

## Revisiting a simple method for short-term earthquake probabilities derived from past Seismicity

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We revisit the method of Kato (2016, doi:10.4294/zisin.68.163 ) to estimate the probability that random earthquake predictions would hit using the seismicity data after 2011. When the seismicity rate is high, a random earthquake prediction without scientific evidence often becomes successful. Accidental, occasional hits will not guarantee that such methods of earthquake prediction are worthy of trust, and we should have a measure to judge whether the method is reliable. Kato (2016) proposed a method to roughly compute the probability that a random earthquake prediction accidentally hits. In this method, assuming that the rate of background seismicity is nearly constant in any period. This presentation is a follow-up to this study, and we reevaluate the method of Kato using the other seismicity data in Japan. We also revisit two probabilities of Utsu (1977) and argue how to make apparently successful earthquake predictions

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