

Core no. 15612-1 R.C. N 44° 41.6' W 26° 32.6': 3060 m b.s.l.  
15612-2 P.C. 3050 m b.s.l.

Age control:

Date: 05/1998

- Planktonic and benthic <sup>18</sup>O records from Zahn-Knoll (1986), Winn et al. (1991) and Sarnthein et al. (1994).
- AMS <sup>14</sup>C dating and age model from Kiefer (1998).

Core fit :

- None.

Surface sediment age :

- 2.23 ka calendar, based on AMS <sup>14</sup>C dating.

Age/depth correlation :

Orig. depth	<sup>14</sup> C age	Error ±	Calendar years		Sed.rate	Original interval/ material/ δ <sup>18</sup> O stratigraphy	Core no.	Remarks
[cm]	[ky BP]		[ka]		[cm/ky]			
0.75	2.23	30	2.31	a)	-.-	0-1.5 cm	-2	<i>G. inflata</i>
8.5	4.07	30	4.57	a)	3.4	8-9 cm	-2	<i>G. inflata</i>
23			9.8		2.8	AMS <sup>14</sup> C analogue	-2	
28.25			11.6		2.9	Top Younger Dryas (GISP2)	-2	
33.75	12.09	60	14.1	a)	2.2	33-34.5 cm	-2	<i>G. inflata</i>
36.25	12.32	50	14.3	a)	12.5	35.5-37 cm	-2	<i>G. bulloides</i>
37.75			15.57		0.6	H1 Top (GISP2)	-2	IRD
44.75	14.95	60	17.88	a)	3.0	44-45.5 cm	-2	<i>N. pachyderma</i> sin.; good, but ignored
45.25			18.1		2.3	H1 Base (GISP2)	-2	IRD
50	14.8		18.3		23.7	AMS <sup>14</sup> C analogue		
52.5	16.47	110	19.63	a)	1.9	52-53 cm	-2	<i>N. pachyderma</i> sin.
68.5	19.05	110	22.60	a)	5.4	68-69 cm	-2	<i>N. pachyderma</i> sin.
72.5	18.39	110	21.84	a)	-.-	72-73 cm	-2	<i>G. bulloides</i>
74.5	20.52	180	24.29	a)	3.6	74-75 cm H2 Top (GISP2)	-2	<i>N. pachyderma</i> sin. IRD

a) Calendar years converted from <sup>14</sup>C years using INTCAL 98.

Remarks :

- C<sub>org</sub> data (K. Winn, unpublished).
- Exceptional maximum of C<sub>org</sub> at 40.5 cm depth (2.3%).

Original references:

- Kiefer, Th. (1998): Produktivität und Temperaturen im subtropischen Nordatlantik: Zyklische und abrupte Veränderungen im späten Quartär. - Ber.-Rep. Geol. Paläont. Inst. Univ. Kiel, 90, 127 pp.
- 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.- Paleoclimatology, 9, 209-267.
- Winn, K., Sarnthein, M. & Erlenkeuser, H. (1991): <sup>18</sup>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: 50-62.5 cm orig. depth in core (-2)
- EPILOG: 51.5-68 cm orig. depth in core (-2)

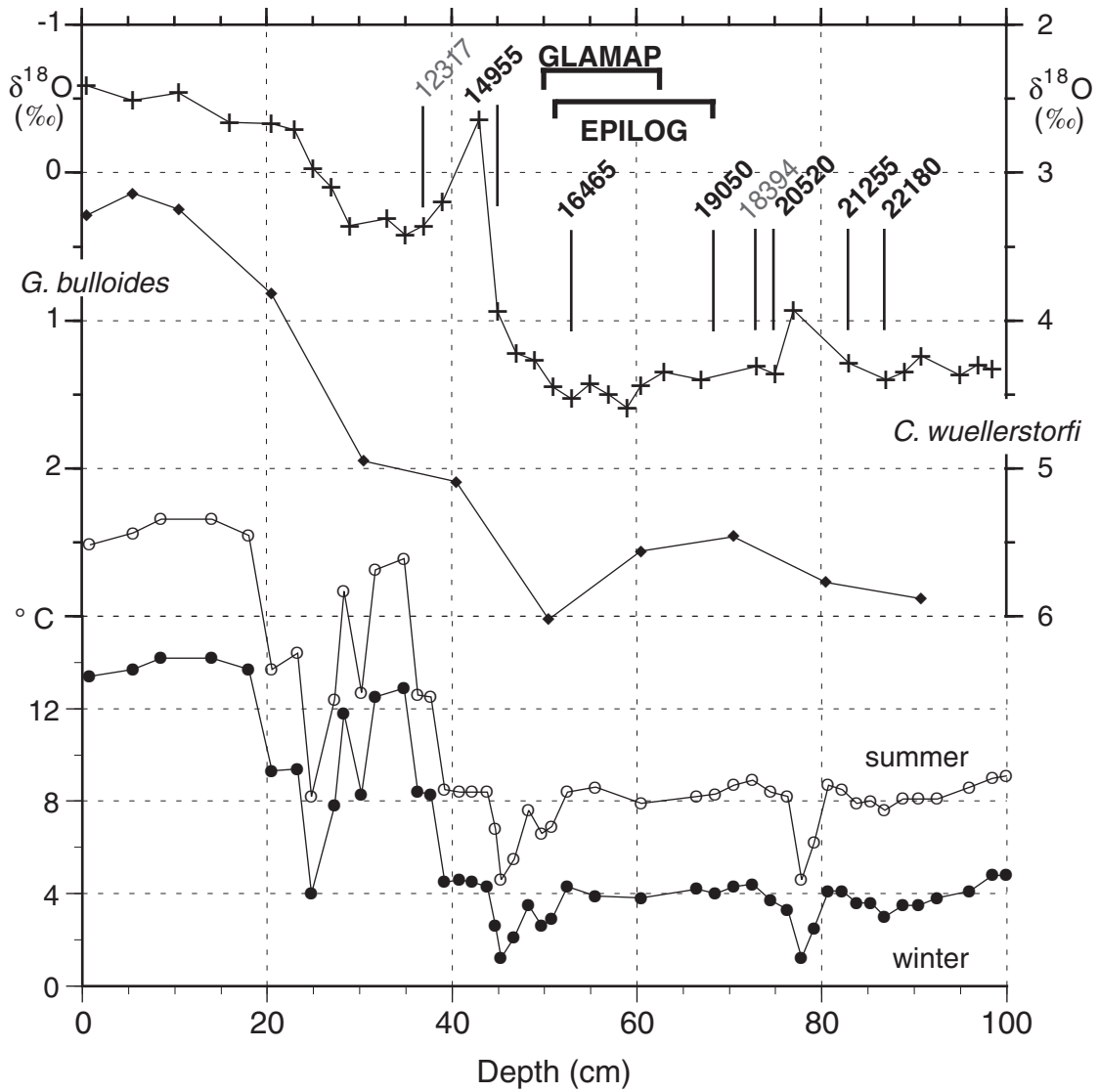
LGM foraminifera counts: Kiefer (TK)

- GLAMAP: (in core -2) 50.8, 52.5, 55.5, 60.5 cm orig. depth.
- EPILOG: (in core -2) 52.5, 55.5, 60.5, 66.5 cm orig. depth.

References for faunal analysis:

- Kiefer, Th. (1998): Produktivität und Temperaturen im subtropischen Nordatlantik: Zyklische und abrupte Veränderungen im späten Quartär. - Ber.-Rep. Geol. Paläont. Inst. Univ. Kiel, 90, 127 pp.

# 15612-2



16465: *N. pachyderma*

18394: *G. bulloides*