



First Quarter 2008

A FEW WORDS FROM THE PRESIDENT

We continue to analyze the data we gathered from the Alum Rock earthquake last Oct 30, 2007. An increased number of large magnetic pulsations were observed at our East Milpitas site a couple of weeks prior to the quake and we have also noticed a period of saturated air conductivity the day prior to the quake. It is important to analyze all the evidence in order to identify every possible noise source that can contaminate the collected data. As we methodically identify and remove these noise sources, *positive pre-quake indicators continue to be observed*. All of this analysis will be included in a comprehensive paper later this year presented at the Union Radio-Scientifique Internationale Conference (<http://www.ursi.org>.)

“Community” Web Page for QuakeFinder

At QuakeFinder, we provide scientists and the community at large with earthquake information and contemporaneous electromagnetic signal information that we are examining for pre-earthquake content. This is in concert with our overall goal: “QuakeFinder is dedicated to earthquake forecasting research to ultimately develop, within the next decade, a global warning system of imminent destructive earthquakes”. We believe that input from the community is vital to our role in this community service. Therefore our enhanced website now includes a “community forum” and many other features that give the community a voice in our efforts. This includes sharing our processed data on our website so you can follow along with us as we try new techniques and algorithms to extract the earthquake signal from background noise. Your thoughts and suggestions are important to us. To sign up as part of the new QuakeFinder Community, please start here:

<http://www.quakefinder.com/community/signup.php>

We continue to expand the types of data that we share with our scientific community. To check out

some of this data visit:

<http://www.quakefinder.com/dataplots/QuakeFinderDailyDisplay.php>

To learn about how to read the data, we have built a video tutorial, which can be viewed by clicking on the "Page Guide" button on the lower left (data page).

Sharing QuakeFinder Data for IHY

Quakefinder is honored to join international geosolar research teams during this "International Heliophysical Year" by supplying data for Whole Heliosphere Interval-WHI. Dozens of organizations are sharing geophysical data from each of their organizations to help learn more about the sun and its impact on the Earth. To learn more about this effort please visit:

http://ihy2007.org/WHI/WHI_news.shtml

And to sign up to access our WHI data, you can log in at:

<http://www.quakefinder.com/news/whi.php>

We hope you enjoy our new website, and become a regular visitor. As always, we are open to your questions and comments, which can be sent through our new secure message system:

<http://www.quakefinder.com/contact.php>

Earthquakes and the Magnetosphere

Dr. Jacob Bortnik performed an extensive analysis of the statistical relation of Pc1 pulsations detected at Parkfield, CA, to nearby earthquake occurrence, and found a significant correlation. Large Pc1 events that occur in the daytime are 5 times more likely to be followed within 5-15 days by an earthquake, using the Parkfield (Berkeley) ULF data and the earthquake events near Parkfield. This has been written up and submitted for publication to the journal, *Annales Geophysicae*. Dr. Bortnik was also responsible for major finding in his field concerning the origin of plasmaspheric hiss, which was published in the March 6th edition of the journal, *Nature*.