

## UNIVERSITY OF MIAMI RADIOCARBON DATES XIX

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The following radiocarbon dates are a partial list of samples measured for a variety of projects and materials since January 1980. Chemical and counting procedures remain the same as indicated in R, v 20, p 274-282.

Calculations are based on the 5568-year Libby  $^{14}\text{C}$  half-life. Precision is reported as one standard deviation based only on statistical counting uncertainties in the measurement of the background, NBS modern standard, and sample activities.  $\delta^{13}\text{C}$  values are measured relative to PDB and reported ages are corrected for isotopic fractionation by normalizing to  $-25\%$ .

### I. GEOLOGIC SAMPLES

#### East Pacific Rise Series I

Carbonate sediment samples from eight cores taken on the East Pacific Rise, Clipperton Fracture Zone, and Galapagos Fracture Zone. Dated to study sedimentation rates and benthic mixing. Coll 1976 and subm 1979 by W H Berger, Scripps Inst Oceanography, La Jolla, California.

**UM-1757. PLDS 77Bx#1 (1-4cm) 7530  $\pm$  220**

Galapagos Fracture Zone, water depth 4366m ( $1^{\circ} 3.6' \text{ N}$ ,  $119^{\circ} 55.8' \text{ W}$ ).

**UM-1758. PLDS 77Bx#1 (7-10cm) 6810  $\pm$  420**

Location and water depth identical to UM-1757.

**UM-1759. PLDS 77Bx#1 (20-25cm) 13,040  $\pm$  190**

Location and water depth identical to UM-1757.

**UM-1760. PLDS 79Bx#2 (1-4cm) 6230  $\pm$  170**

W slope East Pacific Rise, water depth 4542m ( $1^{\circ} 4.6' \text{ N}$ ,  $122^{\circ} 14.9' \text{ W}$ ).

**UM-1761. PLDS 79Bx#2 7-10cm) 5950  $\pm$  170**

Location and water depth identical to UM-1760.

**UM-1762. PLDS 79Bx#2 (20-25cm) 10,690  $\pm$  150**

Location and water depth identical to UM-1760.

**UM-1763. PLDS 81Bx#1 (1-4cm) 6580  $\pm$  280**

East Pacific Rise, water depth 4771m ( $1^{\circ} 1.7' \text{ N}$ ,  $124^{\circ} 37.3' \text{ W}$ ).

**UM-1764. PLDS 81Bx#1 (7-10cm) 5960  $\pm$  190**

Location and water depth identical to UM-1763.

<b>UM-1765. PLDS 81Bx#1 (20-25cm)</b>	<b>12,645 ± 160</b>
Location and water depth identical to UM-1763.	
<b>UM-1766. PLDS 83Bx#1 (1-4cm)</b>	<b>5780 ± 150</b>
East Pacific Rise, water depth 4527m (0° 56.6' N, 126° 37.7' W).	
<b>UM-1767. PLDS 83Bx#1 (7-10cm)</b>	<b>6030 ± 210</b>
Location and water depth identical to UM-1766.	
<b>UM-1768. PLDS 83Bx#1 (20-25cm)</b>	<b>11,800 ± 120</b>
Location and water depth identical to UM-1766.	
<b>UM-1769. PLDS 85Bx#1 (1-4cm)</b>	<b>4850 ± 100</b>
East Pacific Rise, water depth 4385m (0° 58.3' N, 128° 27.7' W).	
<b>UM-1770. PLDS 85Bx#1 (7-10cm)</b>	<b>5620 ± 130</b>
Location and water depth identical to UM-1769.	
<b>UM-1771. PLDS 85Bx#1 (20-25cm)</b>	<b>11,580 ± 150</b>
Location and water depth identical to UM-1769.	
<b>UM-1772. PLDS 89Bx#1 (1-4cm)</b>	<b>5520 ± 220</b>
East Pacific Rise, water depth 4407m (0° 58.3' N, 131° 39.4' W).	
<b>UM-1773. PLDS 89Bx#1 (7-10cm)</b>	<b>5460 ± 110</b>
Location and water depth identical to UM-1772.	
<b>UM-1774. PLDS 89Bx#1 (20-25cm)</b>	<b>11,520 ± 170</b>
Location and water depth identical to UM-1772.	
<b>UM-1775. PLDS 90Bx#1 (1-4cm)</b>	<b>5680 ± 150</b>
East Pacific Rise, water depth 4297m (0° 59.2' N, 135° 4.8' W).	
<b>UM-1776. PLDS 90Bx#1 (7-10cm)</b>	<b>6340 ± 180</b>
Location and water depth identical to UM-1775.	
<b>UM-1777. PLDS 90Bx#1 (20-25cm)</b>	<b>13,430 ± 140</b>
Location and water depth identical to UM-1775.	
<b>UM-1778. PLDS 107Bx#1 (1-4cm)</b>	<b>13,700 + 690 - 640</b>
Clipperton Fracture Zone, water depth 4849m (6° 9.4' N, 138° 16.6' W).	
<b>UM-1779. PLDS 107Bx#1 (7-10cm)</b>	<b>17,390 ± 350</b>
Location and water depth identical to UM-1778.	
<b>UM-1780. PLDS 107Bx#1 (20-25cm)</b>	<b>31,900 + 2500 - 1900</b>

