

Three-Dimensional S-Wave Velocity Structure of the Kinki Region, Southwestern Japan based on Ambient Seismic Noise Tomography using Data from Dense Seismic Array

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Introduction

Supplementary figures referred to in the main text are provided in this document.

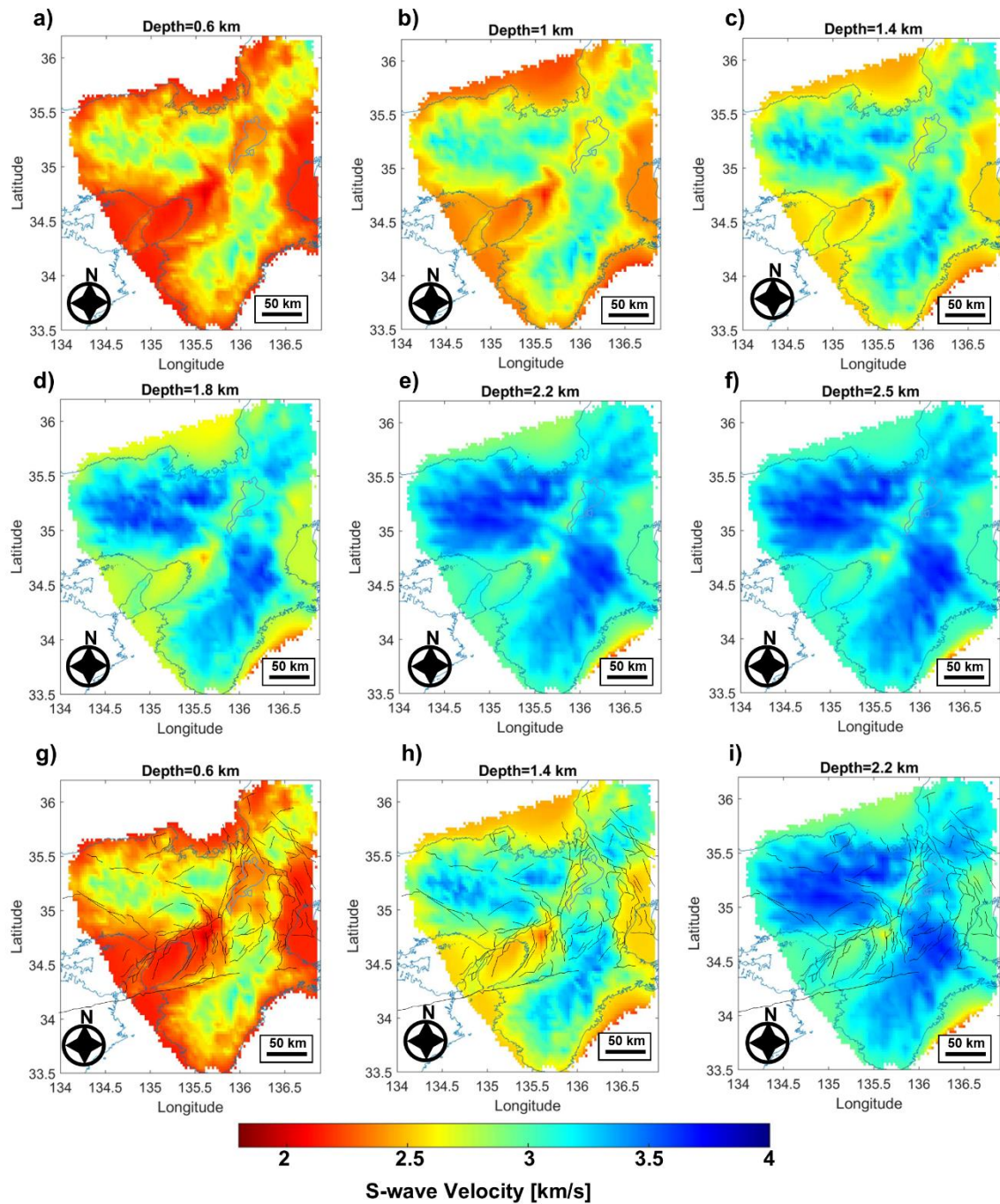


Figure S1. Weakly smoothed S-wave velocity models at different depths below sea level, given above each panel. (a–f) S-wave velocity models without showing the active faults. (g–i) S-wave velocity models overlaid with active faults (black lines).

