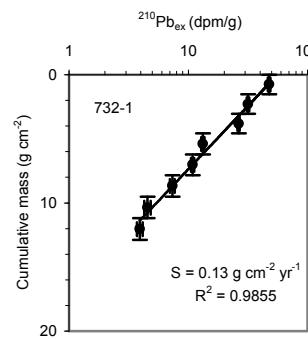


Downcore data on water content, cumulative mass, nuclide activities and sediment chronology

| Depth<br>(cm) | Content of<br>water (%) | Cumulative mass*<br>(g cm <sup>-2</sup> ) | Mean deposition<br>time (A.D.)** | <sup>210</sup> Pb <sub>ex</sub> | <sup>137</sup> Cs<br>(dpm g <sup>-1</sup> ) |
|---------------|-------------------------|---|----------------------------------|---------------------------------|---|
|---------------|-------------------------|---|----------------------------------|---------------------------------|---|

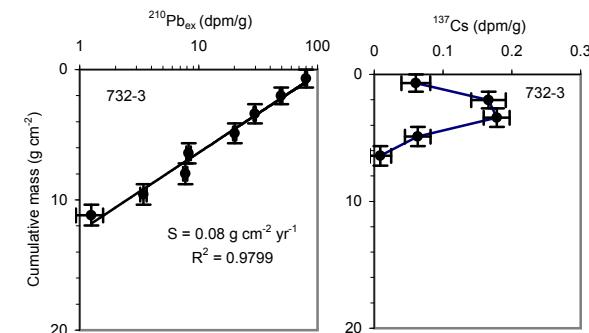
732-1 (22°11.17'N, 119°59.10'E; 1004 m; collected on September 30, 2004)

|       |       |                |        |              |  |
|-------|-------|----------------|--------|--------------|--|
| 0-2   | 46.64 | 0.760 ± 0.760  | 1999.0 | 47.63 ± 1.07 |  |
| 2-4   | 46.34 | 2.285 ± 0.766  | 1987.6 | 31.70 ± 0.80 |  |
| 4-6   | 46.60 | 3.812 ± 0.760  | 1976.1 | 26.42 ± 0.56 |  |
| 6-8   | 44.11 | 5.389 ± 0.816  | 1964.3 | 13.25 ± 0.40 |  |
| 8-10  | 44.10 | 7.022 ± 0.817  | 1952.0 | 10.86 ± 0.35 |  |
| 10-12 | 43.31 | 8.673 ± 0.835  | 1939.6 | 7.35 ± 0.32  |  |
| 12-14 | 42.96 | 10.351 ± 0.843 | 1927.0 | 4.55 ± 0.28  |  |
| 14-16 | 42.69 | 12.044 ± 0.849 | 1914.3 | 3.92 ± 0.22  |  |



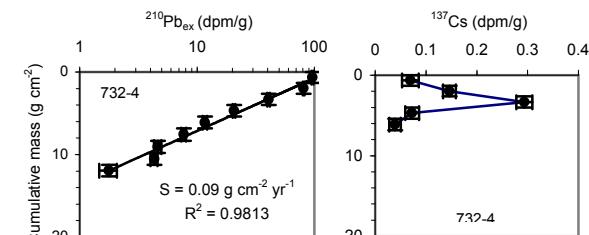
732-3 (22°5.39'N, 119°54.43'E; 1513 m; collected on September 30, 2004)

