

Radiation Transport Calculations for Hiroshima and Nagasaki

Table D2. Continued

| Ground range meter | Slant range meter | Dose | | | Reaction | ⁶⁰ Ca(n,γ) | | | ⁶⁵ Co(n,γ) | | | ¹⁵¹ Eu->gnd | | | ¹⁵² Eu(n,γ) | | | ⁶² Ni(n,γ) | | | ³² S(n,p) | | | ³⁶ K(n,α) | | | |
|-----------------------|----------------------|--------------|----------------------|--------------------|----------|-----------------------|-----------|-----------|-----------------------|-----------------|-----------------|---|-----------------------|---------------------|------------------------|-----------------------|----------|-----------------------|----------|----------|----------------------|--------------------|-------|----------------------|-------|-------|-------|
| | | Neutron dose | Secondary gamma dose | Primary gamma dose | | Total gamma dose | Abundance | Half-life | Time units | Branching ratio | Detector height | Units in atoms (unless otherwise indicated) | ⁴¹ Ca/g Ca | ³⁶ Cl/Cr | Bq/mg Co | ⁶⁵ Ni/g Cu | Bq/mg Eu | Bq/mg Eu | Bq/mg Eu | Bq/mg Ni | dp/mg S | ³⁶ Cl/K | years | days | years | years | years |
| 1700 | 1802 | 2.49E-3 | 1.01E-1 | 1.37E-1 | 2.37E-1 | 0.96941 | 0.7577 | 1 | 0.6917 | 5.12E+3 | 2.51E-3 | 3.88E-4 | 0.4782 | 0.5218 | 0.03634 | 0.9502 | 0.93258 | | | | | | | | | | |
| 1725 | 1826 | 2.13E-3 | 9.23E-2 | 1.26E-1 | 2.18E-1 | 40.08 | 35.453 | 58.9332 | 4.44E+3 | 2.11E-3 | 3.26E-4 | 0.6917 | 151.96 | 151.96 | 58.71 | 39.102 | 4.56E-18 | | | | | | | | | | |
| 1750 | 1850 | 1.82E-3 | 8.43E-2 | 1.12E-1 | 1.96E-1 | 80000 | 301000 | 5.2714 | 3.83E+3 | 1.78E-3 | 2.74E-4 | 0.6917 | 13.542 | 8.593 | 100.1 | 14.262 | 3.99E-18 | | | | | | | | | | |
| 1775 | 1873 | 1.56E-3 | 7.73E-2 | 1.02E-1 | 1.79E-1 | | | | 3.34E+3 | 1.49E-3 | 2.30E-4 | 0.6917 | | | | | 3.49E-18 | | | | | | | | | | |
| 1800 | 1897 | 1.33E-3 | 7.07E-2 | 9.41E-2 | 1.65E-1 | | | | 2.87E+3 | 1.25E-3 | 1.94E-4 | 0.6917 | | | | | 3.02E-18 | | | | | | | | | | |
| 1825 | 1921 | 1.13E-3 | 6.48E-2 | 8.16E-2 | 1.48E-1 | | | | 2.51E+3 | 1.06E-3 | 1.63E-4 | 0.6917 | | | | | 2.67E-18 | | | | | | | | | | |
| 1850 | 1945 | 9.70E-4 | 5.94E-2 | 7.30E-2 | 1.32E-1 | | | | 2.16E+3 | 8.89E-4 | 1.37E-4 | 0.6917 | | | | | 2.29E-18 | | | | | | | | | | |
| 1875 | 1968 | 8.34E-4 | 5.44E-2 | 6.70E-2 | 1.21E-1 | | | | 1.89E+3 | 7.50E-4 | 1.16E-4 | 0.6917 | | | | | 2.00E-18 | | | | | | | | | | |
| 1900 | 1992 | 7.11E-4 | 4.99E-2 | 6.09E-2 | 1.10E-1 | | | | 1.63E+3 | 6.32E-4 | 9.78E-5 | 0.6917 | | | | | 1.75E-18 | | | | | | | | | | |
| 1925 | 2016 | 6.15E-4 | 4.58E-2 | 5.37E-2 | 9.96E-2 | | | | 1.43E+3 | 5.34E-4 | 8.23E-5 | 0.6917 | | | | | 1.52E-18 | | | | | | | | | | |
