

Lee et al. Downcore data on water content, cumulative mass, nuclide activities, $^{240}\text{Pu}/^{239}\text{Pu}$ ratio and sediment chronology.

Depth (cm)	Content of water (%)	Cumulative* mass (g cm^{-2})	Mean deposition time (A.D.)	$^{210}\text{Pb}_{\text{ex}}$	^{137}Cs	$^{239,240}\text{Pu}$	$^{240}\text{Pu}/^{239}\text{Pu}$
							(dpm g^{-1})
590-12 (24° 49.92'N, 122° 20.05'E; 1184 m)							
0-1	50.27	0.341	2000.3	38.47 ± 0.27	0.062 ± 0.005		
1-2	48.17	1.046	1999.8	43.19 ± 0.53	0.055 ± 0.007		
2-3	48.22	1.772	1999.3	41.87 ± 0.44	0.072 ± 0.006		
3-4	46.37	2.517	1998.8	44.91 ± 0.30	0.060 ± 0.005		
4-5	44.82	3.300	1998.3	40.65 ± 0.44	0.082 ± 0.006		
5-6	44.47	4.104	1997.7	41.98 ± 0.48	0.051 ± 0.009		
6-7	44.38	4.913	1997.1	40.32 ± 0.52	0.054 ± 0.007		
7-8	44.46	5.722	1996.6	40.28 ± 0.26	0.075 ± 0.006		
8-9	45.25	6.522	1996.0	37.74 ± 0.27	0.083 ± 0.006		
9-10	44.72	7.318	1995.5	39.54 ± 0.34	0.073 ± 0.007		
10-12	44.95	8.517	1994.6	37.49 ± 0.33	0.073 ± 0.005		
12-14	44.09	10.13	1993.5	35.56 ± 0.40	0.068 ± 0.009		
14-16	43.96	11.77	1992.4	29.37 ± 0.29	0.058 ± 0.010		
16-18	43.86	13.41	1991.2	27.09 ± 0.22	0.082 ± 0.008		
18-20	43.80	15.06	1990.1	32.72 ± 0.41	0.087 ± 0.009		
20-22	42.61	16.73	1988.9	29.16 ± 0.27	0.059 ± 0.008		
22-24	41.33	18.46	1987.7	29.55 ± 0.27	0.075 ± 0.011		
24-26	42.80	20.19	1986.5	29.57 ± 0.27	0.100 ± 0.012		
26-28	43.15	21.88	1985.3	28.07 ± 0.35	0.081 ± 0.010		
28-30	42.16	23.58	1984.1	26.47 ± 0.35	n.a.		
30-32	42.45	25.29	1982.9	26.50 ± 0.36	0.093 ± 0.007		
32-34	43.45	26.98	1981.7	27.67 ± 0.34	n.a.		
34-36	41.16	28.70	1980.5	23.88 ± 0.32	0.106 ± 0.010		
36-38	39.96	30.50	1979.3	20.14 ± 0.30	0.099 ± 0.010		
38-40	41.08	32.30	1978.0		0.146 ± 0.010		

40-42	41.08	34.08	1976.8	20.12 ± 0.28	n.a.		
42-44	40.80	35.86	1975.5		0.185 ± 0.015		
44-45	40.23	37.21	1974.6		0.275 ± 0.024		

590-16 (25° 07.62'N, 122° 32.78'E; 1130 m)

