[RADIOCARBON, VOL. 19, No. 2, 1977, P. 326-331]

UNIVERSITY OF MIAMI RADIOCARBON DATES IX

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The following radiocarbon measurements are a partial list of geologic samples dated since September 1975. The technique used is described in R, v 18, p 210-220. Dates are calculated using a ^{14}C half-life of 5568 yr and errors are reported as one standard deviation. This includes only the counting errors on the sample, background and modern standard.

ACKNOWLEDGMENTS

We are grateful to D Evans, Dept of Biology for the continued supplemental use of his Packard Tri-Carb 2003 liquid scintillation spectrometer.

SAMPLE DESCRIPTIONS

A. Bahamas

Joulters Cays I series

A piston core of oolites from Joulters Cays, Bahamas (25° 20′ N, 78° 12′ W). Samples coll to determine stratigraphy and date sedimentation rates. Coll 1975 and subm 1976 by P M Harris, RSMAS, Miami, Florida.

General Comment (DP): 1st of 3 projects from Joulters Cays area.

UM-801. 75-2-40A: 128 to 133cm **625 ± 155**
Outer layer.

UM-802. 75-2-40A: 128 to 133cm **760 ± 75**
Duplicate run of UM-801.

UM-803. 75-2-40A: 128 to 133cm **1245 ± 70**
Middle layer.

UM-804. 75-2-40A: 128 to 133cm **2195 ± 75**
Inner layer.

UM-805. 75-2-40B: 217 to 222cm **2000 ± 80**
Outer layer.

UM-806. 75-2-40B: 217 to 222cm **2665 ± 90**
Inner layer.

UM-807. 75-2-40C: 308 to 312cm **2740 ± 85**
Outer layer.

UM-808. 75-2-40C: 308 to 312cm **2675 ± 75**
Inner layer.

UM-809. 75-2-40D: 397 to 402cm **3660 ± 75**
Outer layer.

UM-810. 75-2-40D: 397 to 402cm **3970 ± 95**
Inner layer.

UM-811. 75-2-40E: 430cm **4560 ± 105**
Whole oolite.

Joulters Cays II series

A piston core of oolites from Joulters Cays, Bahamas (25° 18′ N, 78° 13′ W). Samples coll to determine stratigraphy and date sedimentation rates. Coll 1976 by P M Harris, RSMAS, Miami, Florida; subm 1976 by T Dlugos, Univ Miami.

General Comment (DP): 2nd of 3 projects from Joulters Cays area; this correlates to Joulters Cays I series. Only outer 40-50% of oolites were dated.

UM-794. 76-2-67: 0 to 2cm **910 ± 80**

UM-795. 76-2-67: 70 to 72cm **1235 ± 75**

UM-796. 76-2-67: 140 to 143cm **1580 ± 80**

UM-797. 76-2-67: 210 to 212cm **2640 ± 100**

UM-798. 76-2-67: 350 to 352cm **4005 ± 90**

UM-799. 76-2-67: 420 to 422cm **4090 ± 100**

UM-800. 76-2-67: 468 to 470cm **4935 ± 85**
Calcitic mud.

Joulters Cays III series

Hand-picked oolites from S end of Joulters Cay, Bahamas (25° 17° N, 78° 07′ W). Samples coll along a transect at right angles to NW-SE trending island. Where possible, loose ooids were coll under the hardened crust of island. Only the outer 10-15% of ooids in the 250m to 420m range were dated. Study for correlation of island age and formation with active shoal. Coll and subm 1976 by P M Harris and B D Clarke, RSMAS, Miami, Florida.

General Comment (DP): last of 3 projects from Joulters Cays area. Dates are reported in sequential order from E to W.

UM-783. SAM 1 SHO **300 ± 70**
Subtidal shoal in lm water.

UM-784. SAM 2 BEA **1915 ± 75**
Marine beach, intertidal zone.

UM-785. SAM 2 BEA **< 180**
Duplicate run of UM-784.

https://doi.org/10.1017/S0033822200003593 Published online by Cambridge University Press

UM-786. SAM 2 BEA **103.7 ± 1.1% modern**
Triplicate run of UM-784.