|       |       |                |        |              |               |
|-------|-------|----------------|--------|--------------|---------------|
| 0-2   | 50.07 | 0.687 ± 0.687  | 1996.3 | 79.89 ± 1.43 | 0.061 ± 0.021 |
| 2-4   | 52.11 | 2.018 ± 0.645  | 1979.9 | 49.46 ± 1.20 | 0.166 ± 0.025 |
| 4-6   | 47.64 | 3.402 ± 0.738  | 1962.9 | 29.60 ± 0.64 | 0.178 ± 0.019 |
| 6-8   | 47.08 | 4.890 ± 0.750  | 1944.6 | 20.10 ± 0.68 | 0.063 ± 0.019 |
| 8-10  | 45.95 | 6.415 ± 0.775  | 1925.8 | 8.24 ± 0.35  | 0.009 ± 0.016 |
| 10-12 | 44.76 | 7.991 ± 0.802  | 1906.5 | 7.73 ± 0.30  |               |
| 12-14 | 45.13 | 9.585 ± 0.793  | 1886.8 | 3.44 ± 0.21  |               |
| 14-16 | 45.03 | 11.174 ± 0.795 | 1867.3 | 1.25 ± 0.32  |               |



732-4 (22°2.58'N, 119°51.88'E; 1636 m; collected on October 1, 2004)

|       |       |               |        |              |               |
|-------|-------|---------------|--------|--------------|---------------|
| 0-2   | 51.71 | 0.653 ± 0.653 | 1997.2 | 96.11 ± 1.77 | 0.069 ± 0.017 |
| 2-4   | 51.03 | 1.973 ± 0.667 | 1981.9 | 80.98 ± 1.19 | 0.146 ± 0.013 |
| 4-6   | 50.13 | 3.326 ± 0.685 | 1966.3 | 40.74 ± 1.15 | 0.294 ± 0.016 |
| 6-8   | 49.96 | 4.700 ± 0.689 | 1950.4 | 20.62 ± 0.52 | 0.073 ± 0.014 |
| 8-10  | 48.26 | 6.114 ± 0.725 | 1934.1 | 11.68 ± 0.53 | 0.039 ± 0.011 |
| 10-12 | 47.59 | 7.577 ± 0.739 | 1917.2 | 7.69 ± 0.36  |               |



|       |       |                    |        |                 |
|-------|-------|--------------------|--------|-----------------|
| 12-14 | 47.06 | $9.066 \pm 0.750$  | 1899.9 | $4.63 \pm 0.33$ |
| 14-16 | 48.44 | $10.538 \pm 0.721$ | 1882.9 | $4.32 \pm 0.30$ |
| 16-18 | 49.93 | $11.948 \pm 0.690$ | 1866.6 | $1.77 \pm 0.30$ |

**732-5 (22°0.54'N, 119°49.83'E; 1630 m; collected on October 1, 2004)**

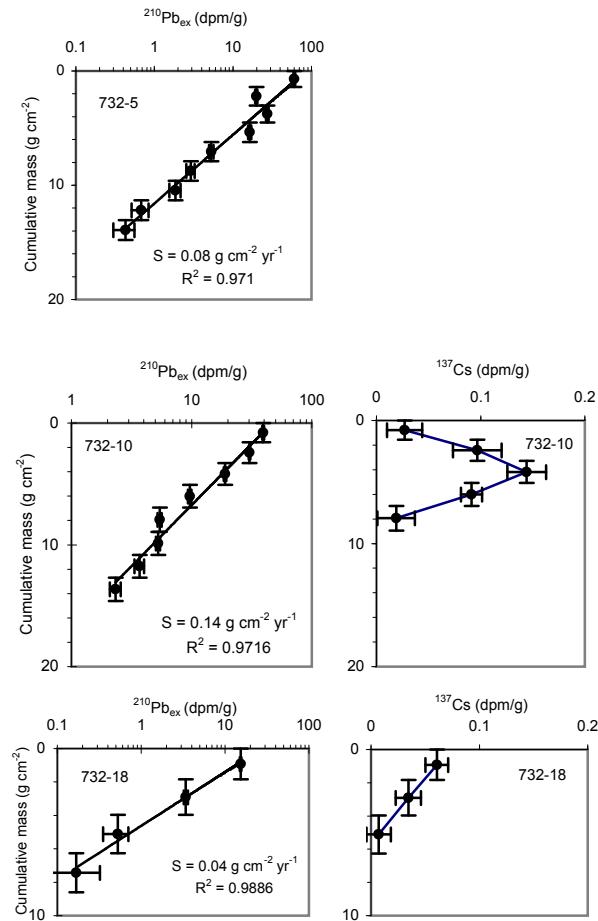
|       |       |                    |        |                  |
|-------|-------|--------------------|--------|------------------|
| 0-2   | 49.55 | $0.697 \pm 0.697$  | 1996.1 | $60.44 \pm 1.44$ |
| 2-4   | 44.20 | $2.209 \pm 0.814$  | 1977.5 | $19.82 \pm 0.58$ |
| 4-6   | 47.46 | $3.765 \pm 0.742$  | 1958.3 | $27.37 \pm 0.97$ |
| 6-8   | 42.62 | $5.358 \pm 0.851$  | 1938.7 | $16.35 \pm 0.82$ |
| 8-10  | 42.72 | $7.057 \pm 0.849$  | 1917.7 | $5.31 \pm 0.33$  |
| 10-12 | 42.87 | $8.751 \pm 0.845$  | 1896.8 | $2.89 \pm 0.36$  |
| 12-14 | 42.30 | $10.455 \pm 0.859$ | 1875.8 | $1.85 \pm 0.30$  |
| 14-16 | 41.94 | $12.180 \pm 0.867$ | 1854.6 | $0.68 \pm 0.16$  |
| 16-18 | 41.72 | $13.920 \pm 0.872$ | 1833.1 | $0.43 \pm 0.13$  |

