I. CORES FROM THE OPEN ATLANTIC

CEARA RISE

KNORR 110 82GGC

Giant gravity core raised from RV KNORR by Bill Curry of WHOI.
Holocene 0–19cm 65–75% $CaCO_3$
Glacial below 19cm 25–30% $CaCO_3$

The study of this core was carried out cooperatively with Bill Curry of Woods Hole Oceanographic. Our goal was to obtain benthic-planktonic age difference for the glacial section of the core (see Figs 1, 2, Table 1).

References

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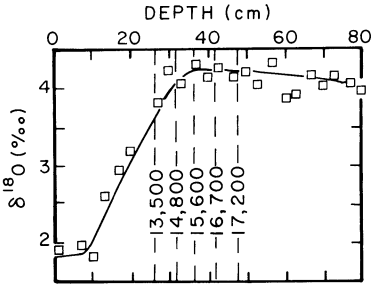

Fig 1. Oxygen isotope record on benthic foraminifera, for KNORR 110-82GGC obtained by Bill Curry of WHOI

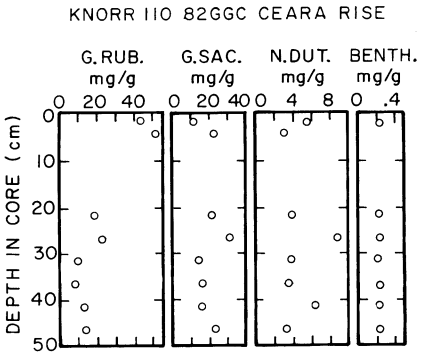

Fig 2. Abundance *vs* depth for the three planktonic and the mixed benthics on which ^{14}C measurements were made

https://doi.org/10.1017/S0033822200044246 Published online by Cambridge University Press

TABLE 1

KNORR 110 82GGC Equatorial Atlantic Ceara Rise
Location (4°20.2'N, 43°29.2'W) Depth 2816m

Depth (cm)	Coarse fraction (%)	Foram sp	Abund (no./gm)	Abund (mgm/gm)	No. tests analyzed	Weight analyzed (mgm)	Date of AMS analysis	Age (yr)	Ref*
0-3**	32.3	G sacc	265	11.2	216	12.3	-	-	
"	"	G ruber	2840	43.6	463	7.1	-	-	
"	"	P obliq	57.7	2.3	201	9.7	-	-	
"	"	N duter	93.2	5.4	161	9.4	-	-	
"	"	M benth	5.7	0.23	247	9.8	-	-	
3-5†	31.8	G sacc	356	22.1	181	11.2	-	-	
"	"	G ruber	2810	52.1	522	9.7	-	-	
"	"	P obliq	49.8	3.0	161	9.7	-	-	
"	"	N duter	76.2	4.8	24	1.5	-	-	
"	"	M benth	-	-	-	-	-	-	
6-8	32.8	G sacc	333	29.1	70	6.1	-	-	
"	"	G ruber	1720	33.1	349	6.7	-	-	
"	"	N duter	29.4	1.75	-	-	-	-	
"	"	M benth	3.8	-	-	-	-	-	
9-11	30.1	G sacc	464	20.6	153	6.8	-	-	
"	"	G ruber	1720	12.8	566	4.2	-	-	
"	"	N duter	41.0	2.31	-	-	-	-	
"	"	M benth	-	-	-	-	-	-	
15-17	26.1	G sacc	454	28.4	152	9.5	-	-	
"	"	G ruber	1630	20.7	401	5.1	-	-	
"	"	N duter	103	5.37	-	-	-	-	
"	"	M benth	9.4	0.35	225	8.2	-	-	
20-23	15.4	G sacc	358	20.4	255	14.5	April 86	12,360 ± 190	15
"	"	G ruber	804	17.8	521	11.5	"	12,040 ± 190	15
"	"	P obliq	110	6.25	274	15.6	"	11,950 ± 180	
"	"	N duter	58.2	3.9	221	14.8	"	13,350 ± 230	15
"	"	M benth	7.1	0.22	328	10.4	"	13,160 ± 210	
23-25	15.2	G sacc	-	-	-	-	-	-	
"	"	G ruber	-	-	-	-	-	-	
"	"	M benth	-	-	-	-	-	-	
25-28	14.5	G sacc	557	30.8	222	12.3	June 86	14,150 ± 160	15,16
"	"	G ruber	1010	22.8	500	11.3	Jan 87	13,870 ± 260	15,16
"	"	P obliq	38.2	2.0	254	13.2	June 86	12,610 ± 140	
"	"	N duter	143	8.8	213	13.0	July 86	13,860 ± 190	15,16
"	"	M benth	5.8	0.24	233	9.5	June 86	14,930 ± 200	16

