

Core no. 12392-1 K.C. N 25° 10.30' W 16° 50.70': 2575 m b.s.l.

Age control:

Date: 28/06/1991

- *C. wuellerstorfi* and *U. peregrina* group ¹⁸O records (Shackleton, 1977; Zahn et al., 1987). *U. peregrina* measured by Shackleton (1977) are probably *U. hollicki* according to Lutze (1985).
- ¹⁴C ages of total organic carbon (Geyh, 1979).
- ¹⁴C ages of carbonate coarse fraction (H. Erlenkeuser, unpublished data.)
- AMS ¹⁴C analogue stratigraphy.

Core fit :

- None.

Surface sediment age :

- 2.38 ka, based on average Stage 5.1-5.53 sedimentation rate of 4-5 cm/ka for the Holocene, and a loss of about 10 cm surface sediment typical of kasten cores.

Age/depth correlation :

Orig. depth [cm]	¹⁴ C age [ky BP]	Error ±	Calendar years [ka]		Sed.rate [cm/ky]	Original interval/ material/ ^δ ¹⁸ O stratigraphy	Remarks
0	2.21		2.38				+10 cm loss!
3.5	0.71	230	0.48	a)	- . -	0- 7 cm, org. carbon	ignored, mixed layer
31.25	9.1		9.8	b)	4.21	AMS ¹⁴ C analogue	
40.25	9.43	300	10.46	a)	- . -	38- 42.5 cm carb. <150µm	ignored
40.25	10.11	330	11.00	c)	4.46	38- 42.5 cm carb. >150µm	
51.25			11.6	b)	- . -	Top Younger Dryas GISP2	
101.25	14.8		18.3	b)	9.41	AMS ¹⁴ C analogue	
107.5	15.14	400	18.32	a)	- . -	105- 110 cm, org. carbon	good, but ignored
197.5	19.0	+1170 /-1020	22.17	a)	- . -	195- 200 cm, org. carbon	good, but ignored
226	22.8	530	26.3	a)	- . -	222- 230 cm total carb. >63µm	good, but ignored
251.25	26		29.5	b)	13.39	AMS ¹⁴ C analogue	

a) see Winn et al. (1991).

b) corrected after Bard et al. (1990).

c) converted according to CALIB 4 (1998).

Remarks:

- None

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, R., Sarnthein, M. & Erlenkeuser, H. (1987): Benthic isotope evidence for changes of the Mediterranean outflow during the Late Quaternary.- *Paleoceanography*, 2, 543-559.
- 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.
- Shackleton, N.J. (1977): Carbon-13 in *Uvigerina*: Tropical rain forest history and the equatorial Pacific carbonate dissolution cycle.- In: N.R. Andersen & A. Malahoff, (eds.), *The Fate of Fossil Fuel in the Oceans*, Plenum, New York, : 401-427.

LGM time slice:

- GLAMAP: 101.25-144 cm orig. depth.
- EPILOG: 110-157 cm orig. depth.

LGM foraminifera counts: Thiede (JT)

- GLAMAP: (in core -1) 102.5, 112.5, 122.5, 132.5, 142.5 cm orig. depth.
- EPILOG: (in core -1) 112.5, 122.5, 132.5, 142.5 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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