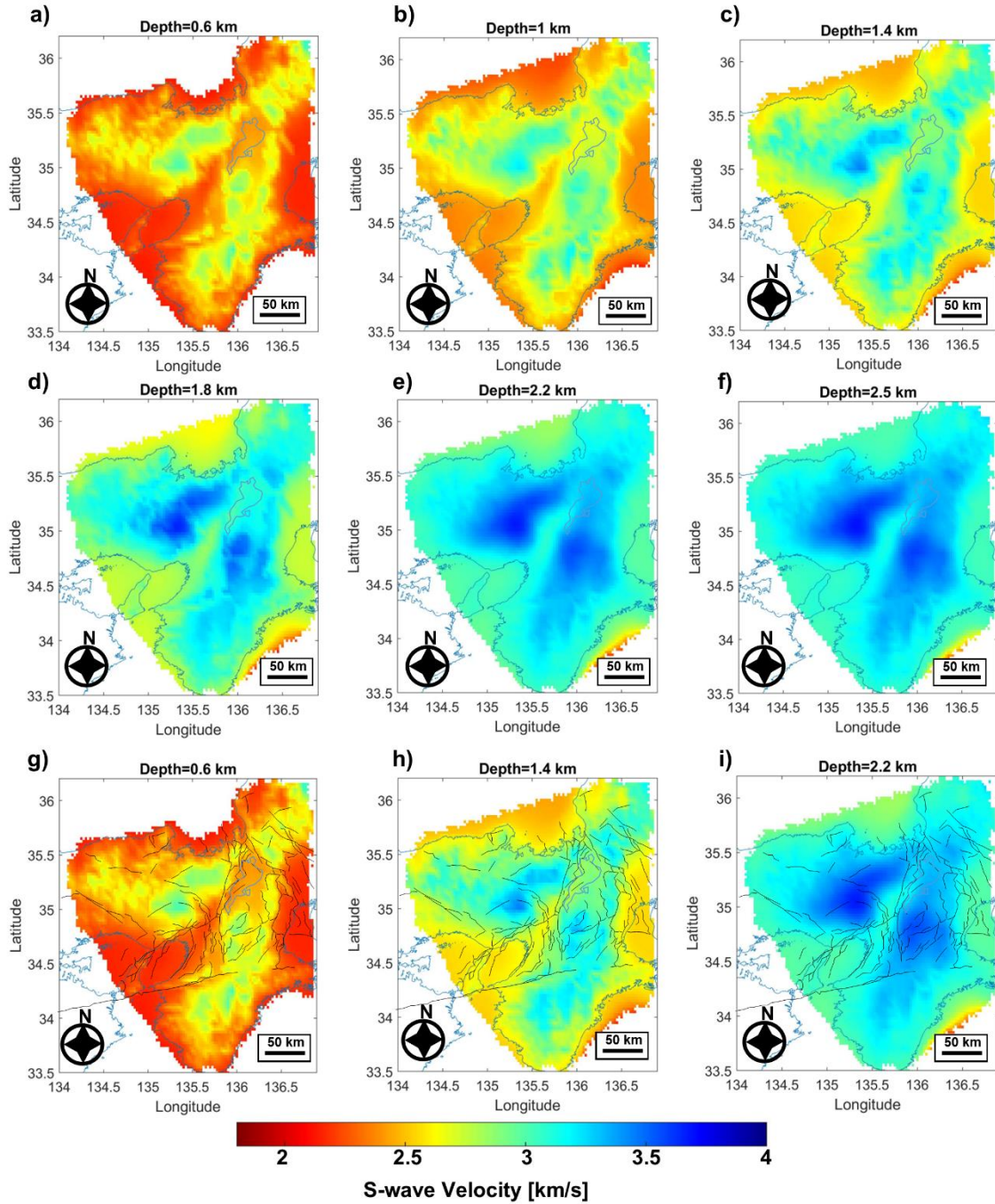


Figure S2. Strongly smoothed S-wave velocity models at different depths below sea level, given above each panel. (a–f) S-wave velocity models without showing the active faults. (g–i) S-wave velocity models overlaid with active faults (black lines).

