



Surface-Wave Tomography of Ireland and Surroundings

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We present tomographic results of the crust and the upper mantle beneath Ireland and Britain. A large number of broad-band measurements of surface-wave phase velocities have been accurately collected to produce a state-of-the-art 3D seismic-velocity structure. We applied different surface-wave analysis methods with complementary frequency bands thus sensitive to different depth: cross-correlation of teleseismic surface waves, and waveform inversion. The use of automated techniques led to an unprecedented coverage, making it possible to improve the resolution of the crust and lithosphere of Ireland and its surroundings, compared to previous models. These latest results would contribute to enhance our understanding of the structure and the evolution of the lithosphere beneath the area.