Core no. 12329-4 B.C. N 19° 22.0 ' W 19° 55.8 ': 3315 m b.s.l.
12329-6 S.C. 3320 m b.s.l.

Age control: Date: 28/06/1991

- *Pyrgo* $\delta^{18}O$ record (Koopmann, 1979), *G. ruber*, *G. inflata* and *C. wuellerstorfi* records (Winn et al., 1991).
- ^{14}C ages of the total organic fraction (Geyh, 1979).
- ^{14}C age of carbonate coarse fraction (H. Erlenkeuser, unpubl. data).
- AMS ^{14}C analogue stratigraphy.

Core fit :

- 9 cm in core -4 0 cm in core -6, based on $\%CaCO_3$.

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 a)	Original interval/ material/	Core no.	Remarks
[cm]	[ky BP]		[ka]		[cm/ky]	$\delta^{18}O$ stratigraphy		
0			0		-.-		-4	
14	2.045	230	1.64	b)	-.-	1- 10 cm organic carbon	-6	ignored, mixed layer
28.5	9.1		9.8	b)	2.91	AMS ^{14}C analogue	-6	
32.5	9.48	350	10.56	b)	-.-	23- 24 cm carbonate >200µm	-6	good, but ignored
32.5	9.76	430	11.12	b)	-.-	23- 24 cm carbonate <200µm	-6	ignored
50	14.8		18.3	b)	2.53	AMS ^{14}C analogue	-6	
84	27.85	+2200/ -1700	?31.35	b)	-.-	73- 77 cm carbonate >125µm	-6	good, but ignored
87	26.58	+1280/ -1110	30.08	b)	-.-	76- 80 cm carbonate >125µm	-6	ignored
94	26		29.5	b)	3.93	AMS ^{14}C analogue	-6	

a) calculated between AMS analogue ages, pelagic sediments only.
b) corrected after Bard et al. (1990).

Remarks :

- C_{org}, CO_2/Alk, N_{total} data (12329-4) from Hartmann et al. (1976).
- ^{230}Th-flux rates indicate sedimentation rates ranging from 2 cm/ka in $\delta^{18}O$ Stage 1 to 4 cm/ka in Stage 6 (Mangini & Diester-Haass, 1983).
- Sample thickness: 3 cm between 0-26 cm; 4 cm between 26-38 cm; 6 cm between 38-50 cm and 10 cm below 50 cm (Diester-Haass archive samples).
- Erroneous PDB correction in *Pyrgo* data set below 3.1 m.

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): $\delta^{18}O$ 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.
- Koopmann, B. (1979): Saharastaub in den Sedimenten des subtropisch-tropischen Nordatlantik während der letzten 20.000 Jahre.- Diss. Univ. Kiel, 107 pp.
- Geyh, M.A. (1979): ^{14}C 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.
- Hartmann, M, Müller, P.J., Suess, E. & van der Wejden, C.H. (1976): Chemistry of Late Quaternary sediments and their interstitial waters from the northwest African continental margin.- Meteor Forsch.-Ergebn., C24, 1-67.

LGM time slice:

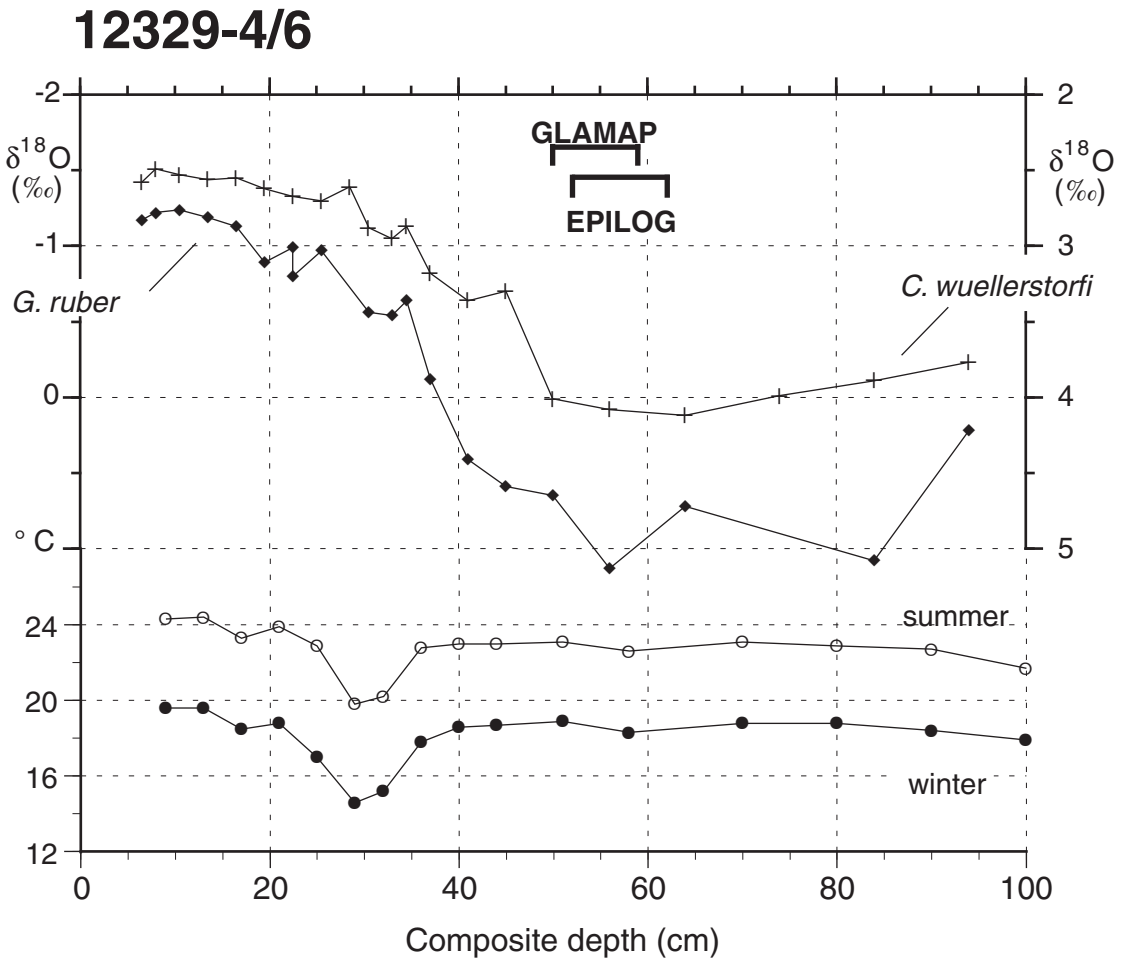
- GLAMAP: 50-59 cm comp. depth = 41-50 cm orig. depth in core (-6)
- EPILOG: 52-62 cm comp. depth = 43-53 cm orig. depth in core (-6)

LGM foraminifera counts: Pflaumann (UP)

- GLAMAP: (in core -6) 42, 49 cm orig. depth.
- EPILOG: (in core -6) 49 cm orig. depth.

References for faunal analysis:

- Pflaumann, U. (1975): Late Quaternary stratigraphy based on planktonic foraminifera off Senegal. - "Meteor" Forsch. Ergebn. C, 23, 1-46.


12329-4/6
GLAMAP
EPILOG
δ18O (‰)
δ18O (‰)
G. ruber
C. wuellerstorfi
summer
winter
° C
Composite depth (cm)
-2
-1
0
2
3
4
5
24
20
16
12
0
20
40
60
80
100