**732-10 (21°52.88'N, 120°9.18'E; 1562 m; collected on October 2, 2004)**

|       |       |                    |        |                  |                   |
|-------|-------|--------------------|--------|------------------|-------------------|
| 0-2   | 45.54 | $0.784 \pm 0.784$  | 1999.0 | $39.33 \pm 0.67$ | $0.027 \pm 0.017$ |
| 2-4   | 42.48 | $2.422 \pm 0.854$  | 1986.9 | $30.29 \pm 0.44$ | $0.097 \pm 0.023$ |
| 4-6   | 40.51 | $4.178 \pm 0.902$  | 1974.0 | $18.98 \pm 0.51$ | $0.144 \pm 0.019$ |
| 6-8   | 39.19 | $6.014 \pm 0.934$  | 1960.4 | $9.65 \pm 0.31$  | $0.091 \pm 0.010$ |
| 8-10  | 36.90 | $7.942 \pm 0.993$  | 1946.2 | $5.42 \pm 0.21$  | $0.019 \pm 0.018$ |
| 10-12 | 38.92 | $9.877 \pm 0.941$  | 1932.0 | $5.26 \pm 0.22$  |                   |
| 12-14 | 39.26 | $11.751 \pm 0.933$ | 1918.2 | $3.69 \pm 0.34$  |                   |
| 14-16 | 38.05 | $13.647 \pm 0.963$ | 1904.2 | $2.33 \pm 0.24$  |                   |

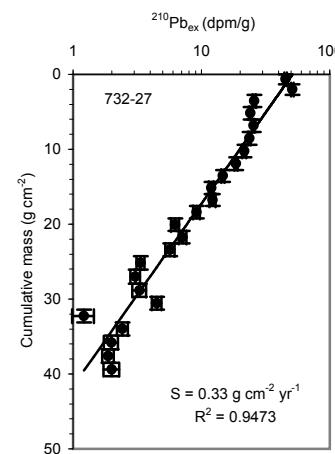
**732-18 (21°59.29'N, 120°12.02'E; 1074 m; collected on October 2, 2004)**

|     |       |                   |        |                  |                   |
|-----|-------|-------------------|--------|------------------|-------------------|
| 0-2 | 39.82 | $0.919 \pm 0.919$ | 1983.6 | $15.32 \pm 0.35$ | $0.061 \pm 0.010$ |
| 2-4 | 34.16 | $2.904 \pm 1.067$ | 1938.0 | $3.40 \pm 0.19$  | $0.034 \pm 0.012$ |
| 4-6 | 31.49 | $5.115 \pm 1.143$ | 1887.2 | $0.53 \pm 0.18$  | $0.007 \pm 0.011$ |
| 6-8 | 30.66 | $7.425 \pm 1.168$ | 1834.1 | $0.17 \pm 0.15$  |                   |