| 1950 | 2040 | 5.22E-4 | 4.20E-2 | 4.77E-2 | 8.98E-2 | | | | 1.23E+3 | 4.51E-4 | 6.97E-5 | 0.6917 | | | | | 1.31E-18 | | | | | | | | | | |
| 1975 | 2064 | 4.55E-4 | 3.86E-2 | 4.40E-2 | 8.28E-2 | | | | 1.09E+3 | 3.82E-4 | 5.88E-5 | 0.6917 | | | | | 1.15E-18 | | | | | | | | | | |
| 2000 | 2088 | 3.86E-4 | 3.54E-2 | 4.10E-2 | 7.64E-2 | | | | 9.41E+2 | 3.23E-4 | 4.99E-5 | 0.6917 | | | | | 9.86E-19 | | | | | | | | | | |
| 2025 | 2112 | 3.35E-4 | 3.26E-2 | 3.86E-2 | 7.12E-2 | | | | 8.17E+2 | 2.74E-4 | 4.22E-5 | 0.6917 | | | | | 8.67E-19 | | | | | | | | | | |
| 2050 | 2136 | 2.86E-4 | 2.99E-2 | 3.53E-2 | 6.52E-2 | | | | 7.11E+2 | 2.32E-4 | 3.58E-5 | 0.6917 | | | | | 7.57E-19 | | | | | | | | | | |
| 2075 | 2160 | 2.47E-4 | 2.75E-2 | 3.03E-2 | 5.78E-2 | | | | 6.20E+2 | 1.97E-4 | 3.03E-5 | 0.6917 | | | | | 6.55E-19 | | | | | | | | | | |
| 2100 | 2184 | 2.11E-4 | 2.53E-2 | 2.71E-2 | 5.24E-2 | | | | 5.38E+2 | 1.67E-4 | 2.58E-5 | 0.6917 | | | | | 5.78E-19 | | | | | | | | | | |
| 2125 | 2208 | 1.83E-4 | 2.32E-2 | 2.52E-2 | 4.88E-2 | | | | 4.67E+2 | 1.42E-4 | 2.19E-5 | 0.6917 | | | | | 5.01E-19 | | | | | | | | | | |
| 2150 | 2232 | 1.57E-4 | 2.14E-2 | 2.24E-2 | 4.38E-2 | | | | 4.06E+2 | 1.21E-4 | 1.86E-5 | 0.6917 | | | | | 4.38E-19 | | | | | | | | | | |
| 2175 | 2256 | 1.36E-4 | 1.96E-2 | 1.97E-2 | 3.94E-2 | | | | 3.54E+2 | 1.03E-4 | 1.58E-5 | 0.6917 | | | | | 3.84E-19 | | | | | | | | | | |
| 2200 | 2280 | 1.16E-4 | 1.81E-2 | 1.79E-2 | 3.59E-2 | | | | 3.06E+2 | 8.74E-5 | 1.35E-5 | 0.6917 | | | | | 3.36E-19 | | | | | | | | | | |
| 2225 | 2304 | 1.01E-4 | 1.66E-2 | 1.62E-2 | 3.28E-2 | | | | 2.68E+2 | 7.45E-5 | 1.15E-5 | 0.6917 | | | | | 2.95E-19 | | | | | | | | | | |
| 2250 | 2328 | 8.61E-5 | 1.53E-2 | 1.46E-2 | 3.01E-2 | | | | 2.31E+2 | 6.35E-5 | 9.82E-6 | 0.6917 | | | | | 2.56E-19 | | | | | | | | | | |
| 2275 | 2353 | 7.51E-5 | 1.41E-2 | 1.36E-2 | 2.77E-2 | | | | 2.02E+2 | 5.42E-5 | 8.36E-6 | 0.6917 | | | | | 2.24E-19 | | | | | | | | | | |
| 2300 | 2377 | 6.41E-5 | 1.30E-2 | 1.24E-2 | 2.53E-2 | | | | 1.75E+2 | 4.63E-5 | 7.16E-6 | 0.6917 | | | | | 1.95E-19 | | | | | | | | | | |
| 2325 | 2401 | 5.59E-5 | 1.19E-2 | 1.11E-2 | 2.30E-2 | | | | 1.50E+2 | 3.95E-5 | 6.09E-6 | 0.6917 | | | | | 1.71E-19 | | | | | | | | | | |
| 2350 | 2425 | 4.77E-5 | 1.10E-2 | 9.98E-3 | 2.10E-2 | | | | 1.28E+2 | 3.38E-5 | 5.23E-6 | 0.6917 | | | | | 1.48E-19 | | | | | | | | | | |
| 2375 | 2449 | 4.17E-5 | 1.01E-2 | 8.92E-3 | 1.93E-2 | | | | 1.09E+2 | 2.89E-5 | 4.45E-6 | 0.6917 | | | | | 1.30E-19 | | | | | | | | | | |
