

Core no. 12310-3B.C. N 23° 29.9' W 18° 43.0': 3076 m b.s.l.
12310-4K.C. 3080 m b.s.l.

Age control: Date: 1991

- *C. wuellerstorfi*, *G. inflata* and *G. ruber* records (Winn et al., 1991).
- *P. murrhina* ^{18}O record (Koopmann, 1979).
- AMS ^{14}C analogue stratigraphy.
- ^{14}C ages of carbonate coarse fraction (H. Erlenkeuser, unpublished data).

Core fit :

- 0 cm in core -4 = 12 cm in core -3.
- Based on extrapolation of gradients in CaCO_3 curves.
- Based on overlap of planktonic and benthanic ^{18}O and ^{13}C curves.

Surface sediment age :

- Zero, assuming no sediment loss at surface of B.C. -3.
- Assumption of short-term variations in sedimentation rates.

Age/depth correlation :

Comp. depth [cm]	^{14}C age [ky BP]	Error ±	Calendar years [ka]		Sed.rate [cm/ky]	Original interval/ material/ $\delta^{18}\text{O}$ stratigraphy	Core no.	Remarks
0.0			0.0				-3	
19.0	6.44	120		a)	-. .	4.5-9.5 cm/ carb. >125 μm	-4	ignored
	6.63	125		a)	-. .	4.5-9.5 cm/ carb. 63-150 μm	-4	ignored
43.5	8.39	320		a)	-. .	30-33 cm/ total carb. > 63 μm	-4	ignored
57.0	9.1		9.8	b)	5.82	AMS ^{14}C analogue	-4	
66.25			11.6	b)	-. .	Top Younger Dryas GISP2	-4	
107.5	14.8		18.3	b)	3.82	AMS ^{14}C analogue	-4	
213.25	26.0		29.5	b)	11.05	AMS ^{14}C analogue	-4	

a) see Winn et al. (1991).

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

Remarks :

- ^{230}Th und ^{231}Pa fluxes (Mangini & Haass, 1983) show average sedimentation rates of 2.5 to 7.0 cm/ka down to ^{18}O event 3.3.
- C_{org} , CO_2/Alk , N_{total} data (Hartmann et al., 1976).
- *C. wuellerstorfi* at 12.5 cm composite depth in core -4 (Duplessy et al., 1984).
- Dry bulk density analogue to neighbour core 12379-3.

Original references:

- Winn, K., Sarnthein, M. & Erlenkeuser, H. (1991): ^{18}O stratigraphy and chronology of Kiel sediment cores from the East Atlantic.- Ber.-Rep. Geol. Paläont. Inst. Univ. Kiel, 45, 99 pp. (modified).

LGM time slice:

- GLAMAP: 107.5-138 cm comp. depth = 95.5-126 cm orig. depth in core (-4)
- EPILOG: 114-147.5 cm comp. depth = 102-135.5 cm orig. depth in core (-4)

LGM foraminifera counts: Thiede (JT)

- GLAMAP: (in core -4) 96, 111.5, 121.5 cm orig. depth.
- EPILOG: (in core -4) 111.5, 121.5 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. Ergebni. C, 28, 1-36.

12310-3/4

