
[EE] Evening Poster | S (Solid Earth Sciences) | S-IT Science of the Earth's Interior & Tectonophysics

[S-IT20]Structure and Dynamics of Earth and Planetary Mantles

convener: Takashi Yoshino (Institute for Planetary Materials, Okayama University), Dapeng Zhao (Department of Geophysics, Tohoku University), Takashi Nakagawa (海洋研究開発機構数理科学・先端技術研究分野)

Mon. May 21, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

Interdisciplinary approach can lead to a better understanding of dynamics and evolution of the deep interiors of the Earth and planets. We welcome any submissions of recent results in observational, theoretical and experimental studies on seismology, geomagnetism, mineral physics, dynamics of deep interiors, and any other relevant fields from researchers in many countries. Integration of such results is also welcome. In particular, we encourage any contributions focusing on "plate and mantle dynamics in Earth and terrestrial planets".

[SIT20-P02]Web Application for 3-D visualization of Global Seismic Tomography Models

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

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.