| 2400 | 2474 | 3.56E-5 | 9.31E-3 | 8.55E-3 | 1.79E-2 | | | | 9.38E+2 | 2.48E-5 | 3.83E-6 | 0.6917 | | | | | 1.13E-19 | | | | | | | | | | |
| 2425 | 2498 | 3.11E-5 | 8.58E-3 | 7.67E-3 | 1.63E-2 | | | | 8.02E+3 | 2.12E-5 | 3.26E-6 | 0.6917 | | | | | 9.85E-20 | | | | | | | | | | |
| 2450 | 2522 | 2.66E-5 | 7.91E-3 | 7.00E-3 | 1.49E-2 | | | | 6.88E+3 | 1.82E-5 | 2.81E-6 | 0.6917 | | | | | 8.63E-20 | | | | | | | | | | |
| 2475 | 2546 | 2.33E-5 | 7.29E-3 | 6.40E-3 | 1.37E-2 | | | | 5.88E+3 | 1.55E-5 | 2.39E-6 | 0.6917 | | | | | 7.50E-20 | | | | | | | | | | |
| 2500 | 2571 | 1.99E-5 | 6.72E-3 | 5.82E-3 | 1.25E-2 | | | | 5.06E+3 | 1.34E-5 | 2.06E-6 | 0.6917 | | | | | 6.53E-20 | | | | | | | | | | |

Table D3. DS86 Nagasaki total doses and activations for 503-m HOB above standard ground at 21-kt yield

| Ground range meter | Slant range meter | Dose | | Neutron dose | | Secondary gamma dose | | Primary gamma dose | | Total gamma dose | | Reaction | | ⁴⁰ Ca(n,γ) | | ³⁵ Cl(n,γ) | | ⁵⁶ Co(n,γ) | | ⁶³ Cu(n,p) | | ¹⁵¹ Eu->gnd | | ¹⁵² Eu(n,γ) | | ⁶² Ni(n,γ) | | ³² S(n,p) | | ³⁹ K(n,α) | | | | | | | |
|--------------------|-------------------|-------|---------|--------------|---------|----------------------|---------|--------------------|---------|------------------|---------|----------|---|-----------------------|---------------------|-----------------------|---------------------|-----------------------|----------|-----------------------|----------|------------------------|----------|------------------------|----------|-----------------------|----------|----------------------|---------|----------------------|---------|---------|--|--|--|--|--|
| | | Units | gray | gray | gray | gray | gray | gray | gray | gray | gray | gray | Units in atoms (unless otherwise indicated) | Bq/mg Ca | ³⁵ Cl/Cl | Bq/mg Co | ⁶³ Ni/Ni | Bq/mg Cu | Bq/mg Eu | Bq/mg Eu | Bq/mg Eu | Bq/mg Eu | Bq/mg Eu | Bq/mg Eu | Bq/mg Eu | Bq/mg Eu | Bq/mg Eu | Bq/mg Eu | Bq/mg S | Bq/mg S | Bq/mg K | Bq/mg K | | | | | |
| 0 | 502 | | 2.15E+1 | 1.08E+2 | 2.28E+2 | 3.34E+2 | 3.34E+2 | 3.34E+2 | 3.34E+2 | 3.34E+2 | 3.34E+2 | 0.96941 | 0.7577 | 1 | 0.6917 | 0.4782 | 0.5218 | 0.03634 | 0.9502 | 0.93258 | 0.9502 | 0.93258 | 0.9502 | 0.93258 | 0.9502 | 0.93258 | 0.9502 | 0.93258 | 0.9502 | 0.93258 | 0.9502 | 0.93258 | | | | | |
| 25 | 503 | | 2.09E+1 | 1.03E+2 | 2.23E+2 | 3.28E+2 | 3.28E+2 | 3.28E+2 | 3.28E+2 | 3.28E+2 | 3.28E+2 | 40.08 | 35.453 | 58.9332 | 63.54 | 151.96 | 151.96 | 151.96 | 58.71 | 32.064 | 39.102 | 32.064 | 39.102 | 32.064 | 39.102 | 32.064 | 39.102 | 32.064 | 39.102 | 32.064 | 39.102 | | | | | | |
