Figure F1. Site map, Expedition 386. Bathymetric overview map of the Japan Trench (modified after Kioka et al., 2019) between the Daiichi Seamount in the south and the Erimo Seamount in the north

Figure F2. Site M0094. Left: high-resolution bathymetric map with 5 m contours, site locations, and track lines and locations of previously acquired high-resolution subbottom profiles and short cores during the site survey cruise (Strasser et al., 2019). Right: site survey subbottom profiles showing depths (assuming 1500 m/s *P*-wave velocities) of the 20 and 40 m GPC barrels used to recover cores. Exact hole positions and depths are given in Table T1, Hydroacoustics, and Table T1 in the Expedition 386 methods chapter (Strasser et al., 2023a). SP = shotpoint.

Figure F3. Bathymetry and grid of subbottom profiler line acquired around Site M0094 in Basin C/N2. Contour interval = 5 m.

Figure F4. Subbotom profiler Line 386_Underway_102 showing the acoustic character of Basin C/N2 and Site M0094. SP = shotpoint.

Figure F5. Lithostratigraphic summaries, Holes M0094A and M0094B. XCT = X-ray CT, MS = magnetic susceptibility, cps = counts per second.

Figure F6. Smear slide summaries, Holes M0094A and M0094B. The most abundant lithogenics (clay, quartz, feldspar, and pyrite) are in a brown color gradient, the volcaniclastics/vitrics are pink, and the biogenics are in a blue gradient for the siliceous biogenics (diatoms, sponge spicules, and radiolaria) and are green for the calcareous microfossils. See legend in Figure F14 in the Expedition 386 methods chapter (Strasser et al., 2023a). XCT = X-ray CT.

Figure F7. Ternary diagrams of major components and grain size, Site M0094.

Figure F8. Lithologic and biogenic components, Site M0094.

Figure F9. X-ray CT images and linescans, Site M0094.

Figure F10. Examples of sedimentary facies, Site M0094.

Figure F11. XRD mineralogy, Site M0094.

Figure F12. Tephra M0094B-1H-16, 82.5 cm (brackets; 386-M0094B-1H-16, 81.7–82.5 cm) in Basin C/N2, Site M0094.

Figure F13. Tephra layer M0094B-1H-16, 82.5 cm, as seen in smear slide Sample 386-M0094B-1H-16, 82 cm.

Figure F14. Tephra layer potentially enabling intersite correlation, Sites M0087 and M0094. Possible correlation is proposed based on tephra characteristic facies, the shape of volcanic glass shards, and mineral composition.

Figure F15. Harker diagram of volcanic glass shards (386-M0094B-1H-19, 93.5–96 cm).

Figure F16. IW salinity, total alkalinity, and ammonium (NH_4^+) concentrations, Site M0094.

Figure F17. IW V, Mo, and U concentrations, Site M0094.

Figure F18. IW Li, B, Si, Mn, Fe, Sr, and Ba concentrations, Site M0094.

Figure F19. IW Cl^-, Br^-, and SO_4^{2-} concentrations, Site M0094.

Figure F20. Methane (C_1) and ethane (C_2) concentrations and C_1/C_2 ratios in Hole M0094B and one trigger core sample from 0.665 mbsf in Hole M0094A (red diamonds).

Figure F21. Solid-phase XRF contents of Al, Ca, Fe, Mn, and Si, Site M0094. Open symbols = trigger core samples.

Figure F22. TC, TOC, TIC, and TS in sediments, Site M0094.

Figure F23. Physical properties summary, Holes M0094A (orange) and M0094B (black). Bulk density: blue = Hole M0094A, red = Hole M0094B. P-wave velocity: blue dots = Hole M0094B, error bars = ±50 m/s. Undrained shear strength was measured with the penetrometer. MS = magnetic susceptibility, cps = counts per second.

Figure F24. Undrained shear strength from the fall cone and AVS, Site M0094.

Figure F25. MAD data, Holes M00094A (orange) and M0094B (black).

Figure F26. Color data, Hole M0094B.

Figure F27. Intensity, inclination, and declination, Hole M0094A.

Figure F28. Intensity, declination, corrected declination, and inclination, Hole M0094B.