

Figure F1. Transect of Expedition 375 sites cored on the Hikurangi margin of New Zealand. Inset: regional setting (from Saffer et al., 2019). Tūranganui Knoll Site U1526 is located on the Hikurangi Plateau at the southeast end of the transect.

Figure F2. Site U1526 lithostratigraphy (from Wallace et al., 2019).

Figure F3. Bulk MS data from discrete samples measured in this study with a KLF-3 susceptibility meter with magnetizing fields of 30 and 300 A/m and from shipboard measurements made with the WRMSL and SHMSL. WRMSL and SHMSL data are smoothed with an 11-point running average. Lithology is explained in Figure F2.

Figure F4. Magnetic hysteresis loops of (A–C) basalt and (D) sediment samples, Site U1526.

Figure F5. Day plot of selected Site U1526 samples. Red squares = basalt samples, green square = nannofossil ooze sample. Dashed lines delineate commonly used regions separating grain size changes from SD to PSD to MD.

Figure F6. FORC diagrams for (A, B) basalt and (C) sediment samples, Site U1526.

Figure F7. CT experiments, Site U1526.

Figure F8. Representative orthogonal vector (modified Zijdeveld) plots of the NRM for three of the better constrained Late Cretaceous sediment samples from Site U1526. Red squares = inclination data, blue circles = declination data. Gray points were excluded from the best-fit line solution. The lines fit through the data are from the PCA, with lines plotted only for the inclination data; dashed lines are anchored to the origin and solid lines are not.

Figure F9. Representative orthogonal vector (modified Zijdeveld) plots of the NRM for four basalts samples from Site U1526. The symbols are the same as in Figure F8. .

Figure F10. Comparison of inclinations from discrete samples from this study with shipboard data from Holes U1526A and U1526B. Inclinations from this study are shown with red squares (U. of Hawai'i laboratory) and orange circles (U. of Otago laboratory). Shipboard inclinations are shown with small blue circles for measurements made along section halves after 20 mT demagnetization or with green circles for PCA results from discrete basalt samples or from archive-half sections for the Late Cretaceous nannofossil ooze interval.