0-1	54.62	0.298	1999.85	59.10 ± 0.49	0.126 ± 0.006	0.072 ± 0.003	0.220 ± 0.010
1-2	55.02	0.890	1998.42	59.79 ± 0.41	0.118 ± 0.009	0.086 ± 0.003	0.234 ± 0.003
2-3	54.59	1.483	1996.99	59.87 ± 0.42	0.126 ± 0.006	0.079 ± 0.003	0.209 ± 0.008
3-4	53.63	2.089	1995.52	55.47 ± 0.40	0.106 ± 0.008	0.098 ± 0.005	0.223 ± 0.011
4-5	52.63	2.714	1994.02	52.50 ± 0.40	0.102 ± 0.008	0.104 ± 0.003	0.223 ± 0.009
5-6	50.50	3.370	1992.43	49.37 ± 0.34	0.087 ± 0.010	0.111 ± 0.005	0.232 ± 0.011
6-7	50.89	4.044	1990.80	48.09 ± 0.42	0.112 ± 0.008	0.114 ± 0.004	0.221 ± 0.006
7-8	50.93	4.714	1989.19	46.47 ± 0.34	0.112 ± 0.007	0.110 ± 0.003	0.216 ± 0.009
8-9	50.95	5.382	1987.57	42.98 ± 0.30	0.055 ± 0.011	0.115 ± 0.005	0.236 ± 0.006
9-10	51.83	6.042	1985.98	43.87 ± 0.52	0.137 ± 0.008	0.138 ± 0.004	0.217 ± 0.005
10-12	49.19	7.072	1983.50	39.70 ± 0.30	0.182 ± 0.011	0.147 ± 0.006	0.233 ± 0.007
12-14	50.54	8.454	1980.16	39.76 ± 0.33	0.164 ± 0.007	0.167 ± 0.005	0.222 ± 0.008
14-16	48.61	9.848	1976.80	31.55 ± 0.22	0.197 ± 0.014	0.211 ± 0.007	0.232 ± 0.010
16-18	48.96	11.27	1973.35	32.13 ± 0.24	0.289 ± 0.013	0.222 ± 0.005	0.233 ± 0.002
18-20	49.98	12.67	1969.98	28.31 ± 0.21	0.554 ± 0.025	0.259 ± 0.009	0.266 ± 0.010
20-22	48.21	14.09	1966.56	25.94 ± 0.19	0.402 ± 0.027	0.373 ± 0.010	0.273 ± 0.011
22-24	47.08	15.56	1963.00	23.72 ± 0.19	0.366 ± 0.016	0.443 ± 0.011	0.293 ± 0.008
24-26	46.49	17.08	1959.53	21.96 ± 0.19	0.151 ± 0.012	0.364 ± 0.009	0.315 ± 0.010
26-28	47.23	18.59	1956.08	18.88 ± 0.16	0.093 ± 0.008	0.150 ± 0.006	0.292 ± 0.012
28-30	47.21	20.08	1952.66	17.30 ± 0.17	0.029 ± 0.009		
30-32	48.57	21.54	1949.30	15.89 ± 0.15			
32-34	48.21	22.99	1945.99	15.07 ± 0.14			
34-36	48.26	24.44	1942.67	13.56 ± 0.14			
36-38	45.74	25.94	1939.23	11.63 ± 0.13			

38-40	44.38	27.53	1935.58	9.53 ± 0.11
40-42	39.29	29.27	1931.59	8.10 ± 0.11
42-44	45.94	30.98	1927.68	8.65 ± 0.11
44-46	46.76	32.51	1924.18	7.86 ± 0.11
46-48	45.00	34.04	1920.69	6.45 ± 0.10
48-49	44.00	35.20	1918.01	5.79 ± 0.09

590-18 (25° 10.03'N, 122° 40.03'E; 1282 m)

0-1	50.27	0.341	1998.88	88.47 ± 0.81	0.076 ± 0.008	0.066 ± 0.004	0.245 ± 0.002
1-2	48.17	1.046	1995.40	85.05 ± 0.75	0.049 ± 0.009	0.070 ± 0.003	0.237 ± 0.001
2-3	48.22	1.772	1991.82	77.71 ± 0.73	0.067 ± 0.010	0.082 ± 0.004	0.232 ± 0.001
3-4	46.37	2.517	1988.13	70.49 ± 0.67	0.147 ± 0.009	0.099 ± 0.003	0.233 ± 0.001
4-5	44.82	3.300	1984.27	65.87 ± 0.59	0.146 ± 0.008	0.114 ± 0.005	0.237 ± 0.001
5-6	44.47	4.104	1980.30	59.12 ± 0.61	0.198 ± 0.011	0.140 ± 0.004	0.239 ± 0.001
6-7	44.38	4.913	1976.30	52.11 ± 0.48	0.242 ± 0.014	0.175 ± 0.005	0.247 ± 0.001
7-8	44.46	5.722	1972.30	45.86 ± 0.50	0.410 ± 0.023	0.204 ± 0.007	0.246 ± 0.001
8-9	45.25	6.522	1968.35	42.03 ± 0.44	0.339 ± 0.012	0.232 ± 0.008	0.254 ± 0.001
9-10	44.72	7.318	1964.42	37.23 ± 0.40	0.313 ± 0.014	0.236 ± 0.006	0.262 ± 0.001
10-12	44.95	8.517	1958.50	29.42 ± 0.32	0.212 ± 0.017	0.189 ± 0.006	0.275 ± 0.001
12-14	44.09	10.13	1950.53	23.34 ± 0.25	0.064 ± 0.008	0.081 ± 0.004	0.266 ± 0.001
14-16	43.96	11.77	1942.44	20.31 ± 0.26			
16-18	43.86	13.41	1934.33	16.88 ± 0.24			
18-20	43.80	15.06	1926.20	11.78 ± 0.19			
20-22	42.61	16.73	1917.93	7.65 ± 0.15			
22-24	41.33	18.46	1909.37	7.69 ± 0.22			
24-26	42.80	20.19	1900.83	5.84 ± 0.22			
26-28	43.15	21.88	1892.51	4.11 ± 0.16			
28-30	42.16	23.58	1884.11	3.09 ± 0.17			
30-32	42.45	25.29	1875.63	1.84 ± 0.11			