**732-27 (22°11.28'N, 120°15.88'E; 822 m; collected on October 2, 2004)**

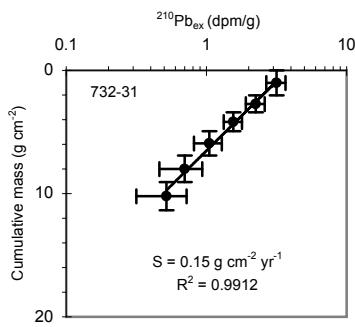
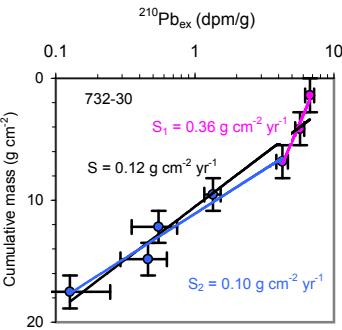
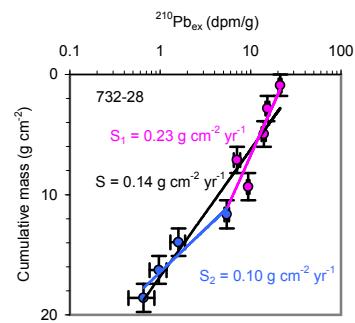
|       |       |                    |        |                  |
|-------|-------|--------------------|--------|------------------|
| 0-2   | 51.75 | $0.652 \pm 0.652$  | 2002.8 | $45.39 \pm 1.02$ |
| 2-4   | 48.38 | $2.027 \pm 0.722$  | 1998.6 | $51.00 \pm 1.23$ |
| 4-6   | 44.59 | $3.554 \pm 0.805$  | 1993.9 | $25.83 \pm 0.70$ |
| 6-8   | 43.61 | $5.188 \pm 0.828$  | 1989.0 | $24.13 \pm 0.65$ |
| 8-10  | 43.16 | $6.854 \pm 0.838$  | 1983.9 | $25.45 \pm 0.51$ |
| 10-12 | 42.47 | $8.547 \pm 0.854$  | 1978.8 | $23.61 \pm 0.54$ |
| 12-14 | 42.96 | $10.244 \pm 0.843$ | 1973.6 | $21.56 \pm 0.83$ |
| 14-16 | 43.26 | $11.923 \pm 0.836$ | 1968.5 | $18.58 \pm 0.52$ |
| 16-18 | 45.02 | $13.555 \pm 0.796$ | 1963.6 | $14.71 \pm 0.42$ |
| 18-20 | 44.32 | $15.162 \pm 0.811$ | 1958.7 | $11.94 \pm 0.52$ |
| 20-22 | 44.60 | $16.778 \pm 0.805$ | 1953.8 | $12.21 \pm 0.64$ |
| 22-24 | 43.81 | $18.407 \pm 0.823$ | 1948.8 | $9.17 \pm 0.58$  |
| 24-26 | 43.07 | $20.071 \pm 0.841$ | 1943.7 | $6.23 \pm 0.44$  |
| 26-28 | 43.52 | $21.741 \pm 0.830$ | 1938.7 | $7.14 \pm 0.49$  |
| 28-30 | 42.97 | $23.414 \pm 0.843$ | 1933.6 | $5.69 \pm 0.48$  |
| 30-32 | 40.23 | $25.165 \pm 0.908$ | 1928.3 | $3.36 \pm 0.24$  |
| 32-34 | 38.89 | $27.015 \pm 0.942$ | 1922.6 | $3.06 \pm 0.26$  |
| 34-36 | 41.65 | $28.831 \pm 0.874$ | 1917.1 | $3.30 \pm 0.41$  |
| 36-38 | 42.32 | $30.564 \pm 0.858$ | 1911.9 | $4.49 \pm 0.38$  |
| 38-40 | 42.95 | $32.265 \pm 0.843$ | 1906.7 | $1.22 \pm 0.24$  |
| 40-42 | 41.23 | $33.992 \pm 0.884$ | 1901.4 | $2.43 \pm 0.24$  |
| 42-44 | 39.90 | $35.793 \pm 0.917$ | 1896.0 | $1.99 \pm 0.25$  |
| 44-46 | 40.36 | $37.616 \pm 0.905$ | 1890.4 | $1.88 \pm 0.20$  |
| 46-48 | 40.71 | $39.418 \pm 0.897$ | 1884.9 | $2.00 \pm 0.28$  |