| 50 | 504 | | 2.01E+1 | 9.76E+1 | 2.18E+2 | 3.15E+2 | 3.15E+2 | 3.15E+2 | 3.15E+2 | 3.15E+2 | 3.15E+2 | 80000 | 301000 | 5.2714 | 100.1 | 13.542 | 8.593 | 100.1 | 13.542 | 14.262 | 301000 | 14.262 | 301000 | 14.262 | 301000 | 14.262 | 301000 | 14.262 | 301000 | 14.262 | 301000 | | | | | | |
| 75 | 508 | | 1.89E+1 | 8.94E+1 | 2.11E+2 | 3.01E+2 | 3.01E+2 | 3.01E+2 | 3.01E+2 | 3.01E+2 | 3.01E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 | 512 | | 1.82E+1 | 8.48E+1 | 2.08E+2 | 2.92E+2 | 2.92E+2 | 2.92E+2 | 2.92E+2 | 2.92E+2 | 2.92E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 125 | 517 | | 1.72E+1 | 7.95E+1 | 2.00E+2 | 2.79E+2 | 2.79E+2 | 2.79E+2 | 2.79E+2 | 2.79E+2 | 2.79E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 150 | 524 | | 1.61E+1 | 7.43E+1 | 1.91E+2 | 2.65E+2 | 2.65E+2 | 2.65E+2 | 2.65E+2 | 2.65E+2 | 2.65E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 175 | 532 | | 1.49E+1 | 6.93E+1 | 1.81E+2 | 2.50E+2 | 2.50E+2 | 2.50E+2 | 2.50E+2 | 2.50E+2 | 2.50E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200 | 540 | | 1.37E+1 | 6.44E+1 | 1.70E+2 | 2.34E+2 | 2.34E+2 | 2.34E+2 | 2.34E+2 | 2.34E+2 | 2.34E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 225 | 550 | | 1.26E+1 | 5.97E+1 | 1.59E+2 | 2.19E+2 | 2.19E+2 | 2.19E+2 | 2.19E+2 | 2.19E+2 | 2.19E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 250 | 561 | | 1.14E+1 | 5.53E+1 | 1.47E+2 | 2.03E+2 | 2.03E+2 | 2.03E+2 | 2.03E+2 | 2.03E+2 | 2.03E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 275 | 572 | | 1.04E+1 | 5.11E+1 | 1.36E+2 | 1.87E+2 | 1.87E+2 | 1.87E+2 | 1.87E+2 | 1.87E+2 | 1.87E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 300 | 585 | | 9.32E+0 | 4.71E+1 | 1.25E+2 | 1.72E+2 | 1.72E+2 | 1.72E+2 | 1.72E+2 | 1.72E+2 | 1.72E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 325 | 598 | | 8.34E+0 | 4.33E+1 | 1.15E+2 | 1.58E+2 | 1.58E+2 | 1.58E+2 | 1.58E+2 | 1.58E+2 | 1.58E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 350 | 612 | | 7.40E+0 | 3.98E+1 | 1.08E+2 | 1.44E+2 | 1.44E+2 | 1.44E+2 | 1.44E+2 | 1.44E+2 | 1.44E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 375 | 627 | | 6.55E+0 | 3.64E+1 | 9.58E+1 | 1.32E+2 | 1.32E+2 | 1.32E+2 | 1.32E+2 | 1.32E+2 | 1.32E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 400 | 642 | | 5.76E+0 | 3.33E+1 | 8.64E+1 | 1.20E+2 | 1.20E+2 | 1.20E+2 | 1.20E+2 | 1.20E+2 | 1.20E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 425 | 658 | | 5.05E+0 | 3.04E+1 | 7.80E+1 | 1.08E+2 | 1.08E+2 | 1.08E+2 | 1.08E+2 | 1.08E+2 | 1.08E+2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 450 | 674 | | 4.41E+0 | 2.77E+1 | 6.98E+1 | 