32-34	43.45	26.98	1867.30	1.65 ± 0.08
34-36	41.16	28.70	1858.81	1.06 ± 0.07
36-38	39.96	30.50	1849.92	1.01 ± 0.12
38-40	41.08	32.30	1841.01	
40-42	41.08	34.08	1832.24	

590-22 (25° 02.04'N, 122° 50.96'E; 1510 m)

0-1	57.45	0.272	1995.7	74.35 ± 0.55	0.143 ± 0.008	0.184 ± 0.007	0.224 ± 0.001
1-2	54.17	0.846	1985.4	61.18 ± 0.49	0.229 ± 0.013	0.206 ± 0.007	0.233 ± 0.001
2-3	53.52	1.457	1974.4	54.55 ± 0.43	0.397 ± 0.015	0.341 ± 0.011	0.237 ± 0.000
3-4	51.66	2.093	1963.0	44.33 ± 0.37	0.475 ± 0.013	0.388 ± 0.010	0.253 ± 0.000
4-5	50.92	2.755	1955.9	34.35 ± 0.28	0.194 ± 0.019	0.209 ± 0.007	0.272 ± 0.001
5-6	51.32	3.420	1948.7	30.96 ± 0.28	0.184 ± 0.011	0.122 ± 0.004	0.251 ± 0.000
6-7	51.81	4.076	1941.6	31.51 ± 0.30	0.202 ± 0.010	0.118 ± 0.004	0.244 ± 0.001
7-8	51.50	4.730	1934.6	27.67 ± 0.25	0.088 ± 0.009	0.073 ± 0.003	
8-9	50.56	5.397	1927.4	14.06 ± 0.18			
9-10	49.81	6.081	1920.1	11.64 ± 0.32			
10-12	49.90	7.118	1908.9	9.37 ± 0.13			
12-14	50.19	8.492	1894.1	6.84 ± 0.13			
14-16	49.72	9.870	1879.3	4.50 ± 0.11			
16-18	48.05	11.29	1864.0	1.93 ± 0.10			
18-20	48.34	12.75	1848.3	1.56 ± 0.09			
20-22	45.24	14.26	1832.0	0.63 ± 0.08			
22-24	44.14	15.87	1814.7	0.36 ± 0.07			
24-26	47.91	17.41	1798.1	0.31 ± 0.07			
26-28	41.98	19.01	1780.9	-0.07 ± 0.06			

590-23 (24° 48.43'N, 122° 30.00'E; 1279 m)

