Core no. 12347-1 B.C. N 15°49.50' W 17° 51.70': 2710 m b.s.l.
12347-2 K.C. 2576 m b.s.l.

Age control: Date: 25/11/1991

- *C. wuellerstorfi and U. peregrina* $\delta^{18}O$ records from Zahn-Knoll (1986).
- ^{14}C ages of carbonate coarse fraction (Erlenkeuser, unpubl. data).
- AMS ^{14}C analogue stratigraphy.

Core fit :

- 0 cm in core -2 = 30 cm in -1, based on minimum discrepancy between geochemical data ($CaCO_3$, % organic carbon, % total nitrogen) in the two records.

Surface sediment age :

- Zero, inferred from undisturbed core surface in B.C. -1.

Age/depth correlation :

Comp. depth	^{14}C age	Error ±	Calendar years		Sed.rate	Original interval/ material/	Core no.	Remarks
[cm]	[ky BP]		[ka]		[cm/ky]	$\delta^{18}O$ stratigraphy		
0			0				-1	
43	4.68		5.42	a)	-.-	10-16 cm, carb. >125µm	-2	ignored mixed layer
53	4.45		5.05	a)	10.5	20-26 cm, carb.>125µm	-2	
100	6.61	250	7.51	a)	-.-	60- 80 cm, carb. >125µm	-2	ignored
120	7.03	190	7.86	a)	-.-	80- 100 cm, carb. 63-125µm	-2	ignored
120	7.14	410	7.97	a)	-.-	80- 100 cm, carb. >125µm	-2	ignored
147.25	9.1		9.8	b)	19.84	AMS ^{14}C analogue	-2	
160	9.51	320	10.62	a)	-.-	120- 140 cm carb. <125µm	-2	ignored
187.25			11.6	b)	22.2	Top Younger Dryas GISP2	-2	
220	13.67	430	17.17	a)	-.-	180- 200 cm, carb. >125µm	-2	good, but ignored
220	14.22	440	17.72	a)	-.-	180- 200 cm, carb. <125µm	-2	ignored
298.75	13.6		17.1	b)	20.3	AMS ^{14}C analogue; c)	-2	
318.75	14.8		18.3	b)	16.67	AMS ^{14}C analogue	-2	
470	26		29.5	b)	13.5	Sediment properties; d)	-2	

a) see Winn et al. (1991).
b) corrected after Bard et al. (1990).
c) after $\delta^{13}C$ minimum.
d) Diester-Haass (1976).

Remarks :

- C_{org}, CO_2/Alk, N_{total} data (Hartmann et al., 1976).
- Additional organic carbon measurements (K. Winn, unpublished).
- Dry bulk density (12347-1) from Müller & Suess (1979). Values in data set analogous to core16402-2.
- Paleotemperature peak at end of Termination I at 91.25 cm on the composite depth scale (core -2) is dated at 6.98 ka.
- 30-150 cm on composite depth scale: uniform sediments justify uniform sedimentation rates. ^{14}C ages at 100 cm and 120 cm on the composite depth scale are contradictory and therefore ignored.

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.

LGM time slice:

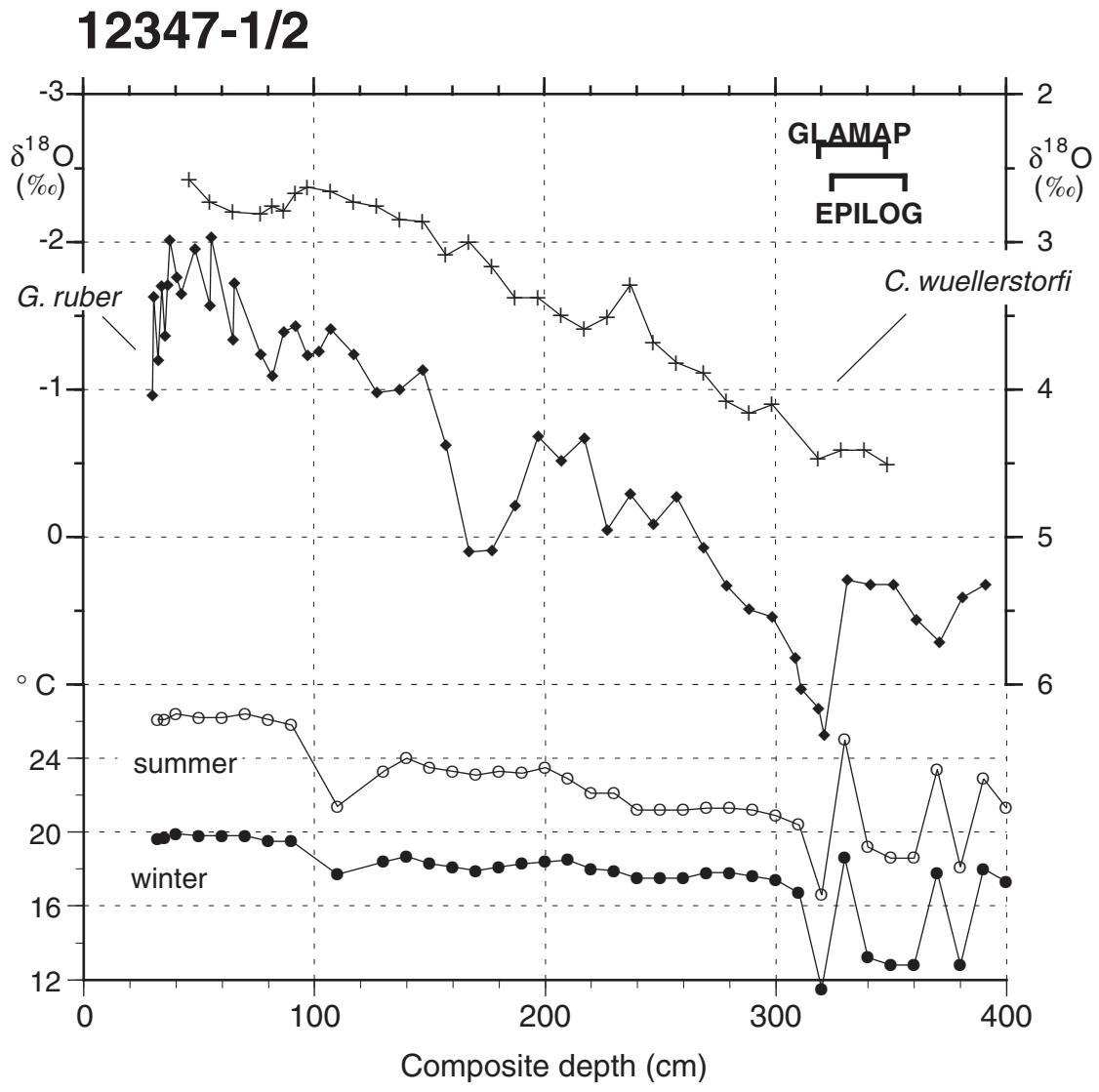
- GLAMAP: 318.75-348 cm comp. depth = 288.75-318 cm orig. depth in core (-2)
- EPILOG: 325-357 cm comp. depth = 295-327 cm orig. depth in core (-2)

LGM foraminifera counts: Pflauman (UP)

- GLAMAP: (in core -2) 290, 300, 310 cm orig. depth.
- EPILOG: (in core -2) 300, 310, 320 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.


12347-1/2
δ18O (‰)
δ18O (‰)
GLAMAP
EPILOG
G. ruber
C. wuellerstorfi
° C
summer
winter
Composite depth (cm)
-3
-2
-1
0
2
3
4
5
6
12
16
20
24
0
100
200
300
400