

Core no. V 30-49

N 18° 25.8'

W 21° 04.8':

3093 m b.s.l.

Age control:

Date: 1991/2000

- *C. wuellerstorfi* and *G. sacculifer*  $^{18}\text{O}$  records (Mix & Ruddiman, 1985; Mix & Fairbanks, 1985; Curry et al., 1988).
- AMS  $^{14}\text{C}$  analogue stratigraphy.

Core fit :

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Surface sediment age :

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Age/depth correlation :

Orig. depth [cm]	$^{14}\text{C}$ age [ky BP]	Error ±	Calendar years [ka]	Sed.rate [cm/ky]	Original interval/ material/ $\delta^{18}\text{O}$ stratigraphy	Remarks
18	5.7	220	6.49		17-19 cm, bulk carbonate	
24			9.8	1.8	AMS $^{14}\text{C}$ analogue	
43	11.38	440		- . -	42-44 cm, bulk carbonate	ignored
56			17.1	4.4	AMS $^{14}\text{C}$ analogue	
60	14.8		18.3	3.3	AMS $^{14}\text{C}$ analogue	
66.5	15.0	680		- . -	65-68 cm, bulk carbonate	good, but ignored
104			29.5	3.9	AMS $^{14}\text{C}$ analogue	

Remarks:

- 12.4/10.4 is not identified at ~35 cm depth (too low  $^{18}\text{O}$  values!!).
- Holocene  $^{18}\text{O}$  level is outstandingly low.
- 17.1/13.6 is not picked directly (based on  $^{13}\text{C}$  evidence).
- Strange  $^{13}\text{C}$  signal at 26/29.5 ka.
- Calendar years converted from  $^{14}\text{C}$  years using INTCAL 98.

Original references:

- Sarnthein, M., Winn, K., Jung, S.J.A., Duplessy, J.-C., Labeyrie, L., Erlenkeuser, H. & Ganssen, G. (1994): Changes in east Atlantic deepwater circulation over the last 30,000 years: Eight time slice reconstructions. - Paleoceanography, 9, 209-267.
- Curry, W.B., Duplessy, J.C., Labeyrie, L.D. & Shackleton, N.J. (1988): Changes in the distribution of  $^{13}\text{C}$  of deep water CO<sub>2</sub> between the last glaciations and the Holocene. - Paleoceanography, 3, 317-341.
- Mix, A. C. & Fairbanks, R. G. (1985): North Atlantic surface ocean control of Pleistocene deep-ocean circulation. - Earth Planet. Sci. Lett., 73, 231-243.
- Mix, A. & Ruddiman, W. F. (1985): Structure and timing of the last deglaciation: Oxygen-isotope evidence. Quat.Sci.Rev., 4, 59-108.

LGM time slice:

- GLAMAP: 60-72 cm orig. depth
- EPILOG: 62.5-76.5 cm orig. depth

LGM foraminifera counts: SPECMAP

- GLAMAP: 60, 64, 68, 72 cm orig. depth
- EPILOG: 64, 68, 72, 76 cm orig. depth

References for faunal analysis:

- Imbrie, J., McIntyre, A. & Mix, A.C. (1989): Oceanic response to orbital forcing in the Late Quaternary: Observational and experimental strategies. In: A.Berger, S.H.Schneider & J.-C. Duplessy (eds.) Climate and geosciences, a challenge for science and society in the 21st century, D. Reidel Publ. Co.
- McIntyre et al. (1989) Surface water response of the equatorial Atlantic Ocean to orbital forcing. Paleoceanography, 4, p. 19-55.
- World Data Center for Marine Geology & Geophysics, SPECMAP Archive # 1

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