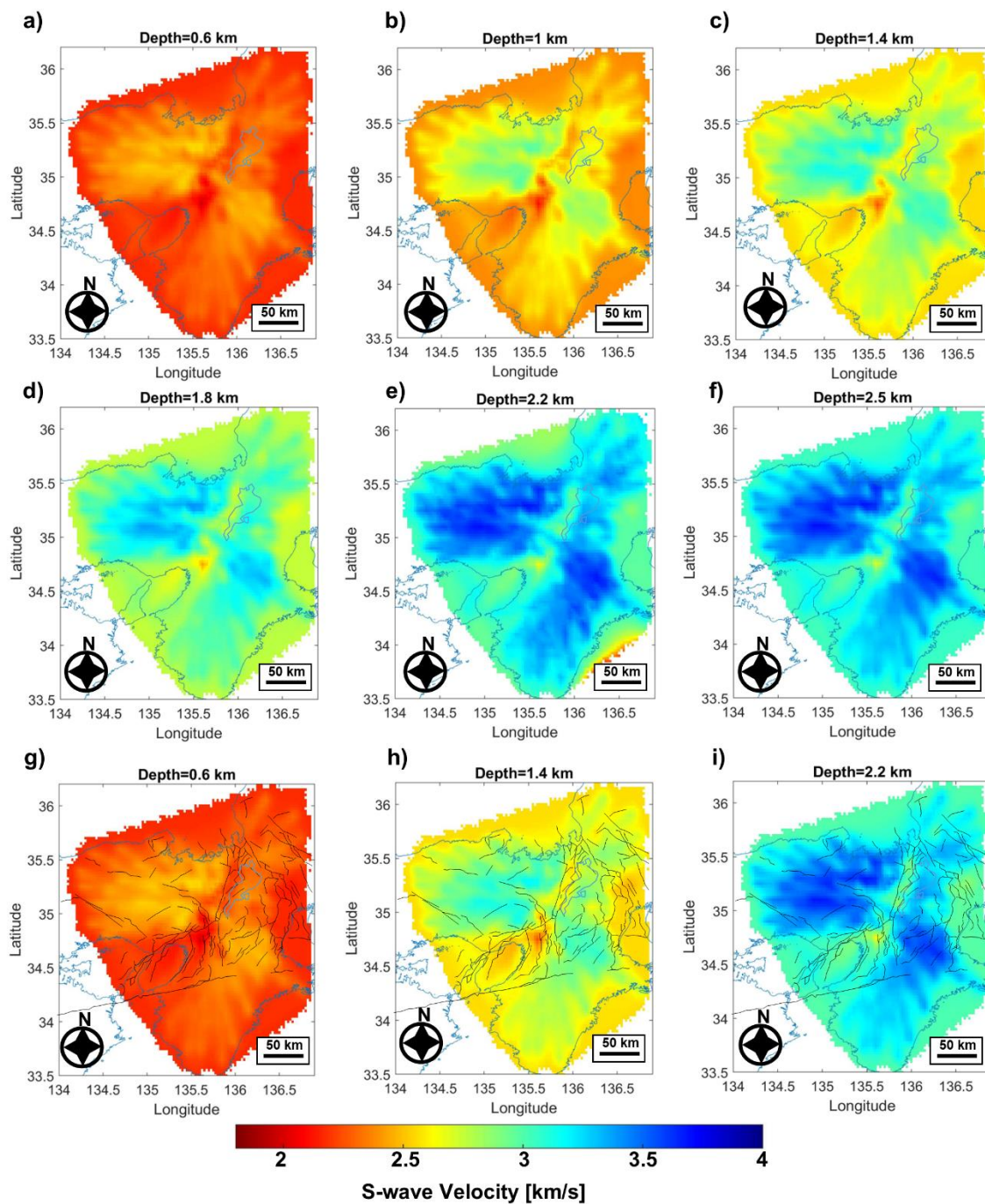


Figure S3. Weakly smoothed S-wave velocity models at different depths before topographic correction. (a–f) S-wave velocity models without showing the active faults. (g–i) S-wave velocity models overlaid with active faults (black lines).

