Figure F1. Bathymetric map, Site C0025. MSL = from mean sea level.

Figure F2. Seismic profile near northwestern margin of Kumano Basin (Tsuji et al., 2015), Site C0025. TWT = two-way traveltime. BSR = bottom-simulating reflector. Blue circles = inferred top of accretionary prism, white circles = splay fault.

Figure F3. Stratigraphic column, Site C0025. Ages are from nannofossil assemblages (see Biostratigraphy).

Figure F4. Examples of common lithologies, Site C0025. A. Silty claystone to clayey siltstone in Unit I; normally graded silty sandstone (reddish brown) marks Unit I/II boundary. B. Mottled, bioturbated silty claystone to clayey siltstone, Unit II. C. Scattered glauconite, clusters of glauconite, and pyrite grains, Unit II. D. *Zoophycos* bioturbation, Unit II. E. Light gray volcanic ash (tuff), Unit II. F. Contact between silty claystone/clayey siltstone and sandy mudstone to muddy sandstone separated by 2 cm thick dark green band, Unit II.

Figure F5. X-ray fluorescence chemical compositions from bulk fine-grained sediments from Units I and II, Site C0025. See Table T5 for tabulated results. LOI = loss on ignition.

Figure F6. Random bulk powder X-ray diffraction mineral composition from sediment from Units I and II, Site C0025. See Table T6 for tabulated results.

Figure F7. Dip data, Site C0025.

Figure F8. Lower hemisphere equal-area projections of poles to bedding, faults, and striations on faults, Site C0025. A. Bedding. B. Faults. Red dots = normal faults, black dots = faults with unknown sense of shear. C. Striations (red and black dots) on faults (great circles).

Figure F9. Sediment-filled veins representing (A) steeply dipping and (B) subhorizontal arrays, Site C0025. C, D. Some sediment-filled veins have narrow intervein spacing and appear similar to thick cohesive faults. E, F. Microscopic view of sediment-filled vein (arrow) (E: plane-polarized light [PPL]; F: cross-polarized light [XPL]). G, H. Close-up of sediment-filled vein and matrix (G: PPL; H: XPL).

Figure F10. (A, C, E) Photo image logger (MSCL-I) and (B, D, F) X-ray computed tomography (CT) images parallel to split-core surface illustrating sediment-filled veins (green arrows), cohesive healed faults (yellow arrows), and normal fault (red arrows) (A, B: 358-C0025A-19R-3, 40–64.5 cm; C, D: 18R-2, 60–75 cm; E, F: 15R-7, 75–82.5 cm). In X-ray CT images, cohesive healed faults are brighter than surrounding matrix, corresponding to higher CT number and density. B. Normal fault can be identified because it displaces array-vein structures. (B, D) Sediment-filled vein structures are generally resolved in X-ray CT images and occur as bright features filled with higher density material; (B) thinner sediment-filled vein structures are not resolved.

Figure F11. (A) Thin cohesive fault and (B) slickenlines on fault surface, Site C0025. White triangles = position of fault. (C) Thick cohesive fault and (D) its X-ray CT image. E, F. Thicker fault and host rock (E: PPL; F: XPL). White triangles = position of fault boundary (host rock is to the upper left and fault is to the lower right across this boundary).

Figure F12. Vector endpoint and stereonet magnetization directions showing of alternating field demagnetization results, Site C0025. Demag. = demagnetization, NRM = natural remanent magnetization.

Figure F13. Inclination and declination after 20 mT alternating field demagnetization. Gray = interval of strong drilling disturbances (358-C0025A-1R through 6R), blue = 7R–16R, red = discrete samples.

Figure F14. Salinity, pH/pmH, alkalinity, sulfate, chlorinity, bromide, ammonium, and phosphate, Site C0025. Black arrows = seawater (SW) concentrations.

Figure F15. Headspace gases, Site C0025.

Figure F16. Minor elements boron, lithium, strontium, barium, iron, manganese, and silica, Site C0025. Black arrows = seawater (SW) concentrations.

Figure F17. Major cations sodium, potassium, magnesium, and calcium, Site C0025. Black arrows = seawater (SW) concentrations.

Figure F18. Trace elements vanadium, copper, zinc, arsenic, rubidium, molybdenum, cesium, lead, and uranium, Site C0025.

Figure F19. Calcium carbonate, total organic carbon (TOC), total sulfur (TS), total nitrogen (TN), and TOC/TN ratio, Site C0025.

Figure F20. Whole-round multisensor core logger measurements, Site C0025. GRA = gamma ray attenuation, NGR = natural gamma radiation. cps = counts per second.

Figure F21. Moisture and density measurements on discrete core samples, Site C0025.

Figure F22. Electrical resistivity, electrical resistivity anisotropy, *P*-wave velocity, and *P*-wave velocity anisotropy, Site C0025.

Figure F23. Thermal conductivity, Site C0025.

Figure F24. Thermal conductivity vs. porosity, Sites C0025 and C0002. Dashed and solid lines represent theoretical values for different grain thermal conductivity (k_s) based on geometrical mean mixing model.

Figure F25. Undrained shear strength measurements, Site C0025.

Figure F26. Representative anelastic strain recovery results, Site C0025. A. Sample with strain gauges attached. B. Magnitude of normal anelastic strains and temperature vs. elapsed time. C. Magnitude of three principal anelastic strains and mean strain vs. elapsed time.