0-1	57.91	0.268	1999.6	61.53 ± 1.77	0.086 ± 0.010	0.068 ± 0.003	0.242 ± 0.011
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1-2	53.34	0.845	1997.6	75.52 ± 1.04	0.075 ± 0.008	0.083 ± 0.003	0.240 ± 0.010
2-3	52.63	1.473	1995.4	65.67 ± 0.90	0.097 ± 0.013	0.080 ± 0.003	0.231 ± 0.004
3-4	51.74	2.117	1993.1	53.92 ± 0.87	0.047 ± 0.012	0.100 ± 0.003	0.251 ± 0.005
4-5	49.76	2.790	1990.7	44.79 ± 0.27	0.077 ± 0.009	0.103 ± 0.003	0.265 ± 0.003
5-6	47.27	3.510	1988.2	52.45 ± 1.84	0.105 ± 0.012	0.128 ± 0.003	0.224 ± 0.011
6-7	47.02	4.258	1985.6	46.82 ± 0.29	0.122 ± 0.010	0.123 ± 0.004	0.256 ± 0.008
7-8	48.35	4.995	1983.0	54.43 ± 0.80	0.121 ± 0.012	0.141 ± 0.004	0.227 ± 0.004
8-9	48.66	5.715	1980.4	46.24 ± 0.79	0.153 ± 0.010	0.149 ± 0.005	0.236 ± 0.004
9-10	49.16	6.426	1977.9	33.27 ± 0.23	0.221 ± 0.015	0.211 ± 0.004	0.245 ± 0.011
10-12	46.99	7.531	1974.0	27.93 ± 0.19	0.279 ± 0.010	0.212 ± 0.006	0.261 ± 0.012
12-14	45.18	9.074	1968.6	31.47 ± 0.56	0.360 ± 0.012	0.243 ± 0.005	0.236 ± 0.012
14-16	45.07	10.66	1963.0	32.35 ± 0.38	0.234 ± 0.018	0.315 ± 0.008	0.262 ± 0.003
16-18	45.79	12.23	1958.6	20.52 ± 0.17	0.129 ± 0.015	0.226 ± 0.007	0.331 ± 0.007
18-20	45.59	13.79	1954.2	19.11 ± 0.16	0.036 ± 0.009	0.111 ± 0.003	0.315 ± 0.016
20-22	45.97	15.35	1949.8	16.13 ± 0.48	0.013 ± 0.005	0.028 ± 0.001	0.284 ± 0.009
22-24	42.42	16.98	1945.2	17.29 ± 0.14			
24-26	41.74	18.71	1940.3	10.94 ± 0.10			
26-28	42.15	20.44	1935.4	11.15 ± 0.14			
28-30	43.73	22.13	1930.7	11.43 ± 0.42			
30-32	43.86	23.78	1926.0	8.63 ± 0.23			
32-34	43.99	25.42	1921.4	6.98 ± 0.10			
34-36	43.31	27.07	1916.7	7.48 ± 0.09			
36-38	42.60	28.76	1912.0	5.27 ± 0.10			
38-40	40.64	30.51	1907.1	3.81 ± 0.07			
40-42	41.58	32.28	1902.1	4.91 ± 0.11			
42-44	41.52	34.04	1897.1	3.36 ± 0.07			

642-4 (25° 00.10'N, 122° 40.07'E; 1474 m)

0-1	55.99	0.241	2000.5	93.33 ± 0.82	0.140 ± 0.006	0.076 ± 0.000	0.232 ± 0.007
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1-2	52.67	0.760	1996.6	82.21 ± 1.08	0.148 ± 0.007	0.129 ± 0.000	0.239 ± 0.007
2-3	53.75	1.323	1992.3	73.91 ± 0.66	0.147 ± 0.007	0.108 ± 0.000	0.242 ± 0.005
3-4	51.49	1.925	1987.8	67.43 ± 0.70	0.187 ± 0.010	0.170 ± 0.000	0.245 ± 0.005
4-5	50.74	2.548	1983.1	56.05 ± 0.45	0.218 ± 0.013	0.174 ± 0.000	0.245 ± 0.004
5-6	50.67	3.184	1978.3	49.87 ± 0.43	0.244 ± 0.012	0.203 ± 0.000	0.249 ± 0.005
6-7	49.64	3.849	1973.3	39.28 ± 0.34	0.305 ± 0.010	0.260 ± 0.000	0.274 ± 0.001
7-8	50.66	4.522	1968.2	31.95 ± 0.30	0.322 ± 0.011	0.228 ± 0.001	0.275 ± 0.001
8-9	50.41	5.207	1963.0	27.10 ± 0.41	0.294 ± 0.014	0.275 ± 0.000	0.310 ± 0.001
9-10	50.02	5.892	1957.8	22.27 ± 0.35	0.143 ± 0.010	0.092 ± 0.001	0.284 ± 0.004
10-12	47.46	6.909	1950.1	19.30 ± 0.37	0.074 ± 0.008	0.102 ± 0.000	0.268 ± 0.002
12-14	46.70	8.277	1939.8	13.97 ± 0.42	0.037 ± 0.006	0.042 ± 0.000	0.273 ± 0.003
14-16	46.10	9.706	1929.0	8.58 ± 0.20	0.025 ± 0.013	0.010 ± 0.002	
16-18	47.52	11.21	1917.7	5.06 ± 0.19		0.004 ± 0.001	
18-20	42.49	12.74	1906.1	5.28 ± 0.15		0.003 ± 0.001	