9.76E+1 | 9.76E+1 | 9.76E+1 | 9.76E+1 | 9.76E+1 | 9.76E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 475 | 691 | | 3.83E+0 | 2.52E+1 | 6.24E+1 | 8.76E+1 | 8.76E+1 | 8.76E+1 | 8.76E+1 | 8.76E+1 | 8.76E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500 | 709 | | 3.33E+0 | 2.28E+1 | 5.57E+1 | 7.86E+1 | 7.86E+1 | 7.86E+1 | 7.86E+1 | 7.86E+1 | 7.86E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 525 | 726 | | 2.87E+0 | 2.07E+1 | 4.95E+1 | 7.02E+1 | 7.02E+1 | 7.02E+1 | 7.02E+1 | 7.02E+1 | 7.02E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 550 | 745 | | 2.48E+0 | 1.87E+1 | 4.41E+1 | 6.29E+1 | 6.29E+1 | 6.29E+1 | 6.29E+1 | 6.29E+1 | 6.29E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 575 | 763 | | 2.14E+0 | 1.69E+1 | 3.95E+1 | 5.64E+1 | 5.64E+1 | 5.64E+1 | 5.64E+1 | 5.64E+1 | 5.64E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 600 | 782 | | 1.83E+0 | 1.53E+1 | 3.49E+1 | 5.02E+1 | 5.02E+1 | 5.02E+1 | 5.02E+1 | 5.02E+1 | 5.02E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 625 | 802 | | 1.57E+0 | 1.38E+1 | 3.08E+1 | 4.46E+1 | 4.46E+1 | 4.46E+1 | 4.46E+1 | 4.46E+1 | 4.46E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 650 | 821 | | 1.35E+0 | 1.24E+1 | 2.75E+1 | 3.99E+1 | 3.99E+1 | 3.99E+1 | 3.99E+1 | 3.99E+1 | 3.99E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 675 | 841 | | 1.15E+0 | 1.12E+1 | 2.42E+1 | 3.54E+1 | 3.54E+1 | 3.54E+1 | 3.54E+1 | 3.54E+1 | 3.54E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 700 | 861 | | 9.83E-1 | 1.01E+1 | 2.14E+1 | 3.15E+1 | 3.15E+1 | 3.15E+1 | 3.15E+1 | 3.15E+1 | 3.15E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 725 | 882 | | 8.41E-1 | 8.90E+0 | 1.90E+1 | 2.81E+1 | 2.81E+1 | 2.81E+1 | 2.81E+1 | 2.81E+1 | 2.81E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 750 | 902 | | 7.16E-1 | 8.19E+0 | 1.67E+1 | 2.49E+1 | 2.49E+1 | 2.49E+1 | 2.49E+1 | 2.49E+1 | 2.49E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 775 | 923 | | 6.10E-1 | 7.39E+0 | 1.48E+1 | 2.22E+1 | 2.22E+1 | 2.22E+1 | 2.22E+1 | 2.22E+1 | 2.22E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 800 | 944 | | 5.20E-1 | 6.66E+0 | 1.30E+1 | 1.97E+1 | 1.97E+1 | 1.97E+1 | 1.97E+1 | 1.97E+1 | 1.97E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 825 | 966 | | 4.43E-1 | 6.01E+0 | 1.15E+1 | 1.76E+1 | 1.76E+1 | 1.76E+1 | 1.76E+1 | 1.76E+1 | 1.76E+1 | | | | | | | | | | | | | | | | | | | | | | | | | | |

Radiation Transport Calculations for Hiroshima and Nagasaki

Table D3. Continued

