## Supporting Information for "Crust and Upper Mantle Structure Associated with Extension in the Woodlark Rift, Papua New Guinea from Rayleigh-wave Tomography"

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1. Figures S1 to S2

**Introduction** This supplement file includes two figures that demonstrate the resolution tests of the ambient-noise tomography, both at the period of 17 s. The results suggest

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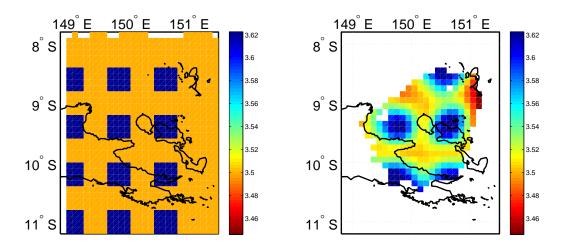
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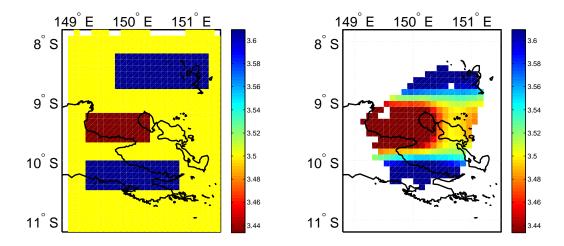
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X-2 JIN ET AL.: SHEAR VELOCITY STRUCTURE OF WOODLARK RIFT, PNG that the absolute velocity of larger, linear features such as the ridge beneath the DI is retrieved fairly well, and the smaller 40x40 km features can be well spatially located.



**Figure S1.** Checkerboard test of the ambient-noise tomography at 17-s period. Left: input velocity. Right: output velocity



**Figure S2.** Spike test of the ambient-noise tomography at 17-s period. Left: input velocity. Right: output velocity