

Figure F1. IODP convention for naming sites, holes, cores, sections, and samples. Graphic lithology and recovery rates shown are invented to illustrate naming conventions.

Figure F2. APC coring system used during Expedition 401 (Graber et al., 2002). I.D. = inner diameter.

Figure F3. XCB coring system used during Expedition 401 (Graber et al., 2002).

Figure F4. RCB coring system used during Expedition 401 (Graber et al., 2002). OD = outer diameter, ID = inner diameter.

Figure F5. Overall flow of cores, sections, analyses, and sampling in the laboratories, Expedition 401. ICP-AES = inductively coupled plasma–atomic emission spectroscopy, PWC = *P*-wave caliper, ROIB = samples for rapid oxygen isotope analyses of benthonic foraminifers. Whole-round samples were taken every 20 m adjacent to IW samples in Hole U1611B and immediately frozen. Expedition 401 sections and samples were shipped to the IODP Bremen Core Repository in Bremen, Germany, for the sample party and permanent storage.

Figure F6. X-Ray Linescan Logger (XSCAN) used to X-ray sediment core halves.

Figure F7. Siliciclastic–biogenic, carbonate–biogenic silica ternary diagram used for sediment names of different compositions, Expedition 401.

Figure F8. Sand-silt-clay ternary diagram used for textural names, Expedition 401.

Figure F9. Example VCD sheet, Expedition 401. cps = counts per second. See Figure F10 for lithologic symbol descriptions.

Figure F10. Graphic keys for VCDs, Expedition 401. Top: lithology patterns. Bottom: sedimentary structure, bedding, and bioturbation symbols.

Figure F11. Scanned sedimentary core description log (barrel sheet), Hole U1609A.

Figure F12. Bioturbation index, Expedition 401. Adapted and modified from Reineck (1963), Taylor et al. (2003), and Bann et al. (2004).

Figure F13. A–C. Selected trace fossils (ichnogenus) observed, Expedition 401. Ch = *Chondrites*, Pl = *Planolites*, Th = *Thalassinoides*, Zo = *Zoophycos*, Pn = pyrite nodule.

Figure F14. Example of synthetic log (hand-drawn log), Hole U1609A. Scanned original descriptions are available in HANDDRAWN in Supplementary material.

Figure F15. Graphic key for hand-drawn sedimentary logs, Expedition 401. Leg-ends may vary slightly between sites.

Figure F16. Geomagnetic polarity timescale over past 8 My following Ogg (2020). Black bars = normal (sub)chrons, white = reversed (sub)chrons.

Figure F17. Zijderveld endpoint orthogonal plots and NRM decay curves of four test samples measured on SRM (green squares = declination, red dots = inclination) and JR-6A (gray squares = declination, orange dots = inclination), Expedition 401. In Zijderveld plots, *X*, *Y*, and *Z* components are normalized by total intensity to better compare directional results measured by SRM and JR-6A.

Figure F18. Coordinate systems used for (A) archive and (B) working section halves and (C) SRM (SQUID) coordinate system used on *JOIDES Resolution*. Orientations of archive- and working-half cube samples relative to SRM coordinate system are also shown.

Figure F19. A. Coordinate system for samples collected from working half using J-cube method. B. Orientation of measurements on JR-6A (see text). Hatched arrow on face of sample points toward stratigraphic top (–*z*-direction) of sample, with flags pointing in +*y*-direction. Sticker with arrow is shown on stratigraphic top of sample box, with arrow pointing toward double line on core liner (+*x*-direction).

Figure F20. Downhole logging tool strings used at different drilling sites during Expedition 401 downhole logging operations.