**732-28 (22°14.28'N, 120°19.19'E; 415 m; collected on October 3, 2004)**

|     |       |                   |        |                  |
|-----|-------|-------------------|--------|------------------|
| 0-2 | 40.90 | $0.892 \pm 0.892$ | 2000.8 | $21.24 \pm 0.77$ |
| 2-4 | 34.82 | $2.833 \pm 1.049$ | 1992.3 | $15.33 \pm 0.71$ |

|       |       |                    |        |                  |
|-------|-------|--------------------|--------|------------------|
| 4-6   | 34.18 | $4.949 \pm 1.066$  | 1983.1 | $14.00 \pm 0.71$ |
| 6-8   | 33.01 | $7.115 \pm 1.099$  | 1973.6 | $7.07 \pm 0.56$  |
| 8-10  | 32.13 | $9.339 \pm 1.124$  | 1963.8 | $9.40 \pm 0.34$  |
| 10-12 | 30.68 | $11.630 \pm 1.167$ | 1953.7 | $5.44 \pm 0.32$  |
| 12-14 | 31.30 | $13.946 \pm 1.149$ | 1930.6 | $1.59 \pm 0.30$  |
| 14-16 | 30.73 | $16.260 \pm 1.165$ | 1907.4 | $0.97 \pm 0.20$  |
| 16-18 | 30.77 | $18.590 \pm 1.164$ | 1884.2 | $0.65 \pm 0.21$  |



#### 732-30 (22°19.07'N, 120°24.18'E; 119 m; collected on October 3, 2004)

|       |       |                    |        |                 |
|-------|-------|--------------------|--------|-----------------|
| 0-2   | 23.57 | $1.395 \pm 1.395$  | 2000.9 | $6.71 \pm 0.51$ |
| 2-4   | 24.97 | $4.137 \pm 1.347$  | 1993.3 | $5.70 \pm 0.42$ |
| 4-6   | 25.00 | $6.831 \pm 1.346$  | 1985.9 | $4.26 \pm 0.41$ |
| 6-8   | 25.06 | $9.522 \pm 1.344$  | 1958.4 | $1.35 \pm 0.18$ |
| 8-10  | 25.93 | $12.182 \pm 1.316$ | 1931.3 | $0.55 \pm 0.20$ |
| 10-12 | 25.39 | $14.830 \pm 1.333$ | 1904.3 | $0.46 \pm 0.17$ |
| 12-14 | 24.94 | $17.512 \pm 1.348$ | 1876.9 | $0.13 \pm 0.12$ |