UM-787. SAM 3 SWW **< 195**
Marine beach ridge crest, supratidal zone.

UM-788. SAM 4 STA 2 **580 ± 75**
Marine beach ridge crest, supratidal zone.

UM-789. SAM 5 STA 2-C **910 ± 85**
Marine beach ridge crest, supratidal zone.

UM-790. SAM 6 STA 3 **390 ± 120**
Marine beach trough, supratidal zone.

UM-791. SAM 7 STA 3-E **500 ± 75**
Marine beach ridge crest, supratidal zone.

UM-792. SAM 8 STA 4 **< 230**
Marine beach ridge crest, supratidal zone.

UM-793. SAM 9 STA 6 **430 ± 75**
Marine beach ridge crest, supratidal zone.

Eleuthera Bank series

Several samples of oolites and *Strombus* coll in lithified fragments from submerged shoals on Eleuthera Bank, Bahamas (24° 50′ N, 76° 25′ W). Crust samples found *in situ* on shoal and clast samples found unattached on shoal. Only outer 15% of oolites were dated. Dates to find correlation between crust and clast lithification. Coll 1975 by J Dravis, RSMAS, Miami, Florida; subm 1976 by J Donnellan, Univ Miami.

UM-769. SC-182 **102 ± 1.4% modern**
Sample consists of cementing material around oolites from crust of oolitic shoal. Coll in 1m water, exposed at low tide.

UM-770. SC-202 **495 ± 75**
Oolite crust from similar shoal as UM-769 coll in 0.5m water, not exposed at low tide.

UM-771. E-29-3 **845 ± 80**
Oolite crust coll from shoal flank in water 4m deep.

UM-772. E-29-2 **1545 ± 85**
Oolite clast found near shoal flank in water 5m deep.

UM-773. E-29-1A **550 ± 215**
Strombus embedded in oolites coll as crust in water 4m deep.

UM-776. E-29-1A **895 ± 65**
Duplicate run of UM-773.

UM-774. SC-89B **<175**

Shell material embedded in oolitic clast from water 5m deep.

UM-775. SC-36 **590 ± 80**

Shell material from oolitic crust in water 30cm deep, exposed at low tide.

B. Mid-Atlantic

Mid-Atlantic Abyssal Plain series

Two cores of pelagic ooze coll on opposite sides of the Mid-Atlantic ridge. Date sedimentation rates for regions adjacent to continents and for comparison to Mid-Atlantic Ridge sedimentation rates. Core P6903-56 (16° 36′ N, 58° 03.5′ W) and Core P7008-25 (08° 01.7′ N, 21° 04.3′ W) are both gravity cores from abyssal plain near base of Mid-Atlantic Ridge. Coll 1969 and 1970 by K Boström, RSMAS, Miami, Florida; subm 1976 by T Damon, Univ Miami.

General Comment (TD): samples presumably influenced by continental sediments and may be affected by slumping.

UM-812.	**P7008-25: 10 to 20cm**	**9400 ± 80**
UM-813.	**P7008-25: 50 to 60cm**	$\mathbf{30{,}860^{+945}_{-1085}}$
UM-822.	**P7008-25: 80 to 90cm**	$\mathbf{32{,}945^{+1165}_{-1365}}$
UM-814.	**P7008-25: 90 to 100cm**	$\mathbf{32{,}495^{+1385}_{-1470}}$
UM-823.	**P7008-25: 100 to 110cm**	**>37,645**
UM-815.	**P7008-25: 130 to 140cm**	**26,945 ± 445**
UM-816.	**P7008-25: 160 to 170cm**	$\mathbf{33{,}390^{+1210}_{-1430}}$
UM-817.	**P6903-56: 0 to 10cm**	**7615 ± 130**
UM-818.	**P6903-56: 35 to 45cm**	**23,335 ± 320**
UM-821.	**P6903-56: 53 to 63cm**	**>34,945**
UM-819.	**P6903-56: 70 to 80cm**	**25,100 ± 460**
UM-820.	**P6903-56: 105 to 115cm**	$\mathbf{25{,}280^{+625}_{-675}}$

Mid-Atlantic Ridge series

Nine gravity cores of pelagic ooze from various locations on the Mid-Atlantic Ridge. Continuation of a study on sedimentation rates along ridge (R, v 18, p 407-412). Coll 1965 and 1970 by K Boström, RSMAS, Miami, Florida; subm 1975 and 1976 by D Grigoriev.

