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Supplement of

Reconstruction of Holocene oceanographic conditions in eastern Baffin Bay

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1 S1. Chronology

2 At the radiocarbon dating laboratory (ETH, Zürich), the samples were run twice, measuring F¹⁴C
3 in both the main and leach fraction of each sample, the leach fraction acting as a measure of quality
4 control (Bard et al., 2015; Wacker et al., 2013). The ¹⁴C dates at depths of 700-701 cm and 737-
5 738 cm, the F¹⁴C were measured only on the leach fractions, since there was no CO₂ in the main
6 fraction, likely explained by the small sample sizes (see Table S1). Both dated intervals at the
7 bottom of the core have large uncertainties but they are still in general agreement with the other
8 dated intervals.

9 **Table S1:** F¹⁴C deviations between the main and leach fractions of the ¹⁴C dated intervals.

Depth (cm)	Lab ID	Sample description	Weight (µg)	Fraction	F ¹⁴ C
4-5cm	ETH-92277.1.1	Mixed benthic foraminifera	600	main fraction	0.915732±0.0054
4-5cm	ETH-92277.2.1	Mixed benthic foraminifera		leach fraction	0.911882±0.0074
70-71 cm	ETH-92279.1.1	Mixed benthic foraminifera	1030	main fraction	0.799837±0.0049
70-71 cm	ETH-92279.2.1	Mixed benthic foraminifera		leach fraction	0.799153±0.0071
310-311 cm	ETH-92281.1.1	Mixed benthic foraminifera	1320	main fraction	0.539826±0.0038
310-311 cm	ETH-92281.2.1	Mixed benthic foraminifera		leach fraction	0.543688±0.0055
410-411 cm	ETH-92283.1.1	Mixed benthic foraminifera	1340	main fraction	0.485369±0.0036
410-411 cm	ETH-92283.2.1	Mixed benthic foraminifera		leach fraction	0.479396±0.0051
580-581 cm	ETH-92285.1.1	Mixed benthic foraminifera	1750	main fraction	0.410401±0.0034
580-581 cm	ETH-92285.2.1	Mixed benthic foraminifera		leach fraction	0.405557±0.0067
700-701 cm	ETH-92286.1.1	Mixed benthic foraminifera	750	main fraction	-
700-701 cm	ETH-92286.2.1	Mixed benthic foraminifera		leach fraction	0.357202±0.0173
737-738 cm	ETH-92287.1.1	Mixed benthic foraminifera	500	main fraction	-
737-738 cm	ETH-92287.2.1	Mixed benthic foraminifera		leach fraction	0.347568±0.0067

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11 Supplementary references

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