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Relationship between the precursory mechanical properties and electromagnetic properties

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There are a number of reports on the seismic quiescence phenomena before large earthquakes. We proposed new RTM algorithm. RTM algorithm is a kind of weighted coefficient methods in the time, distance and size of an earthquake. We test it by applying to three large earthquakes in Japan, namely the Hyogo-ken Nanbu Earthquake in 1995, the Noto Hanto Earthquake in 2007 and the Iwate-Miyagi Nairiku Earthquake in 2008. The results show that the RTM algorithm is more sensitive to the seismic quiescence phenomena than the cureent RTL algorithm. At this moment, whole surveyed parameters (R, T, M and so on) are empirically selected. We have to consider the physical meaning of the "best fit" parameter e.g., the relation of delta CFS, etc. Furthermore, the most important issue is the relationship between electromagnetic precursory phenomena and seismicity changes. We would like to solve this problem in the future.

Keywords: Quiescence, EM phenomena