General Comment (DG): elemental analyses indicate terrigenous influence on sediments from ridge flanks.

Core P6511-29. Eastern flank, Mid-Atlantic Ridge (27° 42′ 5″ N, 37° 13′ 0″ W).

UM-888.	**P6511-29: 0 to 15cm**	**11,145 ± 115**
UM-889.	**P6511-29: 25 to 40cm**	**$27{,}820^{+480}_{-510}$**
UM-890.	**P6511-29: 25 to 40cm**	**$29{,}700^{+635}_{-690}$**

Duplicate run of UM-889.

UM-892.	**P6511-29: 50 to 65cm**	**$23{,}245^{+655}_{-710}$**
UM-893.	**P6511-29: 80 to 95cm**	**$33{,}460^{+1435}_{-1745}$**

Core P6511-31. Eastern flank Mid-Atlantic Ridge (26° 15′ N, 43° 30′ W).

UM-894.	**P6511-31: 5 to 15cm**	**$13{,}100^{+740}_{-810}$**
UM-895.	**P6511-31: 30 to 40cm**	**21,530 ± 275**
UM-896.	**P6511-31: 60 to 70cm**	**$30{,}720^{+740}_{-815}$**
UM-897.	**P6511-31: 90 to 100cm**	**> 37,330**

Core P7008-17. Western flank Mid-Atlantic Ridge (0° 48.8′ N, 31° 27′ W).

UM-714.	**P7008-17: 0 to 15cm**	**4145 ± 85**
UM-900.	**P7008-17: 23 to 35cm**	**13,500 ± 145**
UM-715.	**P7008-17: 40 to 55cm**	**16,720 ± 265**
UM-716.	**P7008-17: 80 to 95cm**	**$29{,}990^{+1600}_{-2000}$**
UM-717.	**P7008-17: 115 to 130cm**	**$31{,}130^{+625}_{-680}$**

Core P7008-18. Western flank Mid-Atlantic Ridge (1° 27.2′ N, 30° 40.1′ W).

UM-898.	**P7008-18: 20 to 35cm**	**13,210 ± 165**

Core P7008-21. Eastern flank Mid-Atlantic Ridge (4° 27.3′ N, 25° 09.3′ W).

UM-899.	**P7008-21: 25 to 35cm**	**18,750 ± 195**

Core P7008-41. Eastern flank Mid-Atlantic Ridge (12° 52.9′ N, 38° 01.5′ W).

UM-718.	**P7008-41: 0 to 15cm**	**9190 ± 150**
UM-901.	**P7008-41: 25 to 35cm**	**27,350 ± 550**
UM-719.	**P7008-41: 40 to 55cm**	**$22{,}430^{+1220}_{-1440}$**
UM-720.	**P7008-41: 80 to 95cm**	**15,170 ± 540**
UM-721.	**P7008-41: 120 to 135cm**	**23,195 ± 420**

Core P7008-44. Western flank Mid-Atlantic Ridge (12° 56.9′ N, 42° 27.6′ W).

UM-738.	**P7008-44: 0 to 20cm**	**22,600 ± 255**
UM-886.	**P7008-44: 0 to 20cm**	**$32{,}975^{+680}_{-740}$**

Duplicate run of UM-738.

UM-739.	**P7008-44: 45 to 60cm**	**15,410 ± 160**
UM-740.	**P7008-44: 95 to 110cm**	**27,980 ± 450**
UM-741.	**P7008-44: 145 to 160cm**	**30,065 ± 455**

References

Eldridge, K L, Stipp, J J, Hattner, J, and McDougal, E, 1975, University of Miami radiocarbon dates IV: Radiocarbon, v 17, p 407-412.

Stipp, J J, Eldridge, K L, and Cadwell, R, 1976, University of Miami radiocarbon dates VI: Radiocarbon, v 18, p 210-220.