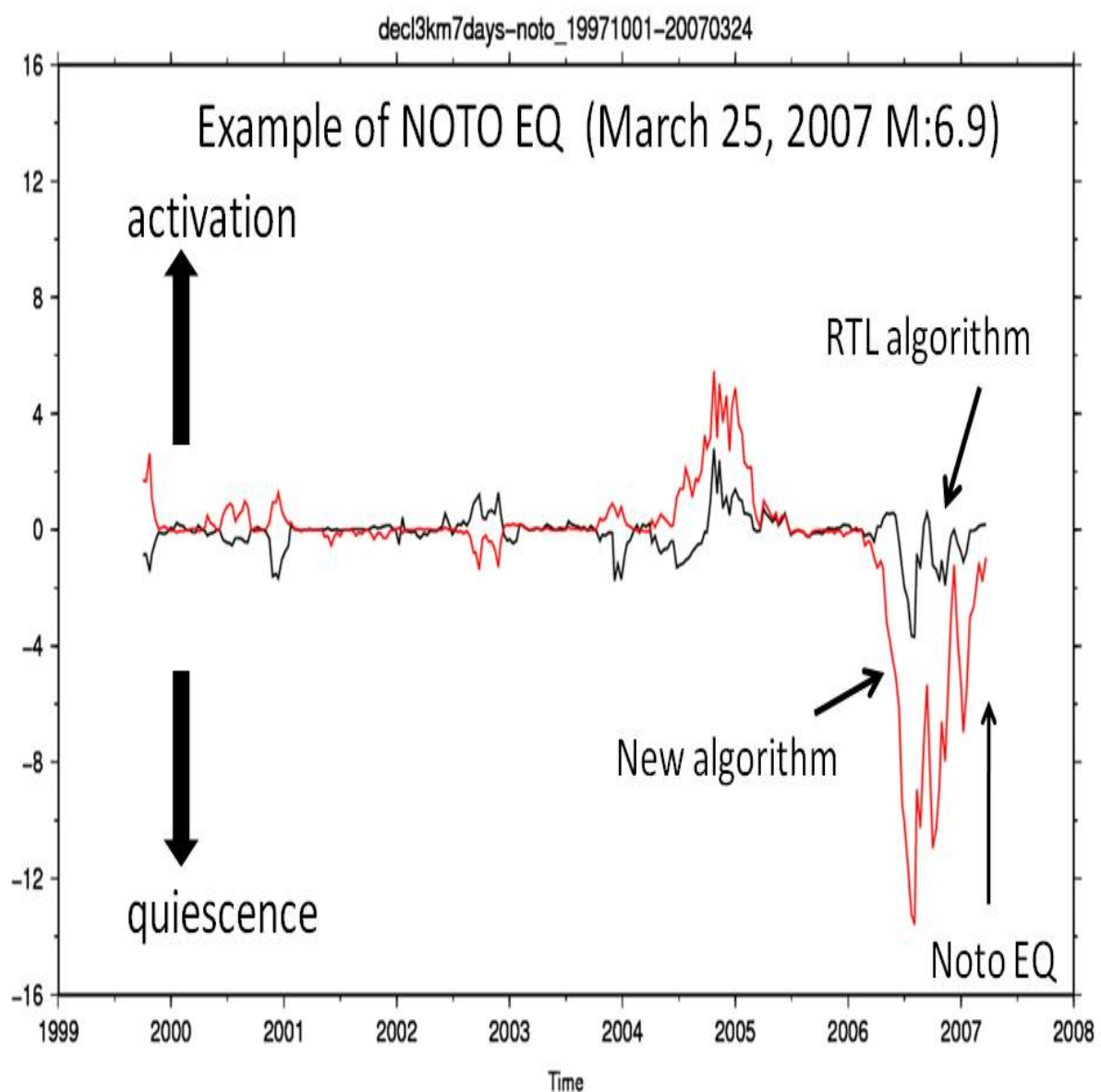


## The proposal for the quantitative evaluation method for seismic quiescence phenomena

Toshiyasu Nagao<sup>1\*</sup>, Kenji Nakamura<sup>1</sup>, Akihiro Takeuchi<sup>1</sup>, Qinghua Huang<sup>2</sup>

<sup>1</sup>Earthquake Prediction Research Center, T, <sup>2</sup>Peking University



Quiescence of seismicity is "well known" precursory phenomena among seismologists. However, its quantitative evaluation is very difficult. Although thanks to the deployment of the Hi-net system in Japan, accuracy enhancement of the seismic catalog drastically improved. We consider that seismicity studies have entered in the new era now. Tokai University and Peking University are continually engaged in the analyses of the seismic quiescence by using the RTL algorithm. The basic concept of the RTL algorithm is the following: Large (rupture Length), nearby (Regional) earthquakes may affect very long time (T). In the presentation, we would like to demonstrate the rule of quantitative evaluation method by using a parameter table which includes search radius (R), analyzing period (T) and magnitude dependence (L). Furthermore, we have already started to improve the RTL algorithm theoretically.

Keywords: seismicity, quiescence, RTL