

Core no. PS 2644-5 G.C. N 67° 52.02' W 21° 45.92': 777 m b.s.l.  
 PS 2644-2 B.C. N 67° 52.10' W 21° 45.40': 778 m b.s.l.

Age control:

Date: 1999

- *N. pachyderma* sin. <sup>18</sup>O record (Voelker, 1999).
- AMS <sup>14</sup>C dating (Voelker, 1999).

Core fit :

- 6 cm in core -2 = 0 cm in core -5

Surface sediment age :

- 0 cal. years

Age/depth correlation :

Comp. depth	<sup>14</sup> C age	Error ±	Calendar years		Sed.rate	Original interval/ material/ $\delta^{18}\text{O}$ stratigraphy	Core no.	Remarks
[cm]	[ky BP]		[ka]		[cm/ky]			
22	9.58	60	11.39	a)	-.-	b), <i>N. pachy. sin.</i>	-5	
24	10.46	60				<i>N. pachy. sin.</i>	-5	
35	3.80	30				<i>N. pachy. sin.</i>	-5	age not used
36	4.33	30				<i>N. pachy. sin.</i>	-5	age not used
50	12.05	60				<i>N. pachy. sin.</i>	-5	
52			12.15	a)	39.5	Vedde Ash; b)	-5	
55	8.61	50	14.32			<i>N. pachy. sin.</i> ; extrapolated; base of hiatus	-5	age not used
57			14.62	a)	2.0	b)	-5	
64			15.66	a)	6.8	b)	-5	
65	13.97	60	15.72	a)		b), <i>N. pachy. sin.</i>	-5	
65	13.65	90	16.39	c)		<i>C. lobat. and C. pachy. (&gt;250 µm)</i>	-5	
71	14.68	210	16.04	a)		b); <i>N. pachy. sin.</i>	-5	
71	14.05	80	16.85	b)	13.0	<i>C. lobat. and C. pachy. (&gt;150 µm)</i>	-5	
75			16.50	a)		b)	-5	
80	14.49	80	17.24	a)		b); <i>N. pachy. sin.</i>	-5	
80	13.73	90				<i>C. pachyderma (&gt;400 µm)</i>	-5	
80	14.09	90	16.89	c)	-.-	<i>C. lobat. and C. pachy. (&gt;315 µm)</i>	-5	
86	14.81	240	17.46	a)		b), <i>N. pachy. sin.</i>	-5	
86	14.32	+90/ -80	17.16	c)	22.2	<i>C. lobat. and C. pachy. (&gt;150 µm)</i>	-5	
91	15.26	+220/ -210	17.68	a)		b), <i>N. pachy. sin.</i>	-5	
93			17.78	a)		b)	-5	
95	14.98	80	17.94	a)		b), <i>N. pachy. sin.</i>	-5	
95	14.75	90	17.65	c)	18.4	<i>C. lobat. and C. pachy. (&gt;150 µm)</i>	-5	
105	16.11	70	18.10	a)		base of Heinrich event 1; b); <i>N. pachy. sin.</i>	-5	
113	17.23	90	18.84	a)		b), <i>N. pachy. sin.</i>	-5	
113	15.39	120	18.39	c)	24.3	<i>C. lobat. and C. pachy. (&gt;250 µm)</i>	-5	actual sample interval 107-108 cm
116			19.24	a)		b)	-5	
121	18.56	100				<i>N. pachy. sin.</i>	-5	age not correlated to GISP2
122			20.30	a)		b)	-5	
126	19.33	+340/ -330				<i>N. pachy. sin.</i>	-5	age not correlated to GISP2
129	18.90	90	21.64	a)		b); <i>N. pachy. sin.</i> ; top of hiatus based on benthic <sup>14</sup> C age	-5	age not correlated to GISP2
129	17.34	160	20.63	c)	7.1	<i>C. lobatulus (&gt;250 µm)</i>	-5	age not correlated to GISP2
133	20.70	160				<i>N. pachy. sin.</i> ; base of hiatus based on benthic <sup>14</sup> C age	-5	age not correlated to GISP2
133	21.03	200	24.88	c)	-.-	<i>C. lobatulus (&gt;250 µm)</i>	-5	age not correlated to GISP2
134			24.08	a)		peak of Heinrich event 2; b)	-5	
137	21.94	180				<i>N. pachy. sin.</i>	-5	age not correlated to GISP2
137	21.39	+200/ -190	25.13	c)	16.0	<i>C. lobatulus (&gt;150 µm)</i>	-5	age not correlated to GISP2

Comp. depth	<sup>14</sup> C age	Error ±	Calendar years		Sed.rate	Original interval/ material/ <sup>δ</sup> <sup>18</sup> O stratigraphy	Core no.	Remarks
[cm]	[ky BP]		[ka]		[cm/ky]			
141	21.74	70	25.00	a)		b); <i>N. pachy. sin.</i>	-5	
141	21.19	70				<i>C. lobatulus</i> (>315 μm)	-5	
143	22.38	180	25.62	a)		b); <i>N. pachy. sin.</i>	-5	
149	23.91	+170/ -160				<i>N. pachy. sin.</i>	-5	age not correlated to GISP2
151			27.86	a)		b)	-5	
155			28.70	a)		b)	-5	
163	25.30	+300/ -290	29.00	a)		b); <i>N. pachy. sin.</i>	-5	
163	23.38	+220/ -210	27.47	c)	11.1	<i>C. lobat.</i> and <i>C. pachy.</i> (>315 μm)	-5	
171			29.66	a)		b)	-5	
176	27.15	+910/ -820	30.18	a)		b); <i>N. pachy. sin.</i>	-5	
180	27.04	+300/ -290	30.36	a)		b); <i>N. pachy. sin.</i>	-5	
188			30.70	a)		b)	-5	
199	27.63	+340/ -320	31.42	a)		b); <i>N. pachy. sin.</i>	-5	
203			31.62	a)		b)	-5	
206	28.94	+1150 / -1010	31.72	a)		b); <i>N. pachy. sin.</i>	-5	

a) Age acc. to ice core age model of Meese et al. (1994)

b) Correlation with bidecadal record of GISP2 ice core.

