

Figure F1. Map of drilling sites from Expedition 362.

Figure F2. Core photos of Subunit IIIB at 1:100 from Cores 362-U1480G-60R and 61R showing the positions of Samples 60R-6, 95–97 cm (Sample A), 60R-6, 106–109 cm (Sample B), and 61R-6, 128–131 cm (Sample C). Notice the chalk intervals (white) contrasting with the brown clays derived from ash deposits.

Figure F3. Scanned thin sections of Samples A, B, and C. Blue lines highlight stylolites and seam dissolution, black lines show fractures, and arrows show potential stress associated with the volume change from stylolite growth.

Figure F4. Core photos of the areas surrounding the 3 samples, including their position.

Figure F5. Line drawings of macroscopic diagenetic features from the core photos of Samples A, B, and C.

Figure F6. Photomicrographs at 25× magnification of Sample A and close-ups of interesting diagenetic features. A. Ghosts of dissolved carbonate clasts. B. Arrows point to insoluble elements in a stylolite, either clay or organic matter. C. Intervals contrasting between micritic cementation with and without microporosity. D. Foraminifer test starting to be dissolved by a stylolite. E. Compartmentalization from a stylolite between more or less porosity left after micritic cementation. F. Fracture preserved in the chalk with slip in the lower part (microbrecciation, arrows) and its precursor, pore collapse of deformation bands, in the upper part (clast alignments, dashed line).