**East Pacific Rise Series II**

Carbonate sediment samples from seven cores taken on the East Pacific Rise, Clipperton Fracture Zone, and Galapagos Fracture Zone. Dated for mixing and sedimentation studies. Coll 1975 and subm 1979 by W H Berger.

<b>UM-1892. ERDC 77Bx#1 (1-5cm)</b>	<b>6500 ± 100</b>
Water depth 3585m (4° 51' N, 156° 3.5' E).	
<b>UM-1893. ERDC 77Bx#1 (7-10cm)</b>	<b>7210 ± 90</b>
Location and water depth identical to UM-1892.	
<b>UM-1894. ERDC 77Bx#1 (20-25cm)</b>	<b>19,180 ± 210</b>
Location and water depth identical to UM-1892.	
<b>UM-1895. ERDC 83Bx#1 (1-5cm)</b>	<b>3700 ± 80</b>
Water depth 2342m (1° 24.1' N, 157° 18.6' E).	
<b>UM-1896. ERDC 83Bx#1 (7-10cm)</b>	<b>4380 ± 110</b>
Location and water depth identical to UM-1895.	
<b>UM-1897. ERDC 83Bx#1 (20-25cm)</b>	<b>8930 ± 110</b>
Location and water depth identical to UM-1895.	
<b>UM-1898. ERDC 108Bx#1 (1-5cm)</b>	<b>4680 ± 90</b>
Water depth 3383m (1° 44.8' S, 160° 48.0' E).	
<b>UM-1899. ERDC 108Bx#1 (7-10cm)</b>	<b>5870 ± 90</b>
Location and water depth identical to UM-1898.	
<b>UM-1900. ERDC 108Bx#1 (20-25cm)</b>	<b>11,650 ± 150</b>
Location and water depth identical to UM-1898.	
<b>UM-1901. ERDC 112Bx#1 (1-5cm)</b>	<b>4340 ± 70</b>
Water depth 2169m (1° 37.5' S, 159° 14.1' E).	
<b>UM-1902. ERDC 112Bx#1 (7-10cm)</b>	<b>5040 ± 80</b>
Water depth and location identical to UM-1901.	
<b>UM-1903. ERDC 112Bx#1 (20-25cm)</b>	<b>9895 ± 120</b>
Water depth and location identical to UM-1901.	
<b>UM-1904. ERDC 128Bx#2 (1-5cm)</b>	<b>4020 ± 80</b>
Water depth 3732m (0° 0.3' S, 161° 25.6' E).	
<b>UM-1905. ERDC 128Bx#2 (7-10cm)</b>	<b>5570 ± 90</b>
Water depth and location identical to UM-1904.	
<b>UM-1906. ERDC 128Bx#2 (20-25cm)</b>	<b>12,070 ± 150</b>
Water depth and location identical to UM-1904.	

<b>UM-1907. ERDC 136Bx#2 (1-5cm)</b>	<b>4250 ± 100</b>
Water depth 3848m (1° 6' N, 161° 36.3' E).	
<b>UM-1908. ERDC 136Bx#2 (7-10cm)</b>	<b>5920 ± 100</b>
Water depth and location identical to UM-1907.	
<b>UM-1909. ERDC 136Bx#2 (20-25cm)</b>	<b>13,740 ± 130</b>
Water depth and location identical to UM-1907.	
<b>UM-1910. PLDS 92Bx#1 (1-5cm)</b>	<b>9410 ± 90</b>
Water depth 4515m (3° 57.7' N, 135° 58.6' W).	
<b>UM-1911. PLDS 92Bx#1 (7-10cm)</b>	<b>14,130 ± 140</b>
Water depth and location identical to UM-1910.	
<b>UM-1912. PLDS 92Bx#1 (20-25cm)</b>	<b>27,630 ± 350</b>
Water depth and location identical to UM-1910.	