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

#### Remarks:

- Top of hiatus at 129 cm 20.63 ka benthic cal. age / 17.34 ka benthic <sup>14</sup>C age is base of LGM time slice.

#### Original references:

- Voelker, A. (1999): Zur Deutung der Dansgaard-Oeschger Ereignisse in ultra-hochauflösenden Sedimentprofilen aus dem Europäischen Nordmeer. - Ber.-Rep.Inst.Geowiss.Univ.Kiel, 9, 287 pp.
- Voelker, A.H.L., Grootes, P.M., Nadeau, M.-J. & Sarnthein, M. (in press): <sup>14</sup>C levels in the Iceland Sea from 25–53 kyr and their link to the earth's magnetic field intensity.- Radiocarbon, 42(3)

#### LGM time slice:

- GLAMAP: 111-129 cm comp. depth = 105-123 cm orig. depth in core (-5)
- EPILOG: 117-129 cm comp. depth = 111-123 cm orig. depth in core (-5)

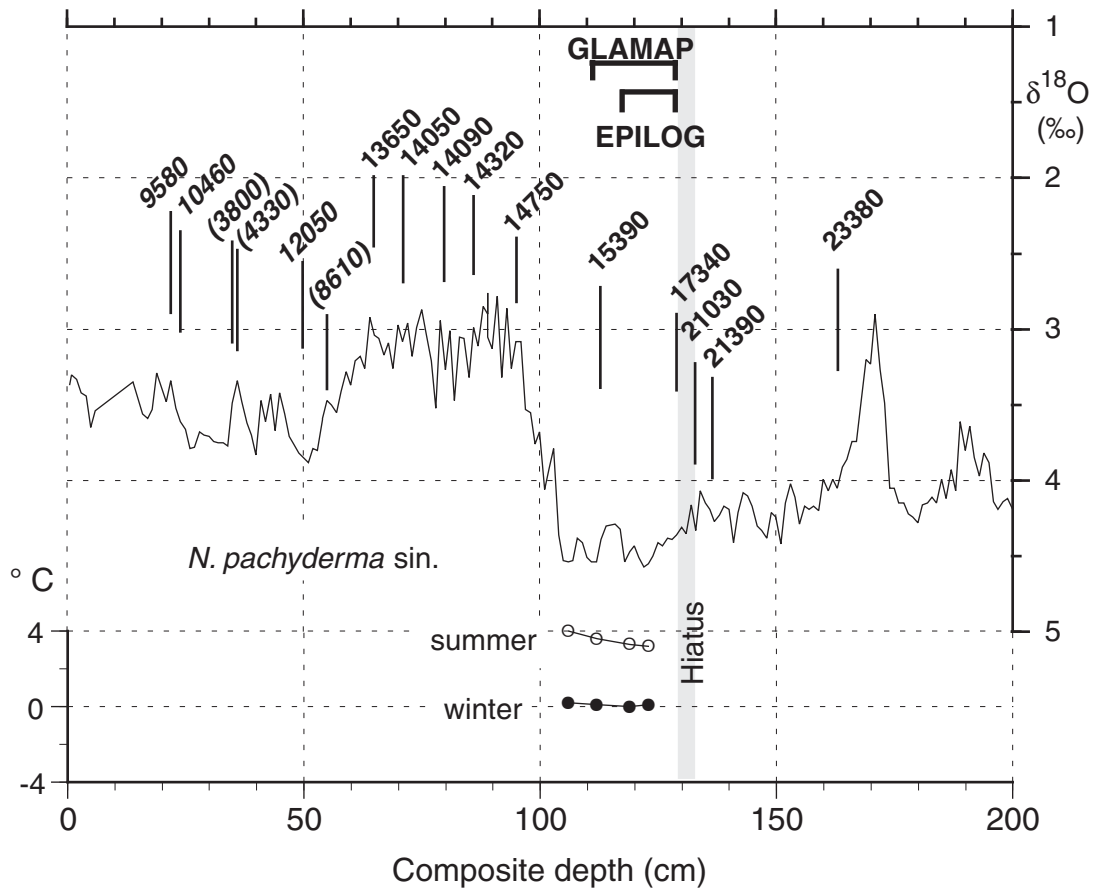
#### LGM foraminifera counts: Vogelsang (EV)

- GLAMAP: (in core -5) 106, 113, 117 cm orig. depth
- EPILOG: (in core -5) 113, 117 cm orig. depth

#### References for faunal analysis:

- Pflaumann et al., Paleoceanography, in prep.

# PS 2644-2/5



12050: *N. pachyderma* sin.

13650: *C. lobat.* + *C. pachyd.*