Core no. V 23-81 P.C./T.W.C. N 54° 02.0' W 16° 08.0': 2393 m b.s.l.

Age control: Date: 1991, modified 11/2000

- $\delta^{18}O$ records *C. wuellerstorfi* and *N. pachyderma* sin. in Jansen & Veum (1990) (corrected for 0.2‰ shift in laboratory data).
- AMS ^{14}C datings from Broecker et al. (1988) and Bond et al. (1993).

Surface sediment age :

- 1.32 ka (trigger weight core)

Age/depth correlation :

Depth	^{14}C age *N. pachyderma* sin.	^{14}C age *G. inflata*	^{14}C age *G. bulloides*	^{14}C age *G. glutinata*	Calendar years	Sed.rate	Remarks
[cm]	[ky BP]	[ky BP]	[ky BP]	[ky BP]	[ka]	[cm/ky]	
1.5[1)]		1.67 ± 90					
7.5		1.42 ± 90	2.01 ± 100		1.32*		
62.0[2)]		5.86 ± 150	6.53 ± 170		6.73		
135.5		9.09 ± 200	9.49 ± 160	9.61 ± 150	9.79		
143.5	9.72 ± 180	10.05 ± 200					
146.5			9.20 ± 210				
147.5		9.86 ± 190			11.32		
154.5	10.90 ± 140				12.4		
157.5	9.83 ± 200						
164.5		11.10 ± 200	11.10 ± 210		13.10		
171.5		10.13 ± 160	10.77 ± 180				
172.5		10.56 ± 200	11.46 ± 170				
175.5	10.59 ± 190						
175.5	10.38 ± 190						
180.5		11.84 ± 220	11.59 ± 280		13.84		
186.5		10.10 ± 230	11.14 ± 210				
189.0[2)]	11.45 ± 200	10.93 ± 230	11.25 ± 210				
194.5	12.26 ± 240	11.54 ± 210	12.44 ± 230				
198.5	12.32 ± 220	12.13 ± 220	12.51 ± 240		14.32		
201.5		11.99 ± 240	12.46 ± 240				
206.5		12.84 ± 310	12.78 ± 240				
210	13.44 ± 120	(Bond et al., 1993)			16.15[3)]		
213	13.60 ± 120	(Bond et al., 1993)			16.33[3)]	16.7	
215.5	13.66 ± 210	(Bond et al., 1993)			16.40[3)]		ignored
217	13.61 ± 100	(Bond et al., 1993)			16.34[3)]	250.0	
219	13.63 ± 100	(Bond et al., 1993)			16.36[3)]	250.0	
221	14.15 ± 110	(Bond et al., 1993)			16.96[3)]	3.3	
223	14.33 ± 100	(Bond et al., 1993)			17.17[3)]	9.5	
227	14.77 ± 110	(Bond et al., 1993)			17.68[3)]	7.8	
229	15.04 ± 110	(Bond et al., 1993)			17.99[3)]	6.5	
234.5	15.28 ± 190	(Jansen & Veum, 1990)			18.26[3)]	20.4	ignored[4)]
293.5	16.74 ± 240	(Bond et al., 1993)			19.94[3)]	35.1	
321	20.42 ± 180	(Bond et al., 1993)			24.18[3)]	6.5	
323	20.47 ± 160	(Bond et al., 1993)			24.24[3)]	33.3	
327	20.57 ± 180	(Bond et al., 1993)			24.35[3)]	36.4	
329	20.99 ± 170	(Bond et al., 1993)			24.83[3)]	4.2	
331	21.21 ± 170	(Bond et al., 1993)			25.09[3)]	7.7	
333	21.70 ± 180	(Bond et al., 1993)			25.65[3)]	3.6	
335.5	18.39 ± 280	(Jansen & Veum, 1990)			21.84		ignored[4)]
337	21.96 ± 190	(Bond et al., 1993)					
371	24.68 ± 200	(Bond et al., 1993)					
381	26.27 ± 260	(Bond et al., 1993)					
384.5	24.42 ± 870	(Jansen & Veum, 1990)			28.78		ignored[4)]
391	28.98 ± 320	(Bond et al., 1993)					
393	29.05 ± 310	(Bond et al., 1993)			ca 33		
418.5	29.00 ± 960	(Jansen & Veum, 1990)			32.5		ignored[4)]
449.5	32.14 ±1240	(Jansen & Veum, 1990)					ignored[4)]
499.5	35.24 ±1810	(Jansen & Veum, 1990)					

* Average of 1.31 ka (Stuiver & Becker, 1986) and 1.33 ka calendar years (Pearson et al., 1986).

Remarks:

1) Age from trigger weight core.
2) 2-cm sediment samples, otherwise 1-cm samples.
3) Calendar years converted from ^{14}C years using INTCAL 98.
4) Young dates of Jansen and Veum (1990), which strongly contradict dates of Bond et al. (1993) are ignored in harmony with major benthic $\delta^{18}O$ maximum at 265-310 cm depth.

