

**Core no.** 17045-2 B.C. N 52° 26.94' W 16°39.36': 3653 m b.s.l.  
17045-3 G.C. N 52° 25.50' W 16°39.92': 3663 m b.s.l.

**Age control:** Date: 1995

- *C. wuellerstorfi* and various planktonic  $^{18}\text{O}$  records (Winn et al., 1991).
- AMS  $^{14}\text{C}$  dating on *N. pachyderma* sin. and *G. bulloides*, unpublished data measured in Gif-sur-Yvette (GsY; Duplessy/Sarnthein/Winn) and at Leibniz Labor Kiel (KL; Trauth, 1995).

**Core fit:**

- 0 cm in core -2 = 0 cm in core -3, based on best fit of  $^{18}\text{O}$  records of *C. wuellerstorfi*, *G. inflata*, *G. bulloides* and *N. pachyderma* (dextral).

**Surface sediment age:**

- Zero, inferred from undisturbed sediment surface in B.C. -2.

**Age/depth correlation :**

Comp. depth [cm]	$^{14}\text{C}$ 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					
1.0	2.16	70	2.24		<i>G. bulloides</i>	- 2	KI	
2.0	2.34	90	2.34	a)	<i>G. bulloides</i>	- 2	Gif, ignored, mixed layer	
2.5	1.89	60	1.88		<i>G. bulloides</i>	- 2	KI	
5	2.66	80	2.8		<i>G. bulloides</i>	- 2	KI	
7.5	3.13	80	3.39		<i>G. bulloides</i>	- 2	KI	
10	2.92	70	3.16		<i>G. bulloides</i>	- 2	KI	
12.5	3.88	70	4.39		<i>G. bulloides</i>	- 2	KI	
15	4.51	70	5.25		<i>G. bulloides</i>	- 2	KI	
20.0	6.75	130	7.05	b)	<i>G. bulloides</i>	- 3	Gif	
26.0	5.64	130	6.40	c)	<i>G. bulloides</i>	- 3	Gif; reworked!	
30.0	7.64	100	8.45	b)	7.14	<i>G. bulloides</i>	- 3	Gif
40.0	9.09	140	9.79	d)	7.46	<i>G. bulloides</i>	- 3	Gif
46.5	9.1		9.8	d)	- -	AMS $^{14}\text{C}$ analogue	- 3	ignored
48.5	~10.35		~12.3	d)	3.59	hiatus	- 3	Mn-rich layer, colorless volcanic glass
50.0	12.00	130	14.0	d)	- -	<i>G. bulloides</i>	- 3	Gif
60.0	12.43	120	14.43	d)	23.26	<i>G. bulloides</i>	- 3	Gif
77.5	13.6		17.1	d)	6.55	AMS $^{14}\text{C}$ analogue	- 3	
80.0	15.32	150	18.82	d)	- -	<i>N. pachyderma</i> (I)	- 3	Gif; ignored, upcore bioturbation
80.0	14.8		18.3	d)	2.08	AMS $^{14}\text{C}$ analogue	- 3	
84.0	15.79	160	19.29	d)	4.04	<i>N. pachyderma</i> (I)	- 3	Gif
90.0	16.20	200	19.70	d)	14.63	<i>N. pachyderma</i> (I)	- 3	Gif
94.0	16.55	180	20.05	d)	11.43	<i>N. pachyderma</i> (I)	- 3	Gif
99.0	17.11	170	20.61	d)	8.93	<i>N. pachyderma</i> (I)	- 3	Gif
116.0	18.49	200	21.99	d)	12.32	<i>N. pachyderma</i> (I)	- 3	Gif
120.0	19.00	200	22.50	d)	7.84	<i>N. pachyderma</i> (I)	- 3	Gif
130.0	20.05	230	23.55	d)	9.52	<i>N. pachyderma</i> (I)	- 3	Gif
180.0	26.0		29.5	d)	8.40	AMS $^{14}\text{C}$ analogue	- 3	

a) corrected after Stuiver & Becker (1986).

b) corrected after Linick et al. (1986).

c) corrected after Pearson et al. (1986).

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

**Remarks :**

- Corg and dry bulk density data (Sarnthein et al., 1989; K. Winn, unpublished).
- Volcanic glass shards (colorless, rhyolite variety: Vedde ash) sporadic at 48 cm, decreasing towards 40 cm (rare). Black Mn-rich tubes (Todorokite) frequent in the >200  $\mu\text{m}$  size fraction at 48 cm, much lesser at 46.5 cm and 50 cm.

**Original references:**

- Trauth, M. (1995): Bioturbate Signalverzerrung hochauflösender paläozeanographischer Zeitreihen. - Ber.-Rep. Geol. Paläont. Inst. Univ. Kiel, 74, pp. 167.
- 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):  $^{18}\text{O}$  stratigraphy and chronology of Kiel sediment cores from the East Atlantic. - Ber.-Rep. Geol. Paläont. Inst. Univ. Kiel, 45, 99 pp.