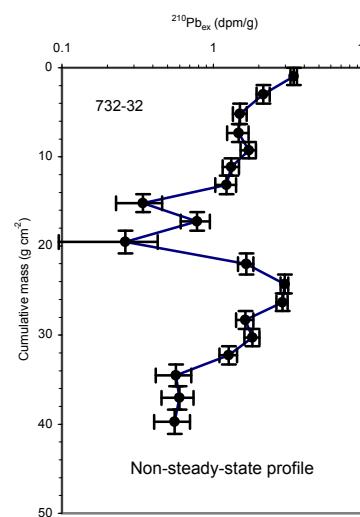
#### 732-31 (22°21.54'N, 120°25.81'E; 68 m; collected on October 3, 2004)

|       |       |                    |        |                 |
|-------|-------|--------------------|--------|-----------------|
| 0-2   | 35.95 | $1.018 \pm 1.018$  | 1998.1 | $3.17 \pm 0.49$ |
| 2-4   | 50.04 | $2.724 \pm 0.687$  | 1986.9 | $2.25 \pm 0.35$ |
| 4-6   | 46.71 | $4.170 \pm 0.758$  | 1977.4 | $1.56 \pm 0.23$ |
| 6-8   | 36.76 | $5.925 \pm 0.997$  | 1965.8 | $1.05 \pm 0.23$ |
| 8-10  | 33.78 | $7.999 \pm 1.078$  | 1952.2 | $0.70 \pm 0.24$ |
| 10-12 | 31.85 | $10.210 \pm 1.133$ | 1937.7 | $0.52 \pm 0.20$ |

#### 732-32 (22°24.36'N, 120°24.54'E; 350 m; collected on October 4, 2004)

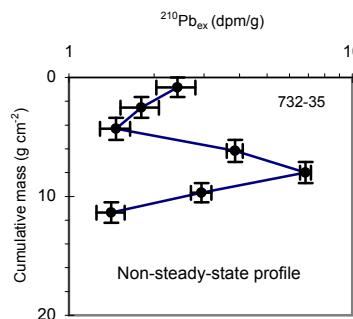
|     |       |                   |  |                 |
|-----|-------|-------------------|--|-----------------|
| 0-2 | 38.09 | $0.962 \pm 0.962$ |  | $3.41 \pm 0.17$ |
|-----|-------|-------------------|--|-----------------|

|       |       |                    |                 |
|-------|-------|--------------------|-----------------|
| 2-4   | 35.03 | $2.968 \pm 1.043$  | $2.15 \pm 0.22$ |
| 4-6   | 31.23 | $5.162 \pm 1.151$  | $1.51 \pm 0.16$ |
| 6-8   | 36.01 | $7.329 \pm 1.017$  | $1.47 \pm 0.24$ |
| 8-10  | 40.04 | $9.259 \pm 0.913$  | $1.72 \pm 0.20$ |
| 10-12 | 37.93 | $11.139 \pm 0.966$ | $1.32 \pm 0.17$ |
| 12-14 | 34.94 | $13.151 \pm 1.046$ | $1.23 \pm 0.19$ |
| 14-16 | 36.67 | $15.196 \pm 0.999$ | $0.34 \pm 0.12$ |
| 16-18 | 35.05 | $17.238 \pm 1.043$ | $0.78 \pm 0.17$ |
| 18-20 | 27.11 | $19.558 \pm 1.277$ | $0.26 \pm 0.17$ |
| 20-22 | 30.07 | $22.021 \pm 1.185$ | $1.65 \pm 0.19$ |
| 22-24 | 34.21 | $24.272 \pm 1.066$ | $2.97 \pm 0.18$ |
| 24-26 | 37.14 | $26.325 \pm 0.987$ | $2.87 \pm 0.24$ |
| 26-28 | 36.46 | $28.316 \pm 1.005$ | $1.63 \pm 0.22$ |
| 28-30 | 37.80 | $30.291 \pm 0.970$ | $1.82 \pm 0.21$ |
| 30-32 | 36.18 | $32.274 \pm 1.012$ | $1.27 \pm 0.17$ |
| 32-34 | 28.77 | $34.511 \pm 1.225$ | $0.57 \pm 0.15$ |
| 34-36 | 26.23 | $37.042 \pm 1.306$ | $0.60 \pm 0.14$ |
| 36-38 | 24.35 | $39.716 \pm 1.368$ | $0.56 \pm 0.15$ |



