

**Development of the strong ground motion simulator(No.2) FDM subsystem**

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We introduce a 3D finite difference (FD) simulation tool, which is developed as a subsystem of strong ground simulator as a part of "Research about a assessment of risk at an earthquake disaster project ". This tool consists of a parameter generation tool, a 3D FD code, and a visualization tool. The parameter generation tool automatically optimizes the grid spacing adapting to the wave velocity and provide a graphical user interface for setting the sources and observation stations. The FD code adopts an FDM with discontinues grid (Aoi and Fujiwara, 1999, BSSA). Visualization tool generate animates of wavefield of ground motion, and paste up of waveforms.