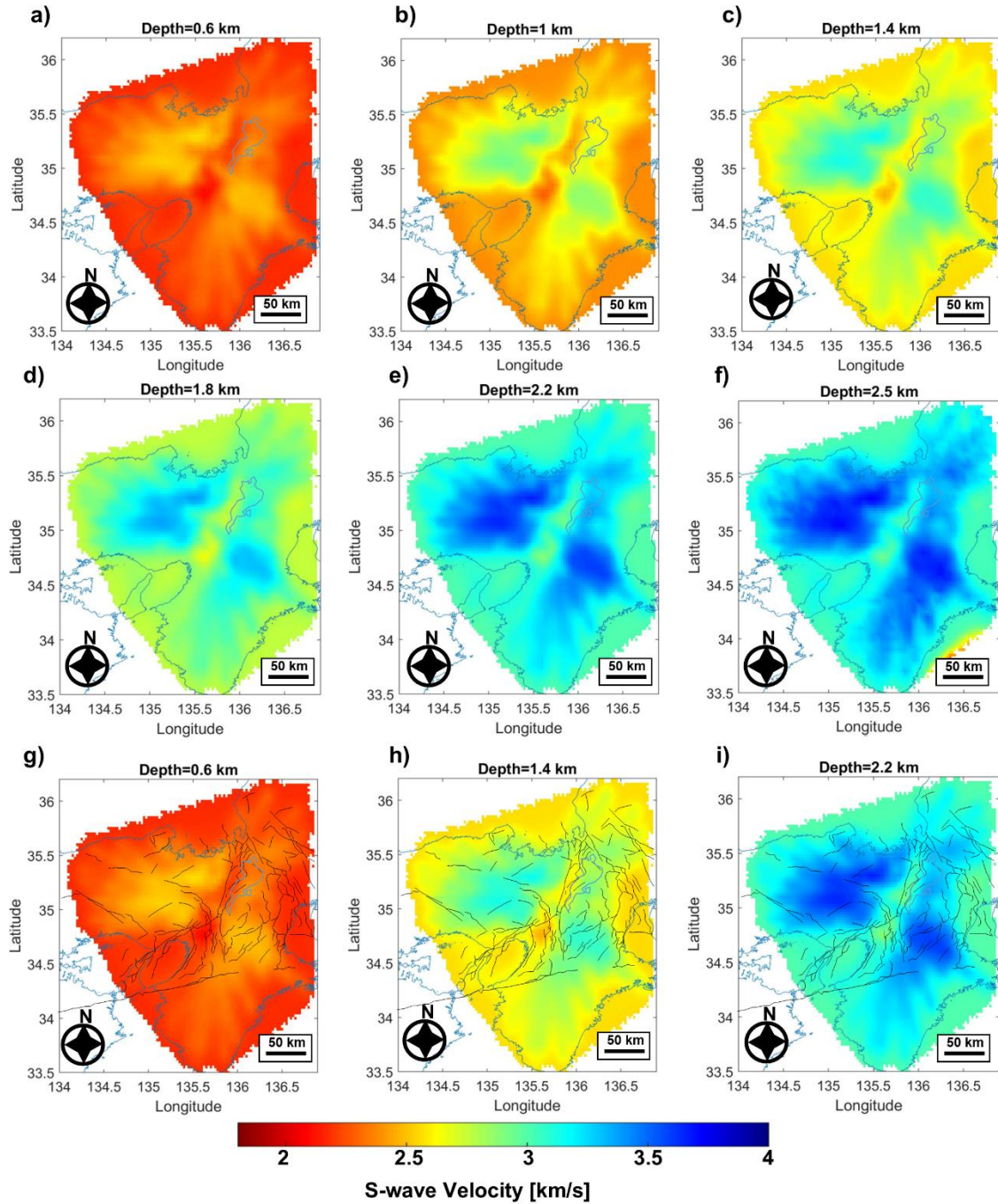


Figure S4. Moderately smoothed S-wave velocity models at different depths before topographic correction. (a–f) S-wave velocity models without showing the active faults. (g–i) S-wave velocity models overlaid with active faults (black lines).

