

Figure F1. Location map of study region with topography from Ryan et al. (2009), Site U1415. Black lines = OBS profiles from Cruise EW0305, white circles = OBS instruments, red circles = instruments with record sections shown in Figure F2.

Figure F2. Record sections for vertical channel of OBSs 03 and 10 (Figure F1), Site U1415. Data are plotted with reduction velocity of 6 km/s with 0.5 s automatic gain control applied. Picked traveltimes are overlain.

Figure F3. A, B. Tomographic inversion velocity models with lighter areas marking regions along each profile with ray coverage, Site U1415. Black lines = contour intervals of 1 km/s, white lines = water/seafloor and crust/mantle interfaces, inverted white triangles = OBS locations.

Figure F4. Average velocity-depth functions for Lines 301 and 311, Site U1415. Gray shaded region displays young (<7.5 Ma), fast (>40 mm/y half-spreading rate) subgroup from the oceanic crustal structure synthesis of Christeson et al. (2019).