| Ground range | Slant range | Dose | | Neutron dose | Secondary gamma dose | | Primary gamma dose | | Total gamma dose | Reaction | ⁴⁰ Ca(n,γ) | | ³⁵ Cl(n,γ) | | ⁵⁶ Co(n,γ) | | ⁶³ Cu(n,p) | | ¹⁵¹ Eu->gnd | | ¹⁵¹ Eu(n,γ) | | ⁶³ Ni(n,γ) | | ³² S(n,p) | | ³⁶ K(n,α) | |
|--------------|-------------|---------|---------|--------------|----------------------|---------|--------------------|---------|------------------|----------|-----------------------|---------|---|---------|-----------------------|----------|-----------------------|----------|------------------------|----------|------------------------|----------|-----------------------|----------|----------------------|--------|----------------------|-------|
| | | Units | gray | | gray | gray | gray | gray | | | gray | gray | Units in atoms (unless otherwise indicated) | Calg Ca | CJ/Cl | Bq/mg Co | ⁶³ Ni/g Cu | Bq/mg Eu | Bq/mg Eu | Bq/mg Eu | ⁶³ Ni/g Ni | dp/mg S | years | days | years | years | years | years |
| 850 | 987 | 3.78E-1 | 5.42E+0 | 1.03E+1 | 1.57E+1 | 1.03E+1 | 1.57E+1 | 1.03E+1 | 1.57E+1 | 8.36E-2 | 4.04E-1 | 8.43E+5 | 8.36E-2 | 4.04E-1 | 8.36E-2 | 1.27E+08 | 2.48E+2 | 1.97E+16 | 0.9502 | 0.93258 | 0.5218 | 0.36E-2 | 1.27E+08 | 2.48E+2 | 1.97E+16 | 0.9502 | 0.93258 | |
| 875 | 1009 | 3.22E-1 | 4.89E+0 | 9.05E+0 | 1.39E+1 | 9.05E+0 | 1.39E+1 | 9.05E+0 | 1.39E+1 | 6.49E-13 | 3.80E-2 | 7.27E+5 | 6.49E-13 | 3.80E-2 | 6.49E-13 | 1.06E+08 | 2.15E+2 | 1.73E+16 | 32.064 | 39.102 | 151.96 | 6.96E-2 | 1.06E+08 | 2.15E+2 | 1.73E+16 | 32.064 | 39.102 | |
| 900 | 1031 | 2.74E-1 | 4.42E+0 | 7.97E+0 | 1.24E+1 | 7.97E+0 | 1.24E+1 | 7.97E+0 | 1.24E+1 | 5.41E-13 | 3.17E-2 | 6.27E+5 | 5.41E-13 | 3.17E-2 | 5.41E-13 | 8.83E+07 | 1.86E+2 | 1.51E+16 | 14.262 | 301000 | 8.593 | 5.79E-2 | 8.83E+07 | 1.86E+2 | 1.51E+16 | 14.262 | 301000 | |
| 925 | 1052 | 2.33E-1 | 3.99E+0 | 7.07E+0 | 1.11E+1 | 7.07E+0 | 1.11E+1 | 7.07E+0 | 1.11E+1 | 4.53E-13 | 2.65E-2 | 5.41E+5 | 4.53E-13 | 2.65E-2 | 4.53E-13 | 7.40E+07 | 1.61E+2 | 1.33E+16 | | | 4.85E-2 | 7.40E+07 | 1.61E+2 | 1.33E+16 | | | | |
| 950 | 1074 | 1.99E-1 | 3.60E+0 | 6.24E+0 | 9.84E+0 | 6.24E+0 | 9.84E+0 | 6.24E+0 | 9.84E+0 | 3.79E-13 | 2.22E-2 | 4.67E+5 | 3.79E-13 | 2.22E-2 | 4.67E+5 | 6.20E+07 | 1.39E+2 | 1.16E+16 | | | 4.05E-2 | 6.20E+07 | 1.39E+2 | 1.16E+16 | | | | |
| 975 | 1097 | 1.69E-1 | 3.25E+0 | 5.51E+0 | 8.76E+0 | 5.51E+0 | 8.76E+0 | 5.51E+0 | 8.76E+0 | 3.17E-13 | 1.85E-2 | 4.03E+5 | 3.17E-13 | 1.85E-2 | 4.03E+5 | 5.17E+07 | 1.20E+2 | 1.02E+16 | | | 3.37E-2 | 5.17E+07 | 1.20E+2 | 1.02E+16 | | | | |
| 1000 | 1119 | 1.44E-1 | 2.93E+0 | 4.91E+0 | 7.84E+0 | 4.91E+0 | 7.84E+0 | 4.91E+0 | 7.84E+0 | 2.67E-13 | 1.56E-2 | 3.48E+5 | 2.67E-13 | 1.56E-2 | 3.48E+5 | 4.37E+07 | 1.04E+2 | 8.94E+17 | | | 2.84E-2 | 4.37E+07 | 1.04E+2 | 8.94E+17 | | | | |
