

## Proposal of a quantitative risk evaluation/comparison method for low-frequency megadisasters

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This study proposes a method for quantitative risk evaluation/comparison of low-frequency megadisasters. A logarithmic scatter diagram, of which x-axis shows an average recurrence interval of each megadisaster and y-axis shows a victim number without evacuation, respectively, is used for this purpose. In this diagram, the risk of each megadisaster is defined as a victim number divided by a recurrence interval, i.e. a victim number per one year. The risk of each megadisaster can be reduced by mitigation planning and evacuation. This diagram enables us not only to compare the risks of megadisasters of different origins, but also to determine the order of priority for mitigation planning.

Keywords: risk evaluation, risk comparison, low-frequency megadisaster, earthquake, tsunami, volcanic eruption

