

Core no. 12328-4 B.C. N 21° 08.70' W 18° 34.40': 2798 m b.s.l.
12328-5 K.C. 2778 m b.s.l.

Age control:

Date: 4/11/1991

- *C. wuellerstorfi* and *U. peregrina* ¹⁸O records (Zahn-Knoll, 1986).
- ¹⁴C ages of total organic carbon (Geyh, 1979).
- AMS ¹⁴C analogue stratigraphy.

Core fit :

- 22 cm in core -4 = 0 cm in core -5, based on %CaCO₃.

Surface sediment age :

- Zero, assuming no sediment loss at surface of B.C. -4.

Age/depth correlation :

Comp. depth	¹⁴ C age	Error ±	Calendar years		Sed.rate	Original interval/ material/ δ ¹⁸ O stratigraphy	Core no.	Remarks
[cm]	[ky BP]		[ka]		[cm/ky]			
0.0	0			- . -			- 4	
27.0	3.195	250	3		- . -	0- 10 cm; organic carbon mixed layer	- 5	ignored
117.0	9.1		9.8	a)	13.2	AMS ¹⁴ C analogue	- 5	
127.0			11.6	a)	5.5	Top Younger Dryas Gisp2	- 5	
164.0			16.35	b	7.8	top of turbidite	- 5	
170.0			16.35	b	- . -	base of turbidite	- 5	
177.0	13.14		14.81	a)	- . -	150- 160 cm organic carbon	- 5	ignored
177.0	13.6		17.1		3.1	AMS ¹⁴ C analogue	- 5	
187.0	14.8		18.3		8.33	AMS ¹⁴ C analogue	- 5	
327.0	25.1		28.27		- . -	300- 310 cm organic carbon	- 5	good, but ignored
332.0	26		29.5		12.95	AMS ¹⁴ C analogue	- 5	

a) see Table II (Winn et al., 1991)

b) ¹⁴C age not calculable since it falls in the abnormally expanded time span around 13.2 ka B.P. (see also Winn et al., 1991)

Remarks :

- Corg, CO₂/Alk, N_{total} data (Hartmann et al., 1976).
- Additional organic carbon measurements (K. Winn, unpublished).
- Dry bulk density analogue to neighbour core 12379-3.
- *Uvigerina* and *C. wuellerstorfi* records disagree at 9.1 and 14.8 ka.

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): ¹⁸O stratigraphy and chronology of Kiel sediment cores from the East Atlantic.- *Ber.-Rep. Geol. Paläont. Inst. Univ. Kiel*, 45, 99 pp.
- Zahn-Knoll, R. (1986): Spätquartäre Entwicklung von Küstenauftrieb und Tiefenwasserzirkulation im Nordost-Atlantik. Rekonstruktion anhand stabiler Isotope kalkschaliger Foraminiferen.- *Diss. Univ. Kiel*, 111 pp.
- Geyh, M.A. (1979): ¹⁴C routine dating of marine sediments. In: A. Berger & H.E. Suess (eds.), *Radiocarbon dating: Proceedings, 9th International conference, Los Angeles (La Jolla), 1976.*- Univ. California Press, Berkeley, 470-491.

LGM time slice:

- GLAMAP: 187-225 cm comp. depth = 165-203 cm orig. depth in core (-5)
- EPILOG: 195-237 cm comp. depth = 173 -215 cm orig. depth in core (-5)

LGM foraminifera counts: Thiede (JT)

- GLAMAP: (in core -5) 170, 180, 190, 200 cm orig. depth.
- EPILOG: (in core -5) 180, 190, 200, 210 cm orig. depth.

References for faunal analysis:

- Thiede, J. (1977): Appendix to: The North Atlantic eastern boundary current system during Glacials and Interglacials (last 150,000 years). Aspects of the variability of the Glacial and Interglacial North Atlantic eastern boundary current (last 150,000 years).- "Meteor" *Forsch. Ergebn. C*, 28, 1-36.

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