| 1025 | 1141 | 1.23E-1 | 2.65E+0 | 4.34E+0 | 6.99E+0 | 4.34E+0 | 6.99E+0 | 4.34E+0 | 6.99E+0 | 2.24E-13 | 1.31E-2 | 3.00E+5 | 2.24E-13 | 1.31E-2 | 3.00E+5 | 3.66E+07 | 9.01E+1 | 7.87E+17 | | | 2.38E-2 | 3.66E+07 | 9.01E+1 | 7.87E+17 | | | | |
| 1050 | 1164 | 1.05E-1 | 2.39E+0 | 3.86E+0 | 6.24E+0 | 3.86E+0 | 6.24E+0 | 3.86E+0 | 6.24E+0 | 1.89E-13 | 1.10E-2 | 2.59E+5 | 1.89E-13 | 1.10E-2 | 2.59E+5 | 3.08E+07 | 7.80E+1 | 6.89E+17 | | | 2.00E-2 | 3.08E+07 | 7.80E+1 | 6.89E+17 | | | | |
| 1075 | 1186 | 8.93E-2 | 2.16E+0 | 3.39E+0 | 5.55E+0 | 3.39E+0 | 5.55E+0 | 3.39E+0 | 5.55E+0 | 1.57E-13 | 9.16E-3 | 2.24E+5 | 1.57E-13 | 9.16E-3 | 2.24E+5 | 2.57E+07 | 6.76E+1 | 6.03E+17 | | | 1.86E-2 | 2.57E+07 | 6.76E+1 | 6.03E+17 | | | | |
| 1100 | 1209 | 7.63E-2 | 1.96E+0 | 3.02E+0 | 4.98E+0 | 3.02E+0 | 4.98E+0 | 3.02E+0 | 4.98E+0 | 1.33E-13 | 7.72E-3 | 1.93E+5 | 1.33E-13 | 7.72E-3 | 1.93E+5 | 2.17E+07 | 5.85E+1 | 5.28E+17 | | | 1.40E-2 | 2.17E+07 | 5.85E+1 | 5.28E+17 | | | | |
| 1125 | 1232 | 6.50E-2 | 1.77E+0 | 2.67E+0 | 4.44E+0 | 2.67E+0 | 4.44E+0 | 2.67E+0 | 4.44E+0 | 1.11E-13 | 6.46E-3 | 1.67E+5 | 1.11E-13 | 6.46E-3 | 1.67E+5 | 1.82E+07 | 5.07E+1 | 4.61E+17 | | | 1.17E-2 | 1.82E+07 | 5.07E+1 | 4.61E+17 | | | | |
| 1150 | 1255 | 5.55E-2 | 1.60E+0 | 2.37E+0 | 3.97E+0 | 2.37E+0 | 3.97E+0 | 2.37E+0 | 3.97E+0 | 9.33E-14 | 5.41E-3 | 1.45E+5 | 9.33E-14 | 5.41E-3 | 1.45E+5 | 1.52E+07 | 4.40E+1 | 4.03E+17 | | | 9.81E-3 | 1.52E+07 | 4.40E+1 | 4.03E+17 | | | | |
| 1175 | 1278 | 4.74E-2 | 1.45E+0 | 2.11E+0 | 3.56E+0 | 2.11E+0 | 3.56E+0 | 2.11E+0 | 3.56E+0 | 7.86E-14 | 4.56E-3 | 1.25E+5 | 7.86E-14 | 4.56E-3 | 1.25E+5 | 1.28E+07 | 3.81E+1 | 3.53E+17 | | | 8.26E-3 | 1.28E+07 | 3.81E+1 | 3.53E+17 | | | | |
| 1200 | 1301 | 4.05E-2 | 1.32E+0 | 1.87E+0 | 3.19E+0 | 1.87E+0 | 3.19E+0 | 1.87E+0 | 3.19E+0 | 6.61E-14 | 3.83E-3 | 1.08E+5 | 6.61E-14 | 3.83E-3 | 1.08E+5 | 1.08E+07 | 3.31E+1 | 3.08E+17 | | | 6.92E-3 | 1.08E+07 | 3.31E+1 | 3.08E+17 | | | | |
| 1225 | 1324 | 3.46E-2 | 1.19E+0 | 1.66E+0 | 2.86E+0 | 1.66E+0 | 2.86E+0 | 1.66E+0 | 2.86E+0 | 5.56E-14 | 3.22E-3 | 9.35E+4 | 5.56E-14 | 3.22E-3 | 9.35E+4 | 9.08E+06 | 2.87E+1 | 2.69E+17 | | | 5.82E-3 | 9.08E+06 | 2.87E+1 | 2.69E+17 | | | | |
| 1250 | 1347 | 2.97E-2 | 1.08E+0 | 1.50E+0 | 2.58E+0 | 1.50E+0 | 2.58E+0 | 1.50E+0 | 2.58E+0 | 4.72E-14 | 2.73E-3 | 8.09E+4 | 4.72E-14 | 2.73E-3 | 8.09E+4 | 7.70E+06 | 2.49E+1 | 2.35E+17 | | | 4.93E-3 | 7.70E+06 | 2.49E+1 | 2.35E+17 | | | | |