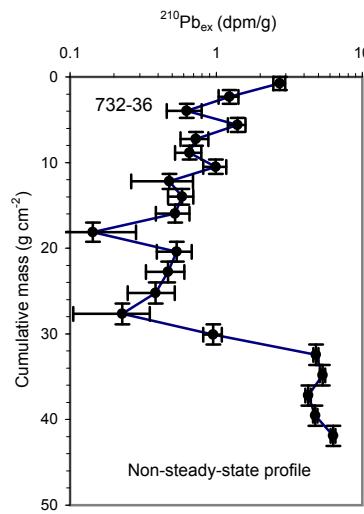
**732-35 (22°22.32'N, 120°19.14'E; 511 m; collected on October 4, 2004)**

|       |       |                    |                 |
|-------|-------|--------------------|-----------------|
| 0-2   | 43.80 | $0.823 \pm 0.823$  | $2.42 \pm 0.38$ |
| 2-4   | 41.82 | $2.517 \pm 0.870$  | $1.80 \pm 0.28$ |
| 4-6   | 39.48 | $4.314 \pm 0.927$  | $1.47 \pm 0.18$ |
| 6-8   | 39.29 | $6.173 \pm 0.932$  | $3.86 \pm 0.25$ |
| 8-10  | 41.09 | $7.993 \pm 0.888$  | $6.84 \pm 0.30$ |
| 10-12 | 44.73 | $9.683 \pm 0.802$  | $2.94 \pm 0.25$ |
| 12-14 | 42.12 | $11.348 \pm 0.863$ | $1.41 \pm 0.16$ |



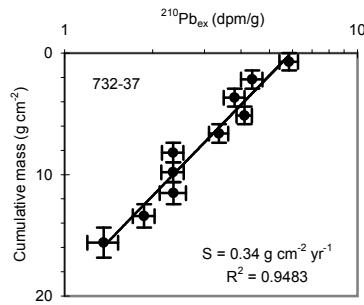
**732-36 (22°20.81'N, 120°16.31'E; 622 m; collected on October 4, 2004)**

|       |       |                    |                 |
|-------|-------|--------------------|-----------------|
| 0-2   | 46.55 | $0.762 \pm 0.762$  | $2.72 \pm 0.25$ |
| 2-4   | 44.67 | $2.327 \pm 0.804$  | $1.23 \pm 0.19$ |
| 4-6   | 43.61 | $3.958 \pm 0.828$  | $0.63 \pm 0.17$ |
| 6-8   | 44.01 | $5.605 \pm 0.819$  | $1.40 \pm 0.19$ |
| 8-10  | 44.23 | $7.237 \pm 0.814$  | $0.73 \pm 0.16$ |
| 10-12 | 44.70 | $8.853 \pm 0.803$  | $0.66 \pm 0.13$ |
| 12-14 | 43.06 | $10.496 \pm 0.841$ | $0.99 \pm 0.18$ |
| 14-16 | 42.11 | $12.200 \pm 0.863$ | $0.48 \pm 0.22$ |
| 16-18 | 39.89 | $13.980 \pm 0.917$ | $0.58 \pm 0.12$ |
| 18-20 | 34.55 | $15.953 \pm 1.056$ | $0.52 \pm 0.14$ |
| 20-22 | 32.45 | $18.125 \pm 1.115$ | $0.14 \pm 0.14$ |
| 22-24 | 30.68 | $20.407 \pm 1.167$ | $0.54 \pm 0.14$ |
| 24-26 | 29.51 | $22.776 \pm 1.202$ | $0.47 \pm 0.14$ |
| 26-28 | 28.46 | $25.213 \pm 1.235$ | $0.38 \pm 0.14$ |
| 28-30 | 28.98 | $27.666 \pm 1.218$ | $0.23 \pm 0.12$ |
| 30-32 | 30.01 | $30.072 \pm 1.187$ | $0.95 \pm 0.14$ |
| 32-34 | 29.80 | $32.452 \pm 1.193$ | $4.82 \pm 0.19$ |
| 34-36 | 30.24 | $34.826 \pm 1.180$ | $5.35 \pm 0.23$ |
| 36-38 | 30.24 | $37.186 \pm 1.180$ | $4.25 \pm 0.18$ |
| 38-40 | 30.24 | $39.547 \pm 1.180$ | $4.76 \pm 0.17$ |
| 40-42 | 30.24 | $41.908 \pm 1.180$ | $6.31 \pm 0.24$ |