Original references:

- Sarnthein, M., Winn, K., Jung, S.J.A., Duplessy, J.-C., 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.
- Bond, G., Broecker, W., Johnsen, S., McManuns, J., Labeyrie, L., Jouzel, J., and G. Bonani (1993): Correlations between climate records from North Atlantic sediments and Greenland ice. - Nature, 365, 143-147.
- Jansen, E. & Veum, T. (1990): Evidence for two-step deglaciation and its impact on North Atlantic deep water circulation. - Nature, 343, 612-616.
- Broecker, W.S., Andree, M., Bonani, G., Wölfli, W., Oeschger, H., Klas, M., Mix, A., & Curry, W. (1988): Preliminary estimates for the radiocarbon age of deepwater in the glacial ocean. - Paleoceanography, 3, 659-669.

LGM time slice:

- GLAMAP: 236-304 cm orig. depth
- EPILOG: 260-310 cm orig. depth

LGM foraminifera counts: CLIMAP

- GLAMAP: 245, 255, 265, 275, 285, 295 cm orig. depth
- EPILOG: 265, 275, 285, 295 cm orig. depth

References for faunal analysis:

- CLIMAP Project Members (1994): CLIMAP 18K Database. IGBP PAGES/World Data Center-A for Paleoclimatology Data Contribution Series # 94-001. NOAA/NGDC Paleoclimatology Program, Boulder CO, USA.

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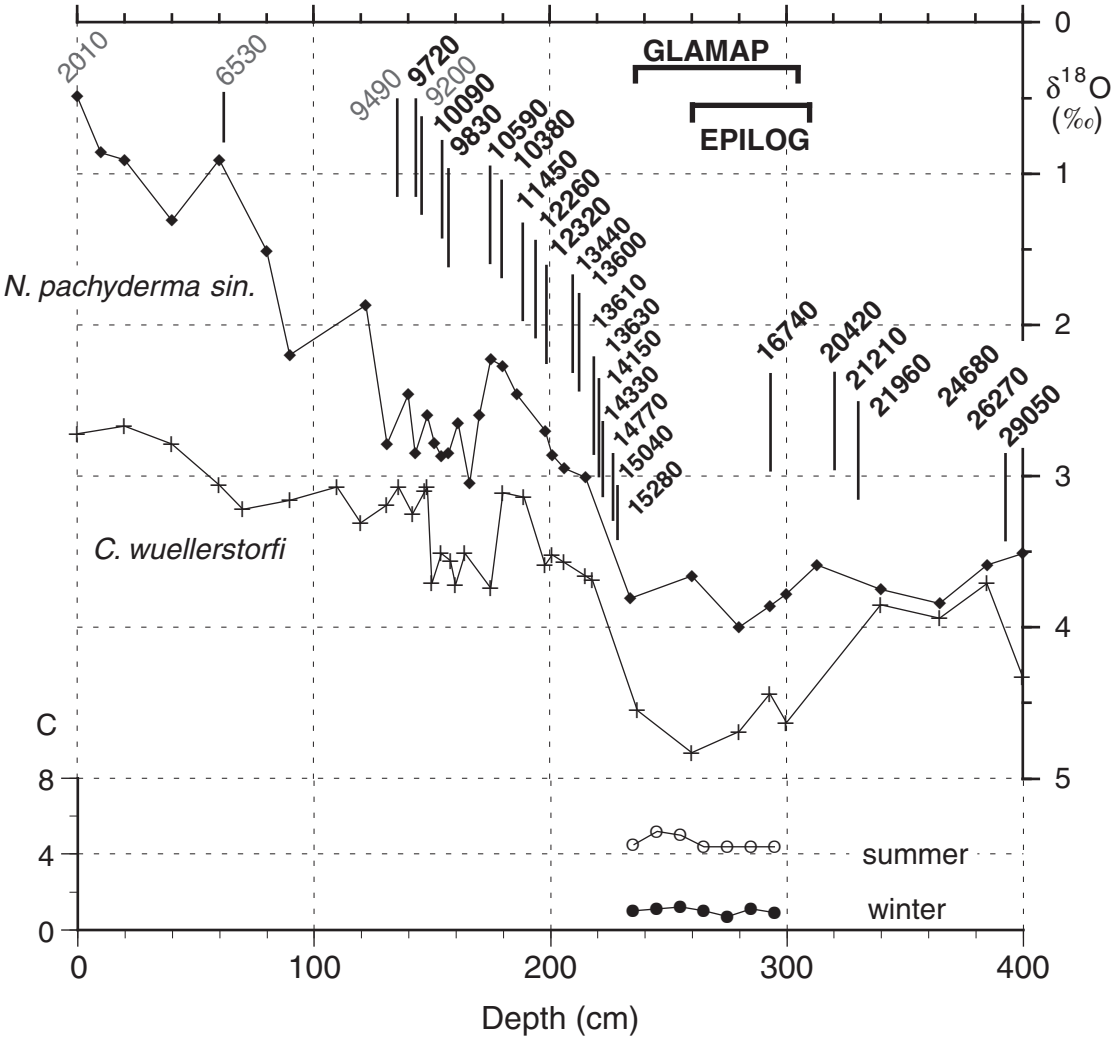

9490: *G. bulloides*

9720: *N. pachyderma sin.*