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The fundamental process for earthquake prediction becoming a science

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1 Abstract

If the earthquake is an observable phenomenon then it should be predictable, too.

There are a lot of scientists studying on the prediction of an earthquake in a useful time range before the quake is obtained. The most of them are monitoring the physical anomalies those hopefully be related to the expected earthquake activities and developing some useful tools to decide about the occurance of future earthquakes. These approximators give catalogs of unclassified data and there are not conceptional intersections of such catalogs discovered in wide use yet. Such non-common parts of huge data brings the idea about thinking on the some regularizations of our very well known physical models and extentions of some physical laws. These modernizations contribute the analytical synthesis of earthquake phenomena [1]-[10] couraging to build a new window for the best science and motivates the critical advances in eartquake prediction reality [10]-[16].

The above mentioned modernization focuses to consider all the earth as an extra complex network which involves interconnections through the electromagnetically structured devices.

The electromagnetic phenomena preparing the earthquake was modeled with an electromagnetically equivalent approach [1]-[2] theoretically, first. This model explains the earthquake phenomena by the assumption below:

Assumption (for the fact behind the earthquake phenomenon): If any motion occurs

at source of waves then some surface currents are induced on some parts of the earth since the earth includes inhomogeneous materials; i.e., including conducting and/or nonconducting bodies and/or free spaces, etc. in some locations. If any part of these materials makes a deviation then those surface currents variate with respect to time.

The assumption for the fact gives the result below:

Result (initial-originator of the earthquake phenomenon): The Lorentz‘s forces, which are applied on variating currents due to the geoelectromagnetic field appear at least. A new force [2] additional to Lorentz‘s force has to be observed due to the irregularities, too. This additional force has to have a very small magnitude around source of waves, but it has to have an irregularly and non-smoothly deviating character, so it propagates with increasing-decreasing in magnitude with some periods according to some transfer rules of forces in bodies.

The modernized physical mechanism beyond the earthquake phenomena is explained with the above mentioned approach. The fact behind the earthquake phenomenon is postulated. Restrictions at the use of some specific frequency values are necessary to the frequency spectrum used in systems all around the earth to realize a succesful prediction.

The analitical discussions on some recent prediction signals will be focused, too.

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