

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 ¹⁸O records (Winn et al., 1991).
- AMS ¹⁴C dating on *N. pachyderma* sin. and *G. bulloides*, unpublished data measured in Gif-sur-Yvette (GsY; Duplessy/Sarnthein/Winn) and at Leibniz Labor Kiel (KI; Trauth, 1995).

Core fit :

- 0 cm in core -2 = 0 cm in core -3, based on best fit of ¹⁸O 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 | ¹⁴ C age | Error ± | Calendar years | | Sed.rate | Original interval/ material/ δ ¹⁸ O stratigraphy | Core no. | Remarks |
|-------------|---------------------|---------|----------------|----|----------|---|----------|---|
| [cm] | [ky BP] | | [ka] | | [cm/ky] | | | |
| 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) | 2.84 | <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 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 C analogue | -3 | |
| 80.0 | 15.32 | 150 | 18.82 | d) | - - - | <i>N. pachyderma</i> (l) | -3 | Gif; ignored, upcore bioturbation |
| 80.0 | 14.8 | | 18.3 | d) | 2.08 | AMS ¹⁴ C analogue | -3 | |
| 84.0 | 15.79 | 160 | 19.29 | d) | 4.04 | <i>N. pachyderma</i> (l) | -3 | Gif |
| 90.0 | 16.20 | 200 | 19.70 | d) | 14.63 | <i>N. pachyderma</i> (l) | -3 | Gif |
| 94.0 | 16.55 | 180 | 20.05 | d) | 11.43 | <i>N. pachyderma</i> (l) | -3 | Gif |
| 99.0 | 17.11 | 170 | 20.61 | d) | 8.93 | <i>N. pachyderma</i> (l) | -3 | Gif |
| 116.0 | 18.49 | 200 | 21.99 | d) | 12.32 | <i>N. pachyderma</i> (l) | -3 | Gif |
| 120.0 | 19.00 | 200 | 22.50 | d) | 7.84 | <i>N. pachyderma</i> (l) | -3 | Gif |
| 130.0 | 20.05 | 230 | 23.55 | d) | 9.52 | <i>N. pachyderma</i> (l) | -3 | Gif |
| 180.0 | 26.0 | | 29.5 | d) | 8.40 | AMS ¹⁴ 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 μm 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): ¹⁸O 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)

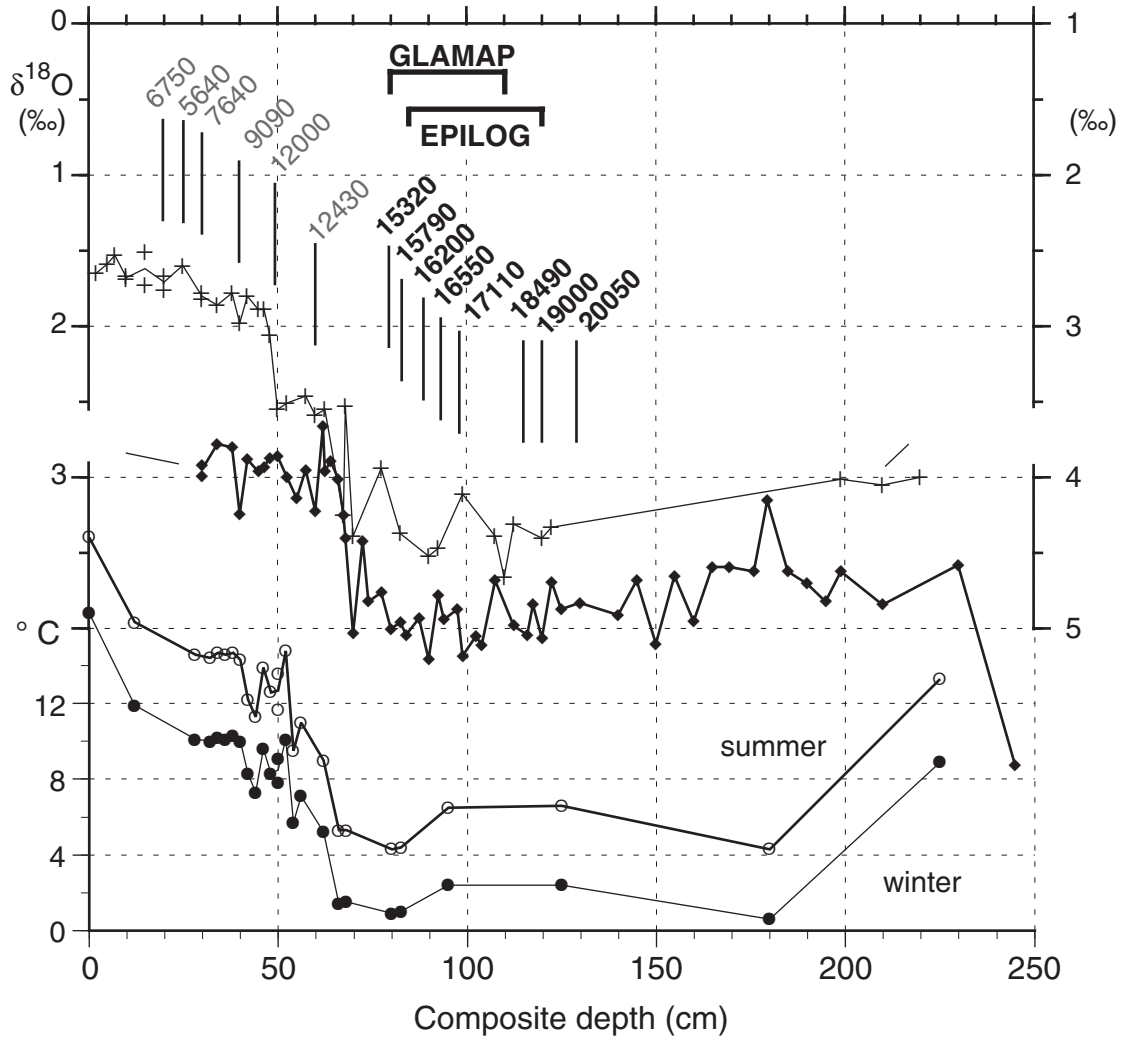
LGM foraminifera counts: Schulz (HS), Pflaumann (UP)

- 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 frühholozänen Insolationsmaximums. - Ber.-Rep. Geol. Paläont. Inst. Univ. Kiel, 73, 156 pp.
- Pflaumann et al., Paleoceanography, in prep.

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16465: *N. pachyderma* sin.

18394: *G. bulloides*