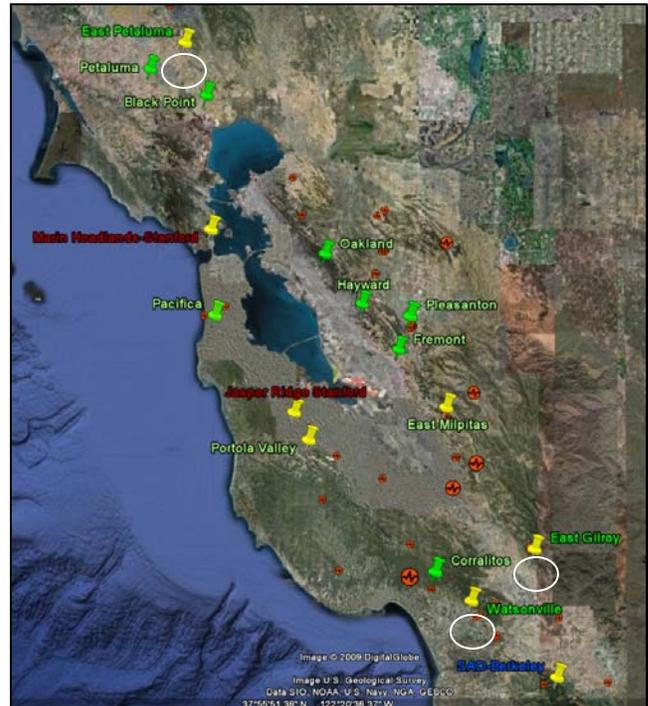
Electronics and Power Subsystems

The Picture below shows the 3 magnetometer locations with the waterproof enclosures protruding from the ground, along with the signal cable junction box.



Buried Magnetometers and Junction Box

These 3 new systems complement the existing units in Northern California (Yellow pins=Hi resolution, Green pins = medium resolution), including existing QF sites (Green site names), and those of our collaborators at UC Berkeley (Blue site names), and Stanford/USGS (Red site names). We still have a way to go to cover the entire state's fault system with approximately 200 sites required, but we are making steady progress.



Northern California map showing magnetometer sites

The QuakeFinder team continues working hard to make improvements to the CalMagNet with QF-1007. The team is busily refining the new software for the units, integrating the new displays into the website, assisting with the hardware and communication software and getting blisters and sore muscles installing the sites. A critical role to our success continues to be working with the site homeowners, who share our passion to get these units installed and providing critical historical and near-real time data for our research. In addition we have a summer intern working behind the scenes with NASA Ames and JPL scientists to investigate satellite-based IR signatures, observed prior to large, worldwide earthquakes.