Supplementary Information for "Millennial-scale changes in North Atlantic circulation since the last glaciation" by Marchitto *et al*. (*Nature* **393,** 557-561, 1998).

Radiocarbon and calibrated ages of *G. sacculifer* samples from core OC205-2-103GGC

Depth in core (cm)	Radiocarbon age (yr BP)	Calibrated age (yr BP)	NOSAMS Accession #	*G. sacculifer* abundance (#/g)
10	920 ±35	510	OS-10523	29 ±4
62	5,290 ±45	5,640	OS-10524	94 ±10
113	11,000 ±50	12,530	OS-10526	54 ±8
121	12,200 ±55	13,760	OS-10525	31 ±4
134	17,100 ±100	19,680	OS-10527	8 ±2
151	20,200 ±85	23,420	OS-10528	18 ±3
171	25,900 ±120	29,830	OS-10529	26 ±5
200	31,500 ±170	35,760	OS-10530	47 ±8
220	37,400 ±360	41,610	OS-10645	75 ±12
270	39,500 ±480	43,600	OS-10531	25 ±4

All radiocarbon measurements were performed at the National Ocean Sciences AMS (NOSAMS) Facility at WHOI. Radiocarbon ages are not reservoir-corrected; calibrated (calendar) ages assume a 400 yr reservoir age. Radiocarbon ages younger than 18,760 yr BP were converted to calibrated ages using a marine calibration based on dendrochronological and coral data[1]. Older radiocarbon ages were converted using the coral-derived equation $C = -1807 + 1.39R - (5.85\times10^{-6})R^2$, where C is calibrated age and R is reservoir-corrected radiocarbon age[2]. *G. sacculifer* abundances are given as the number of >300 μm individuals per g of dry bulk sediment.

References

1. Stuiver, M. & Reimer, P. J. Extended ^{14}C data base and revised Calib 3.0 ^{14}C age calibration program. *Radiocarbon* **35,** 215-230 (1993).
2. Bard, E., Arnold, M. & Hamelin, B. Present status of the radiocarbon calibration for the Late Pleistocene. *GEOMAR Rept.* **15,** 52-53 (1992).

Stable isotope and Cd data are available on NOAA's World Data Center-A for Paleoclimatology (http://www.ngdc.noaa.gov/paleo/paleodat.html).