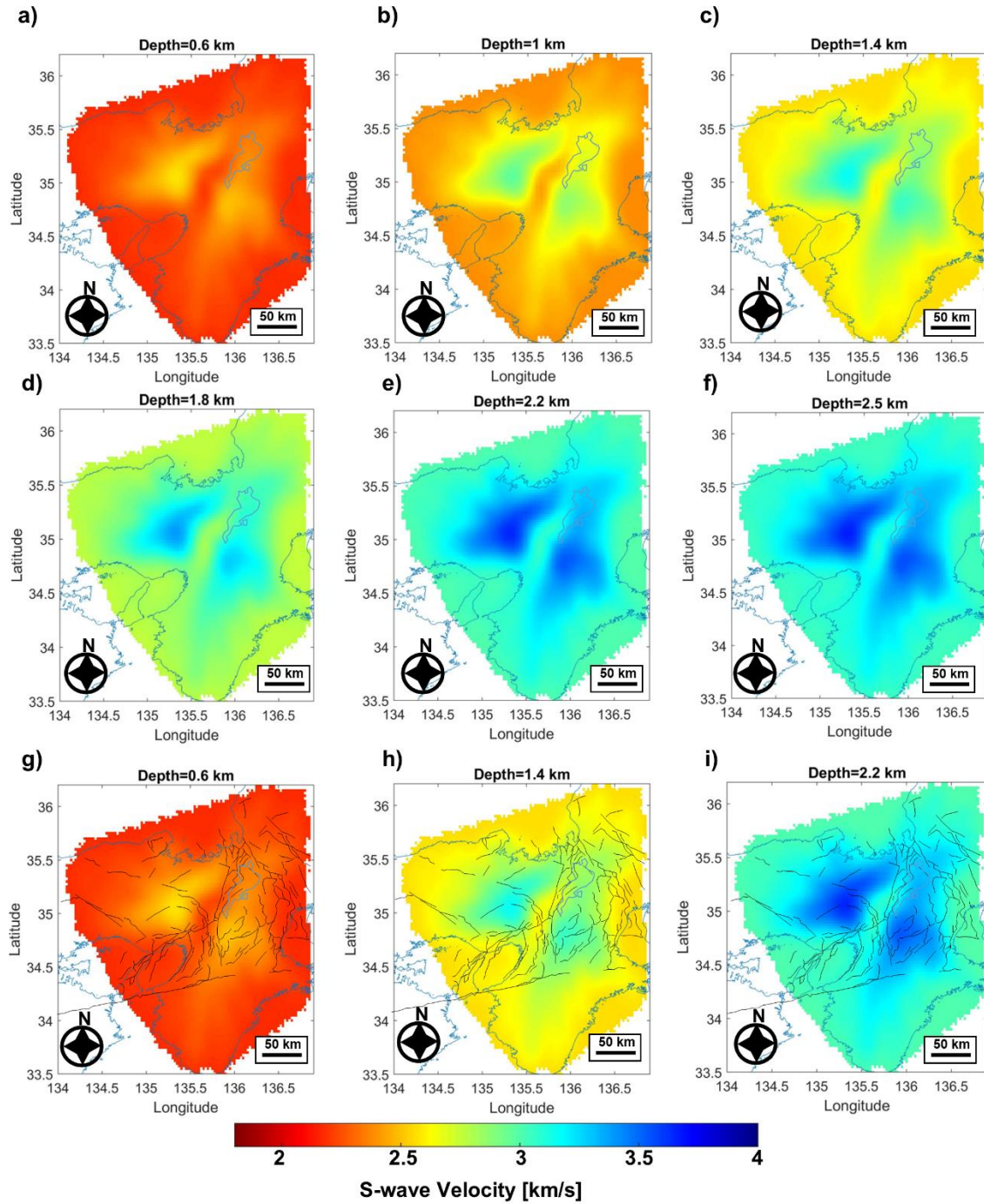


Figure S5. Strongly smoothed S-wave velocity models at different depths before topographic correction. (a–f) S-wave velocity models without showing the active faults. (g–i) S-wave velocity models overlaid with active faults (black lines).

