Scaling Model of Intraslab Earthquakes

Junji Koyama\textsuperscript{1*}, Takahiro Maeda\textsuperscript{2}

\textsuperscript{1}Natural History Sci., Hokkaido Univ., \textsuperscript{2}NIED

Intraslab earthquakes are particularly interested on their mechanism generating short-period seismic waves not only in the seismological field but also in the earthquake engineering aspect. We have studied the relation between short-period acceleration level $A$ and seismic moment $M_0$ by large intraslab earthquakes evaluated independently. The relation has been tested against the theory of complex faulting process by Koyama (1997) and the standard omega-square model. The observation favors the former predicted by a relation of $M_0$ proportional to $A$-square. The physical background of this result will be presented.

Keywords: Intraslab earthquakes, scaling law