

Chronological analysis of intraplate earthquakes around the Tokai district during two great earthquakes in the Nankai Trough

Takeshi Makinouchi[1]; Yuji Mori[1]

[1] Dept. Environment. Sci. & Technol., Fac. Sci. & Engin., Meijo Univ.

The purpose of this study is to analyze the spatial and chronological generation pattern of intraplate earthquakes (M6 to M8) around the Tokai district during the period between two great interplate earthquakes in the Nankai trough (strain accumulating period).

In two strain accumulating periods of the Hoei (1707) to Ansei (1854) earthquakes, and the Ansei (1854) to To-Nankai (1944) and Nankai (1946) earthquakes, the spatial generation patterns are distinguished as follows ; a) earthquakes have sporadically occurred at about 137E to 138E (sporadic occurring belt), and b) many earthquakes have occurred around Tokyo in later half of the strain accumulating period (earthquakes around Tokyo).

The chronological generation pattern is divided into four phases, namely, 1) frequent occurring phase in the early stage, 2) succeeding quiet phase, 3) isolated earthquake at west end of the study area (isolated western Kinki earthquake) in the middle stage, and 4) westward expanding phase in later half of the strain accumulating period. The next great earthquake has occurred when intraplate earthquakes increase at the western part in the latest westward expanding phase.

The same characteristics are recognized in the period after To-Nankai (1944) and Nankai (1946) earthquakes.