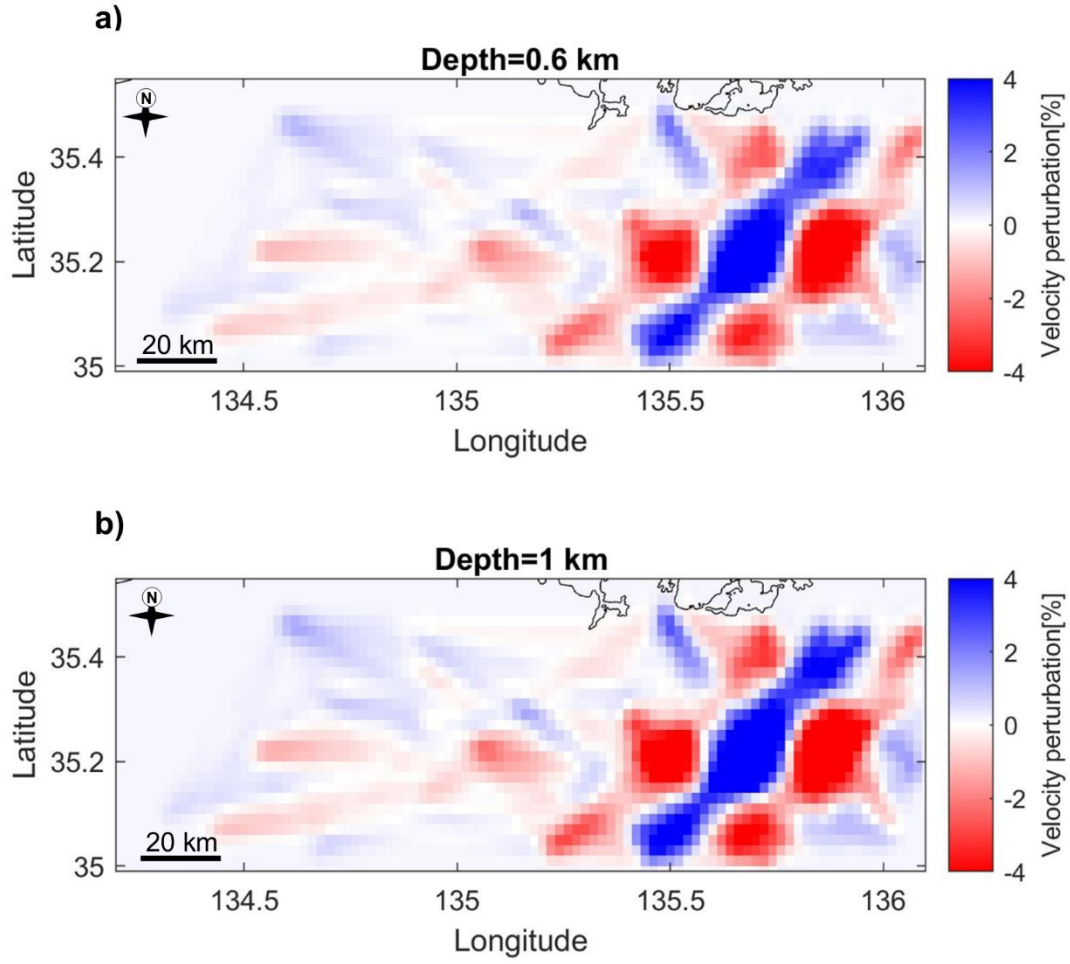


Figure S6. Horizontal velocity perturbation slices of the checkerboard resolution test results for the northern part of the Kinki region at 0.6 km (a) and 1 km (b) depths. The anomaly size was ~ 11 km (0.1°), and the velocity amplitude was $\sim 10\%$. Depth is shown above each horizontal slice.