LGM time slice:

- GLAMAP: 80-110 cm comp. depth = 80-110 cm orig. depth in core (-3)
- EPILOG: 85-120 cm comp. depth = 85-120 cm orig. depth in core (-3)

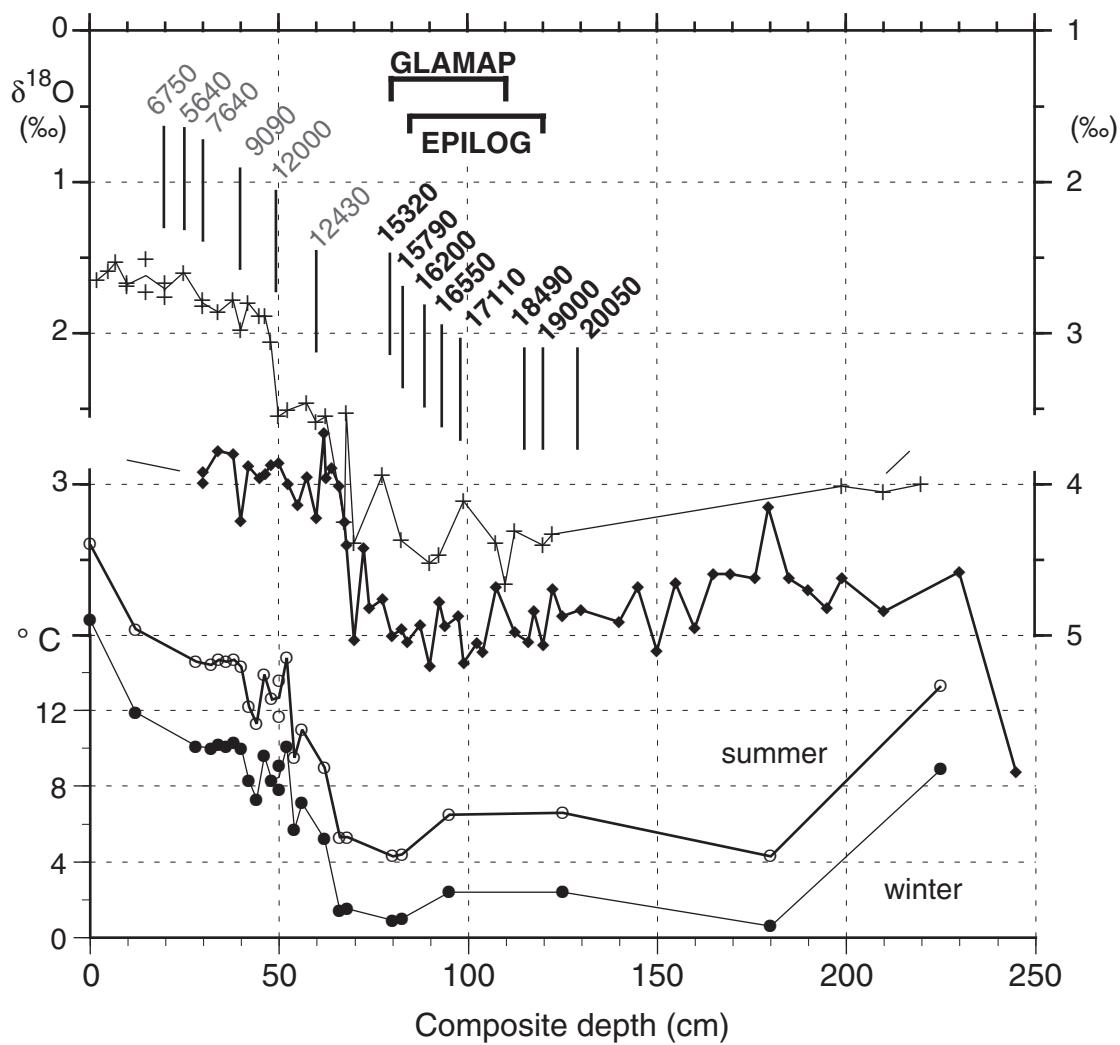
LGM foraminifera counts: Schulz (HS), Pflaumann (UP)

- GLAMAP: (in core -3) 80, 82, 95 cm orig. depth.
- EPILOG: (in core -3) 95 cm orig. depth.

References for faunal analysis:

- Schulz, H. (1995): Meeresoberflächentemperaturen vor 10.000 Jahren - Auswirkungen des fröhholozänen Insolationsmaximums. - Ber.-Rep. Geol. Paläont. Inst. Univ. Kiel, 73, 156 pp.
- Pflaumann et al., Paleoceanography, in prep.

## 17045-2/3



16465: *N. pachyderma* sin.

18394: *G. bulloides*