### **Clipperton Fracture Zone series**

Carbonate sediment samples from a core taken along the Clipperton Fracture Zone (2° 47.1' N, 156° 13.8' E) at depth 2767m. Samples were dated for sedimentation and paleo-oceanographic studies. Coll 1975 and subm 1979 by W H Berger.

UM-1842. ERDC 79Bx#2 (0-2cm)	4090 ± 70
UM-1843. ERDC 79Bx#2 (2-4cm)	4400 ± 100
UM-1844. ERDC 79Bx#2 (4-6cm)	4710 ± 110
UM-1845. ERDC 79Bx#2 (6-8cm)	4400 ± 80
UM-1846. ERDC 79Bx#2 (8-10cm)	5210 ± 100
UM-1847. ERDC 79Bx#2 (10-12cm)	6800 ± 100
UM-1848. ERDC 79Bx#2 (12-14cm)	6820 ± 100
UM-1849. ERDC 79Bx#2 (14-16cm)	7330 ± 90
UM-1850. ERDC 79Bx#2 (16-18cm)	7880 ± 100
UM-1851. ERDC 79Bx#2 (18-20cm)	7800 ± 160
UM-1852. ERDC 79Bx#2 (20-22cm)	9250 ± 110
UM-1853. ERDC 79Bx#2 (22-24cm)	11,820 ± 120
UM-1854. ERDC 79Bx#2 (24-26cm)	12,590 ± 120
UM-1855. ERDC 79Bx#2 (26-28cm)	15,130 ± 160
UM-1856. ERDC 79Bx#2 (28-30cm)	16,930 ± 220
UM-1857. ERDC 79Bx#2 (30-32cm)	17,320 ± 220
UM-1858. ERDC 79Bx#2 (32-34cm)	20,330 ± 220
UM-1859. ERDC 79Bx#2 (34-36cm)	22,890 ± 430
UM-1860. ERDC 79Bx#2 (36-38cm)	23,700 ± 310
UM-1861. ERDC 79Bx#2 (38-40cm)	24,290 ± 240

### **San Jacinto Valley series**

Wood and bark samples coll from well at depth 49m in San Jacinto Valley, California (33° 48' 25" N, 116° 55' 30" W). Samples dated to study Quaternary history of San Jacinto Valley fill. Samples coll 1974

and subm 1980 by D Morton, Western Environmental Geology, Menlo Park, California.

**UM-1984. San Jacinto Valley wood****27,280 ± 350** $\delta^{13}C = -21.3\text{‰}$ **+ 1400****31,000****- 1200****UM-1985. San Jacinto Valley bark** $\delta^{13}C = -22.0\text{‰}$ **Bogue Banks series**

Various shell and organic samples coll using auger drill from Bogue Banks, North Carolina. Samples dated for barrier in stratigraphic research. Samples coll Aug 1979 and subm Nov 1979 by A Steel, Duke Univ, Durham, North Carolina.

**UM-1941. RC#1****5460 ± 170**

Oyster shell (possibly *Crassostrea virginica*) taken at 6.4m below msl in unconsolidated sediments (34° 41' 51" N, 76° 49' 24" W).

**UM-1942. RC#2****7080 ± 70**

Oyster shells (*Crassostrea* ?) taken at 8.8m to 9.1m below msl (34° 40' 18" N, 77° 1' 30" W).

**UM-1943. RC#3****7820 ± 80**

Oyster shells taken at 13.7m below msl (34° 40' 40", 76° 58' 38" W).

**UM-1944. RC#4****4700 ± 80**

Oyster shells taken at 5.2m below msl (34° 39' 52" N, 77° 3' 32" W).

**UM-1945. RC#5****9330 ± 110**

Wood fragments coll at depth of 11.9m to 13.1m below msl (34° 41' 22" N, 76° 51' 43" W).

**UM-1946. RC#6****26,440 ± 240**

Basal peat coll from shelly unconsolidated sediment 18.3m to 18.9m below msl (34° 42' 4" N, 76° 44' 47" W).

**UM-1947. RC#7****1380 ± 100**

Organic bound sand coll from depth of 2.1m to 2.4m below msl (34° 40' 0" N, 76° 49' 49" W).

## REFERENCE

Calvert, M, Rudolph, Kim, and Stipp, J J, 1978, University of Miami radiocarbon dates XII: Radiocarbon, v 20, p 274-282.