

**Figure F1.** Core photograph showing examples of the bed types describe in Gawthorpe et al., 2022, Site M0079 (core depth 0–145 cm, borehole depth 242.30–243.75 mbsf). Gray = graded beds excluded during the modeling run with OxCal 4.4. software (Bronk Ramsey, 2009a). vfs = very fine sand, fs = fine sand, ms = medium sand.

**Figure F2.** Age-depth model for Site M0079. The model was produced in OxCal v.4.4 software (Bronk Ramsey, 2009a) using the age-constraints shown in Table T1.

**Figure F3.** Modeled age and average sedimentation rates for the stratal packages defined in Gawthorpe et al. (2022) at Site M0079, with Expedition 381 litho-stratigraphic units/subunits (from McNeill et al., 2019b) and marine isotope stages.