



Radio-anomalies: tool for earthquakes and tsunami forecasts

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Earthquake is the only among the other geophysical events that doesn't lead directly to death. Tsunami are one of the more dramatic consequences of the seism that happen on global scale. Also in this case, tsunamis, we need to improve the tools that can help the forecast of this great geophysical event and the reduction of the dramatic effects on human activities. In order to explain this topic it is necessary that several methods of investigation cooperate and create a scientific network among the complementary branches of science. In this study I suggest a new strategy based on the detection of radio-anomalies and the increasing of the geomagnetic background; we can apply this method two days before the earthquake until the last few hours before it.

This research and the data collection started in the 2011 and it show us that more than 400 earthquakes, occurred on global scale, were preceded by the increasing value of the geomagnetic background and the emergence of radio-anomalies in the frequency range from Elf to Self band. This last range is not globally accepted by the scientific community and its frequency between 0,001 and 3 Hz is included.

The detection of radio-anomalies data, carried out by the monitoring station Radio Emission Project, in Rome (Italy), it lets us predict a strong seismic event on global scale 6 hour before.

The tsunami is a great geophysical event that can embrace several areas of Earth, for this reason the detection of radio-anomalies method is useful for the experimentation in operative terms. Another important check about detection of radio-anomalies was carried out before and during the strong earthquake and tsunami occurred in Japan in 2011. The radio-anomalies that take over in this event and the energy released by the seaquake are linked and proportional between them.