679-7a (24° 48.18'N, 122° 31.04'E; 1284 m)

0-1	58.20	0.265	2002.6	51.13 ± 0.43	0.131 ± 0.012	0.073 ± 0.002	0.227 ± 0.003
1-2	54.06	0.833	2001.0	57.38 ± 0.32	0.085 ± 0.007	0.080 ± 0.002	0.238 ± 0.003
2-3	53.05	1.450	1999.2	54.30 ± 0.37	0.058 ± 0.007	0.083 ± 0.003	0.232 ± 0.004
3-4	49.30	2.115	1997.4	52.65 ± 0.28	0.101 ± 0.004	0.087 ± 0.002	0.236 ± 0.003
4-5	50.04	2.810	1995.4	49.01 ± 0.23	0.067 ± 0.006		0.236 ± 0.004
5-6	47.80	3.521	1993.4	49.20 ± 0.28	0.060 ± 0.006	0.096 ± 0.003	0.237 ± 0.004
6-7	47.04	4.263	1991.4	44.38 ± 0.35	0.076 ± 0.005	0.098 ± 0.002	0.237 ± 0.003
7-8	48.44	4.999	1989.3	42.31 ± 0.45	0.069 ± 0.015	0.117 ± 0.003	0.238 ± 0.003
8-9	48.93	5.714	1987.3	34.10 ± 0.31	0.059 ± 0.010	0.127 ± 0.003	0.235 ± 0.003
9-10	49.55	6.418	1985.3	34.73 ± 0.30	0.086 ± 0.007	0.141 ± 0.004	0.237 ± 0.003
10-11	50.18	7.109	1983.4	37.07 ± 0.26	0.072 ± 0.007	0.145 ± 0.003	0.232 ± 0.002
11-12	49.03	7.806	1981.4	27.91 ± 0.29	0.082 ± 0.007	0.147 ± 0.004	0.235 ± 0.003
12-13	49.04	8.514	1979.4	34.84 ± 0.33	0.097 ± 0.007	0.147 ± 0.003	0.237 ± 0.002

13-14	48.54	9.227	1977.4	29.16 ± 0.28	0.104 ± 0.007	0.141 ± 0.003	0.232 ± 0.002
14-15	48.42	9.947	1975.4	28.63 ± 0.32	0.108 ± 0.008	0.144 ± 0.003	0.245 ± 0.002
15-16	48.27	10.67	1973.4	25.94 ± 0.28	0.090 ± 0.007	0.149 ± 0.003	0.259 ± 0.003
16-17	47.82	11.40	1971.4	25.01 ± 0.30	0.113 ± 0.007	0.164 ± 0.003	0.258 ± 0.002
17-18	48.14	12.13	1969.3	24.79 ± 0.28	0.129 ± 0.008	0.191 ± 0.003	0.254 ± 0.002
18-19	47.28	12.87	1967.2	21.50 ± 0.36	0.189 ± 0.010	0.228 ± 0.003	0.270 ± 0.002
19-20	46.99	13.61	1965.1	19.50 ± 0.26	0.159 ± 0.007	0.251 ± 0.003	0.286 ± 0.001
20-21	45.76	14.38	1963.0	18.24 ± 0.28	0.144 ± 0.007	0.241 ± 0.004	0.298 ± 0.001
21-22	44.86	15.17	1960.8		0.063 ± 0.022	0.162 ± 0.003	0.301 ± 0.001
22-23	43.77	15.98	1958.5	14.82 ± 0.22	0.052 ± 0.008	0.116 ± 0.003	0.318 ± 0.002
23-24	43.96	16.80	1956.2			0.128 ± 0.004	0.305 ± 0.002
24-25	43.75	17.63	1953.9	13.55 ± 0.22	0.051 ± 0.008	0.106 ± 0.004	0.280 ± 0.004
25-26	43.98	18.45	1951.6			0.063 ± 0.002	0.262 ± 0.004
26-27	44.30	19.26	1949.3	11.47 ± 0.28		0.082 ± 0.005	
27-28	44.48	20.07	1947.0			0.035 ± 0.002	
28-29	44.27	20.88	1944.8	9.69 ± 0.19		0.021 ± 0.001	
29-30	43.19	21.71	1942.5			0.014 ± 0.001	
30-32	43.29	22.96	1938.9	7.90 ± 0.21			

* Cumulative mass is integrated from the core top to the mid-depth of each sampling interval.