**732-37 (22°18.85'N, 120°13.53'E; 975 m; collected on October 4, 2004)**

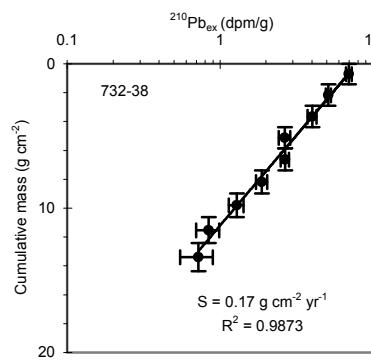
|      |       |                   |        |                 |
|------|-------|-------------------|--------|-----------------|
| 0-2  | 48.82 | $0.713 \pm 0.713$ | 2002.6 | $5.84 \pm 0.42$ |
| 2-4  | 47.33 | $2.170 \pm 0.745$ | 1998.3 | $4.37 \pm 0.37$ |
| 4-6  | 47.62 | $3.653 \pm 0.738$ | 1993.9 | $3.80 \pm 0.31$ |
| 6-8  | 47.75 | $5.127 \pm 0.735$ | 1989.5 | $4.11 \pm 0.25$ |
| 8-10 | 46.69 | $6.620 \pm 0.758$ | 1985.0 | $3.36 \pm 0.25$ |



|       |       |                    |        |                 |
|-------|-------|--------------------|--------|-----------------|
| 10-12 | 44.68 | $8.182 \pm 0.803$  | 1980.4 | $2.35 \pm 0.20$ |
| 12-14 | 43.87 | $9.807 \pm 0.822$  | 1975.5 | $2.34 \pm 0.21$ |
| 14-16 | 40.62 | $11.528 \pm 0.899$ | 1970.4 | $2.35 \pm 0.24$ |
| 16-18 | 37.67 | $13.400 \pm 0.973$ | 1964.8 | $1.87 \pm 0.16$ |
| 18-20 | 28.64 | $15.602 \pm 1.229$ | 1958.2 | $1.36 \pm 0.16$ |

**732-38 (22°15.70'N, 120°11.32'E; 1156 m; collected on October 4, 2004)**

|       |       |                    |        |                 |
|-------|-------|--------------------|--------|-----------------|
| 0-2   | 48.82 | $0.713 \pm 0.713$  | 2000.5 | $6.98 \pm 0.30$ |
| 2-4   | 47.33 | $2.170 \pm 0.745$  | 1991.9 | $5.12 \pm 0.20$ |
| 4-6   | 47.62 | $3.653 \pm 0.738$  | 1983.1 | $4.01 \pm 0.27$ |
| 6-8   | 47.75 | $5.127 \pm 0.735$  | 1974.4 | $2.66 \pm 0.23$ |
| 8-10  | 46.69 | $6.620 \pm 0.758$  | 1965.6 | $2.66 \pm 0.16$ |
| 10-12 | 44.68 | $8.182 \pm 0.803$  | 1956.3 | $1.88 \pm 0.16$ |
| 12-14 | 43.87 | $9.807 \pm 0.822$  | 1946.7 | $1.29 \pm 0.14$ |
| 14-16 | 40.62 | $11.528 \pm 0.899$ | 1936.5 | $0.84 \pm 0.14$ |
| 16-18 | 37.67 | $13.400 \pm 0.973$ | 1925.5 | $0.72 \pm 0.17$ |



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

\*\* Chronologies are established from <sup>210</sup>Pb decay in hemipelagic sediments and constrained by <sup>137</sup>Cs stratigraphy where available.