The following supplement accompanies the article

**Benthic foraminiferal assemblages from Kiritimati (Christmas) Island indicate human-mediated nutrification has occurred over the scale of decades**

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**Supplement.** Additional plots related to the radiocarbon and grain size analyses

Fig. S1. Map of region around Kiritimati showing locations from which F\(^14\)C calibration curve was constructed. Data from 1949–1979 from Fanning Island coral (Druffel 1987), from 1991 from the World Ocean Circulation Experiment [WOCE] (Goyet et al. 1996), and 2006 from the Climate Variability and Predictability [CLIVAR] project (Feely et al. 2006), shown as black circles (samples collected at ~same locations)
Fig. S2. Radiocarbon calibration of 5 foraminifera samples (site no. followed by sample identifier). The marine post-bomb $^{14}$C curve for the central Pacific used as the radiocarbon calibration curve is shown in blue. Gray histograms represent probability distributions of calibrated ages of samples, and black brackets indicate 68.2% and 95.4% confidence intervals of sample ages. The radiocarbon calibration was performed using the OxCal program V4.1.3 (Bronk Ramsey 2009).

Fig. S3. Median grain size versus FORAM Index in the live (white circles) and dead (black diamonds) assemblages.