

Core no. 16017-2 G.C. N 21° 14.7' W 17° 48.2': 812 m b.s.l.

Age control:

Date: 11/03/1992

- *C. wuellerstorfi*, *U. mediterranea*  $^{18}\text{O}$  records from Zahn-Knoll (1986), Winn et al. (1991) and Sarnthein et al. (1994).
- $^{14}\text{C}$  ages of coarse carbonate fraction (Zahn et al., 1987).
- AMS  $^{14}\text{C}$  analogue stratigraphy.

Core fit :

- None

Surface sediment age :

- Zero, assuming no sediment loss at surface of G.C. -1.

Age/depth correlation :

Orig. depth [cm]	$^{14}\text{C}$ age [ky BP]	Error $\pm$ [ka]	Calendar years [ka]		Sed.rate [cm/ky]	Original interval/ material/ $\delta^{18}\text{O}$ stratigraphy	Remarks
0			0				
13	3.6	85	3.91	a)	- . -	10-16 cm, carb. >125 $\mu\text{m}$	ignored b)
37.5	7.2	430	8.05	a)	- . -	35-40 cm, carb. >125 $\mu\text{m}$	ignored b)
80	11.47	110	13.47	c)	- . -	76- 84 cm, carb. >125 $\mu\text{m}$	ignored b)
120	13.7	140	17.2	c)	- . -	117-123 cm, carb. >125 $\mu\text{m}$	ignored b)
125.5	9.1		9.8	c)	12.81	AMS $^{14}\text{C}$ analogue d)	
160.5			11.6	c)	19.44	Top Younger Dryas GISP2, d)	
160	16.06	230	19.56	c)	- . -	156-164 cm, carb. >125 $\mu\text{m}$	ignored b)
216.5	15.36	490	18.86	c)	- . -	211- 222 cm, carb. >500 $\mu\text{m}$	ignored b)
216.5	15.7	150	19.2	c)	- . -	211- 222 cm, carb. 200-500 $\mu\text{m}$	ignored b)
216.5	17.80	220	21.3	c)	- . -	211- 222 cm carb. 125-200 $\mu\text{m}$	ignored b)
220.5	13.6		17.1	c)	10.91	AMS $^{14}\text{C}$ analogue	
225	20.06	300	23.56	c)	- . -	222- 228 cm, carb. >125 $\mu\text{m}$	ignored b)
235.5	14.8		18.3	c)	12.5	AMS $^{14}\text{C}$ analogue d)	
280	25.49	770	28.99	c)	- . -	276- 284 cm, carb. >125 $\mu\text{m}$	ignored b)
310	29.52	850	?33.02	c)	- . -	307- 313 cm, carb. >125 $\mu\text{m}$	ignored b)
340.5	26		29.5	c)	9.37	AMS $^{14}\text{C}$ analogue	

a) see Winn et al. (1991).

b)  $^{14}\text{C}$  ages probably too old because of downslope sediment reworking.

c) Corrected after Bard et al. (1990).

d) Based on *Cibicides wuellerstorfi*  $^{18}\text{O}$  (comparison with core 12345-5).

Remarks :

- Dry bulk density data (U. Pflaumann, unpublished).

Original references:

- Sarnthein, M., Winn, K., Jung, S.J.A., Duplessy, J.-A., 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.
- Winn, K., Sarnthein, M. & Erlenkeuser, H. (1991):  $^{18}\text{O}$  stratigraphy and chronology of Kiel sediment cores from the East Atlantic.- Ber.-Rep. Geol. Paläont. Inst. Univ. Kiel, 45, 99 pp.
- Zahn, R., Sarnthein, M. & Erlenkeuser, H. (1987): Benthic isotope evidence for changes of the Mediterranean outflow during the Late Quaternary.- Paleoceanography, 2, 543-559.
- Zahn-Knoll, R. (1986): Spätquartäre Entwicklung von Küstenauftrieb und Tiefenwasserzirkulation im Nordost-Atlantik. Rekonstruktion anhand stabiler Isotope kalkschaliger Foraminiferen.- Diss. Univ. Kiel, 111 pp.

LGM time slice:

- GLAMAP: 235.5-265.5 cm orig. depth in core (-2)
- EPILOG: 242-275 cm orig. depth in core (-2)

LGM foraminifera counts: Pflaumann (UP)

- GLAMAP: (in core -2) 240, 245, 250, 255, 260, 265 cm orig. depth.
- EPILOG: (in core -2) 245, 250, 255, 260, 265, 270, 275 cm orig. depth.

References for faunal analysis:

- Pflaumann et al., Paleoceanography, in prep.

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