Figure F1. Coring systems used during Expedition 392.

Figure F2. Core reference frame.

Figure F3. Depth scales used during Expedition 392. DRF = drilling depth below rig floor, DSF = drilling depth below seafloor, CSF = core depth below seafloor (Method A or B), CCSF = core composite depth below seafloor, WRF = wireline log depth below rig floor, WSF = wireline log depth below seafloor, WSSF = wireline log speed-corrected depth below seafloor, WMSF = wireline log matched depth below seafloor.

Figure F4. Example VCD and VCD legend used during Expedition 392. cps = counts per second.

Figure F5. Example igneous core section VCD used during Expedition 392. Symbols and nomenclature used for igneous rock descriptions are shown. FSP = feldspar, OL = olivine, PX = pyroxene. WR = whole round MS, POINT = MSP. Color reflectance values: L* (perceptual lightness with black = 0 and white = 100), a* (green-red axis with negative values toward green and positive values toward red), and b* (blue-yellow axis with negative numbers toward blue and positive toward yellow).

Figure F6. Sediment and sedimentary rock naming scheme used during Expedition 392. Adapted from Expedition 369.

Figure F7. Udden-Wentworth grain size classification.

Figure F8. Ternary diagram for siliciclastic principal lithologies. For definition of grain sizes see Figure F7. Modified from Shepard, 1954.

Figure F9. Calcareous-biosiliceous-siliciclastic ternary diagram. Modified after Shepard, 1954.

Figure F10. Dunham limestone classification scheme.

Figure F11. Example thin section report produced during Expedition 392. Data were recorded in the LIMS database using the DESClogik application and then compiled into these reports.

Figure F12. Microfossil datums used during Expedition 392, with calcareous nannofossil and planktonic foraminiferal zonation schemes for the Albian to recent and Southern Ocean diatom scheme for the Quaternary. (Continued on next two pages.)

Figure F13. Coordinate systems used for (A) pass-through SRM measurements on archive halves, and (B) JR-6A spinner magnetometer measurements on discrete working-half samples.

Figure F14. Interrelationship between cored material and the depth scales used during Expedition 392. In this example scenario, five cores were recovered from Hole A. The starting depth for coring Hole B was offset vertically by several meters to cover gaps in the record of Hole A. Five cores were recovered from Hole B, of which Core B2 had less than full recovery and Cores B3, B4, and B5 had more than 100% recovery because of expansion of core material, resulting in increased length (red segments). The CSF-A scale (example Hole B) is established by adding the curated core length (red and brown intervals) to the depth of each core top determined by the DSF measurement. If recovery is >100%, plotting recovery on the CSF-A scale will result in overlap between cores of the same hole. The CCSF scale corrects for this and other inadequacies of the CSF-A scale. It is based on locating features common to cores in multiple holes at a given site and is constructed by working from the top of the site downward to select tie points (green dashed lines) that correlate features in one hole to those in another. Because of core expansion, Holes A and B on the CCSF scale are longer than they are on the CSF-A scale. The splice on the CCSF scale at the far right is constructed by combining selected intervals between tie points so that coring gaps and disturbed sections are excluded. This process ideally results in a complete stratigraphic sequence. The procedure assumes identical sediment thickness between tie points joining two holes. However, because of differential squeezing and stretching of each core during the coring process and lateral variations in sedimentation, features cored in parallel will not align perfectly, as illustrated by the pink dashed lines joining the pink horizon in Cores A2 and B2.

Figure F15. NGRL system (Vasiliev et al., 2011).

Figure F16. XRI system.

Figure F17. WRMSL.

Figure F18. Thermal conductivity (TK04) system.

Figure F19. SHMSL used on archive section halves.

Figure F20. Pycnometer cells for MAD measurements.

Figure F21. SHMG *x*-axis caliper and *y*- and *z*-axis bayonets used to measure *P*-wave velocity on split-core sections of soft sediment and discrete samples of indurated sediment or igneous rock. A. *P*-wave velocity measurement on an igneous rock discrete sample using the *x*-axis caliper.

Figure F22. Downhole logging assemblies used during Expedition 392. LEH-MT = logging equipment head-mud temperature, EDTC = Enhanced Digital Telemetry Cartridge, HLDS = Hostile Environment Litho-Density Sonde, DSI = Dipole Shear Sonic Imager, HRLA = High-Resolution Laterolog Array, HNGS = Hostile Environment Natural Gamma Ray Sonde, MSS = Magnetic Susceptibility Sonde, APS = Accelerator Porosity Sonde, FMS = Formation MicroScanner.