

# Web Application for 3-D visualization of Global Seismic Tomography Models

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A web application for 3-D visualization of global seismic tomography models (Seismic Tomography Globe, <https://members.elsi.jp/~hiroki.ichikawa/gst/index.html>) has been developed. Users can easily create images of the Earth's interior with this application. The application can visualize the 3-D isosurfaces, isodepths, and cross-sections along with various Earth's surface data, working on client web browsers using JavaScript with a simple graphical user interface. The grid point data of tomographic models (e.g. discrepancies of S- and P-wave velocities) are downloaded into the client web browsers and then the web browsers visualize the objects after the calculation of the positions and colors of the objects. The framework of this web application can easily be extended to visualization of other scientific data such as ionosphere, atmosphere, and the outer and inner core in the future. This web application can be accessed easily, even by nonspecialist of seismology, so that it promotes cross-disciplinary studies related to the Earth's internal dynamics.

Keywords: global seismic tomography data, Web application, digital globe, 3-D visualization, mantle dynamics