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TABLE 1 (cont'd)

Depth (cm)	Coarse fraction (%)	Foram sp	Abund (no./gm)	Abund (mgm/gm)	No. Tests analyzed	Weight analyzed (mgm)	Date of AMS analysis	Age (yr)	Ref*
28–30	12.3	G sacc	–	–	–	–	–	–	
"	"	G ruber	–	–	–	–	–	–	
"	"	M benth	–	–	–	–	–	–	
30–33	6.8	G sacc	215	14.9	194	13.5	April 86	15,100 ± 250	15,16
"	"	G ruber	526	10.1	453	8.7	"	15,450 ± 260	15,16
"	"	P obliq	5.7	0.36	–	–	–	–	
"	"	N duter	61.7	3.7	186	11.1	April 86	15,170 ± 260	15,16
"	"	M benth	6.7	0.21	298	9.3	"	16,350 ± 280	16
33–35	9.2	G sacc	–	–	–	–	–	–	
"	"	G ruber	–	–	–	–	–	–	
"	"	M benth	–	–	–	–	–	–	
35–38	7.4	G sacc	216	16.3	163	12.3	Jan 87	16,090 ± 320	15,16
"	"	G ruber	496	8.7	400	7.0	"	15,870 ± 290	15,16
"	"	P obliq	1.6	0.08	–	–	–	–	
"	"	N duter	58.2	3.5	229	13.7	July 86	16,060 ± 200	15,16
"	"	M benth	4.7	0.11	187	4.4	July 86	16,130 ± 240	16
36–38	7.9	G sacc	96.2	9.4	157	15.3	March 87	–	
"	"	G ruber	–	–	–	–	–	–	
"	"	M benth	3.4	0.24	58	4.1	March 87	–	
38–40	9.1	G sacc	–	–	–	–	–	–	
"	"	G ruber	–	–	–	–	–	–	
"	"	M benth	–	–	–	–	–	–	
40–43	8.9	G sacc	220	15.5	183	13.0	June 86	16,710 ± 250	15,16
"	"	G ruber	458	13.2	548	15.8	"	17,040 ± 250	15,16
"	"	P obliq	1.4	0.07	–	–	–	–	
"	"	N duter	86.7	6.3	181	13.2	June 86	17,610 ± 280	15,16
"	"	M benth	4.5	0.23	193	10.2	"	17,870 ± 370	16
43–45	10.1	G sacc	–	–	–	–	–	–	
"	"	G ruber	–	–	–	–	–	–	
"	"	M benth	–	–	–	–	–	–	
45–48	8.6	G sacc	186	22.8	86	9.5	Jan 87	17,780 ± 360	15,16
"	"	G ruber	766	14.0	500	12.7	"	17,430 ± 340	15,16
"	"	P obliq	4.2	0.22	–	–	–	–	
"	"	N duter	52.5	3.4	199	12.9	July 86	17,660 ± 260	15,16
"	"	M benth	4.5	0.23	155	5.8	"	17,900 ± 640	16

*Publication no. in which radiocarbon date has been published (see references cited)
**Archive core
†Working core

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