

Shifts in Benthic Foraminiferal Preservation Correspond with Ocean Circulation Changes During the Last Deglacial Transition

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Foraminifera are used to reconstruct past climate conditions. However, the extent to which fossil preservation affects such records is relatively unknown. To identify processes affecting foraminiferal preservation, I quantified preservation changes in *Cibicides* and *Uvigerina* assemblages from IODP Site 1059 since the Last Glacial Maximum. Results indicate no change in *Uvigerina* preservation, but improved preservation in *Cibicides* preservation beginning at 14.8 ka. This preservation shift occurs in unison with a change in Atlantic deep ocean circulation during the last deglacial period with an increased influence of North Atlantic Deep Water (NADW) at ~15 ka throughout the deep Atlantic Ocean. Therefore, we conclude that North Atlantic *Cibicides* preservation quality is generally better during intervals when NADW formation is strongest.