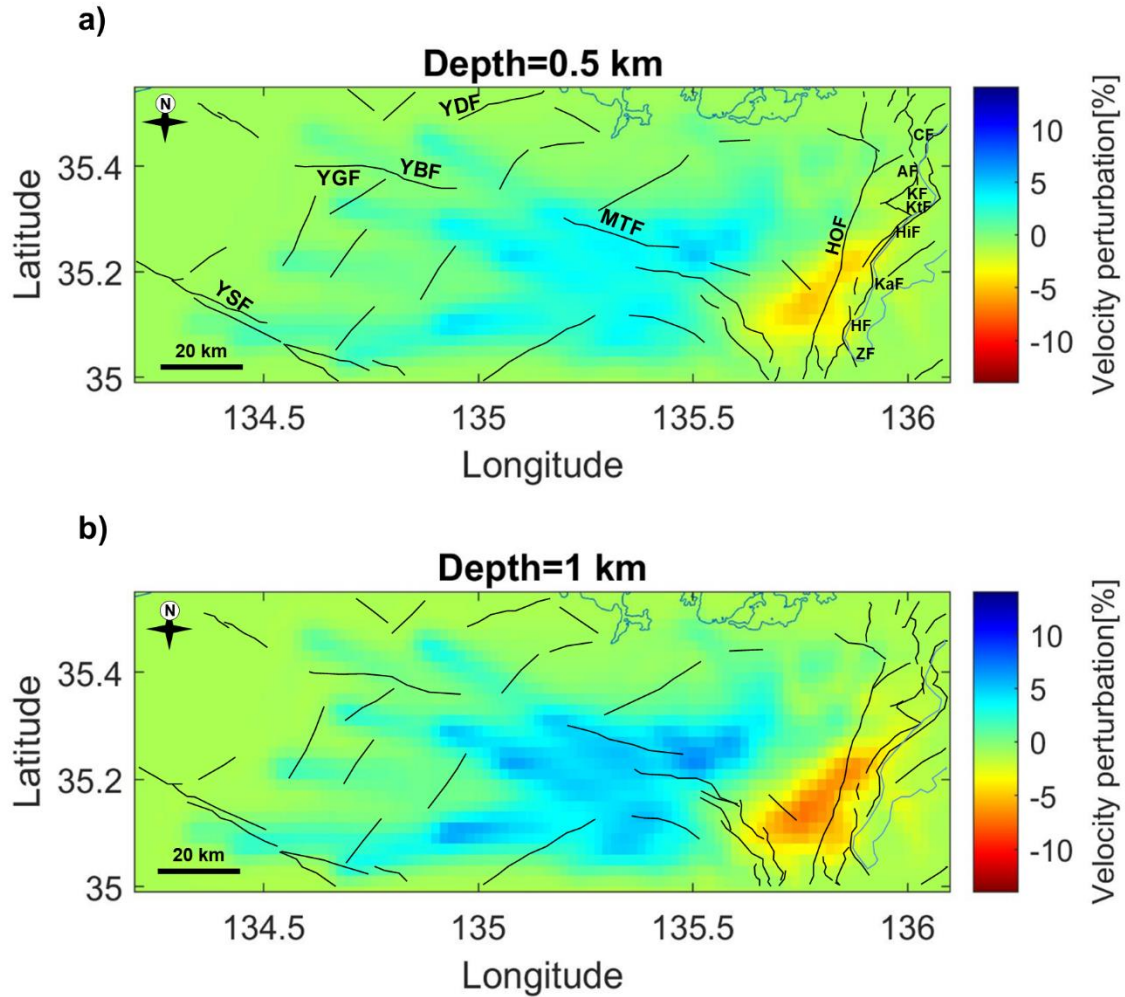


Figure S7. S-wave velocity perturbation of the northern part of the Kinki region before topographic correction. (a) S-wave velocity perturbation at a depth of 0.5 km below sea level. Also shown are the locations of the Yamada Fault (YDF), Yamasaki Fault (YSF), Yagi-Yabu Fault (YGF-YBF), Mitoko Fault (MTF), Hanaore Fault (HOF) and the Biwako-seigan Fault Zone members (Chinai Fault, CF; Aibano Fault, AF; Kamidera Fault, KF; Katsuno, KtF; Hira Fault, HiF; Katata, KaF; Hiei Fault, HF; Zeze Fault, ZF). (b) S-wave velocity perturbation at a depth of 1 km below sea level. Solid black lines represent documented active faults.