Digital movie of three-dimensional earth structure for education and research

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Three-dimensional (3D) distributions of temperature and partial melt in the crust and the upper mantle were investigated from seismic tomography and laboratory velocity data on rocks and minerals. In this study, we newly made digital movies of the 3D structure. The movies enable us to see the interrelationships between high temperature and partial melting regions, volcanoes, S-wave reflectors, and earthquake activities, in detail. We will exhibit the movies by a notebook computer. We will show temperature and partial melt distributions, volcanoes, S-wave reflectors, microearthquakes, Moho discontinuity, upper plane of the subducted slab, etc. beneath the northeastern Japan arc and the Nikko volcano group.