| 1275 | 1370 | 2.54E-2 | 9.84E-1 | 1.32E+0 | 2.30E+0 | 1.32E+0 | 2.30E+0 | 1.32E+0 | 2.30E+0 | 3.95E-14 | 2.29E-3 | 7.00E+4 | 3.95E-14 | 2.29E-3 | 7.00E+4 | 6.45E+06 | 2.16E+1 | 2.06E+17 | | | 4.12E-3 | 6.45E+06 | 2.16E+1 | 2.06E+17 | | | | |
| 1300 | 1394 | 2.17E-2 | 8.94E-1 | 1.18E+0 | 2.07E+0 | 1.18E+0 | 2.07E+0 | 1.18E+0 | 2.07E+0 | 3.34E-14 | 1.93E-3 | 6.06E+4 | 3.34E-14 | 1.93E-3 | 6.06E+4 | 5.45E+06 | 1.87E+1 | 1.80E+17 | | | 3.48E-3 | 5.45E+06 | 1.87E+1 | 1.80E+17 | | | | |
| 1325 | 1417 | 1.86E-2 | 8.13E-1 | 1.05E+0 | 1.86E+0 | 1.05E+0 | 1.86E+0 | 1.05E+0 | 1.86E+0 | 2.81E-14 | 1.62E-3 | 5.25E+4 | 2.81E-14 | 1.62E-3 | 5.25E+4 | 4.59E+06 | 1.63E+1 | 1.57E+17 | | | 2.92E-3 | 4.59E+06 | 1.63E+1 | 1.57E+17 | | | | |
| 1350 | 1440 | 1.59E-2 | 7.40E-1 | 9.38E-1 | 1.68E+0 | 9.38E-1 | 1.68E+0 | 9.38E-1 | 1.68E+0 | 2.35E-14 | 1.38E-3 | 4.55E+4 | 2.35E-14 | 1.38E-3 | 4.55E+4 | 3.88E+06 | 1.41E+1 | 1.39E+17 | | | 2.47E-3 | 3.88E+06 | 1.41E+1 | 1.39E+17 | | | | |
| 1375 | 1464 | 1.36E-2 | 6.73E-1 | 8.33E-1 | 1.51E+0 | 8.33E-1 | 1.51E+0 | 8.33E-1 | 1.51E+0 | 2.01E-14 | 1.16E-3 | 3.94E+4 | 2.01E-14 | 1.16E-3 | 3.94E+4 | 3.28E+06 | 1.23E+1 | 1.21E+17 | | | 2.08E-3 | 3.28E+06 | 1.23E+1 | 1.21E+17 | | | | |
| 1400 | 1487 | 1.17E-2 | 6.13E-1 | 7.45E-1 | 1.36E+0 | 7.45E-1 | 1.36E+0 | 7.45E-1 | 1.36E+0 | 1.70E-14 | 9.81E-4 | 3.42E+4 | 1.70E-14 | 9.81E-4 | 3.42E+4 | 2.78E+06 | 1.07E+1 | 1.06E+17 | | | 1.76E-3 | 2.78E+06 | 1.07E+1 | 1.06E+17 | | | | |
| 1425 | 1511 | 1.00E-2 | 5.58E-1 | 6.62E-1 | 1.22E+0 | 6.62E-1 | 1.22E+0 | 6.62E-1 | 1.22E+0 | 1.44E-14 | 8.29E-4 | 2.96E+4 | 1.44E-14 | 8.29E-4 | 2.96E+4 | 2.35E+06 | 9.27E+0 | 9.24E+18 | | | 1.49E-3 | 2.35E+06 | 9.27E+0 | 9.24E+18 | | | | |
| 1450 | 1534 | 8.62E-3 | 5.09E-1 | 5.92E-1 | 1.10E+0 | 5.92E-1 | 1.10E+0 | 5.92E-1 | 1.10E+0 | 1.22E-14 | 7.02E-4 | 2.57E+4 | 1.22E-14 | 7.02E-4 | 2.57E+4 | 1.99E+06 | 8.06E+0 | 8.07E+18 | | | 1.26E-3 | 1.99E+06 | 8.06E+0 | 8.07E+18 | | | | |
| 1475 | 1558 | 7.40E-3 | 4.64E-1 | 5.30E-1 | 9.94E-1 | 5.30E-1 | 9.94E-1 | 5.30E-1 | 9.94E-1 | 1.03E-14 | 5.95E-4 | 2.23E+4 | 1.03E-14 | 5.95E-4 | 2.23E+4 | 1.69E+06 | 7.01E+0 | 7.04E+18 | | | 1.07E-3 | 1.69E+06 | 7.01E+0 | 7.04E+18 | | | | |
| 1500 | 1582 | 6.36E-3 | 4.23E-1 | 4.73E-1 | 8.96E-1 | 4.73E-1 | 8.96E-1 | 4.73E-1 | 8.96E-1 | 8.74E-15 | 5.04E-4 | 1.93E+4 | 8.74E-15 | 5.04E-4 | 1.93E+4 | 1.43E+06 | 6.09E+0 | 6.15E+18 | | | 9.24E-4 | 1.43E+06 | 6.09E+0 | 6.15E+18 | | | | |
| 1525 | 1605 | 5.49E-3 | 3.86E-1 | 4.22E-1 | 8.08E-1 | 4.22E-1 | 8.08E-1 | 4.22E-1 | 8.08E-1 | 7.41E-15 | 4.27E-4 | 1.68E+4 | 7.41E-15 | 4.27E-4 | 1.68E+4 | 1.21E+06 | 5.30E+0 | 5.37E+18 | | | 8.06E-4 | 1.21E+06 | 5.30E+0 | 5.37E+18 | | | | |
| 1550 | 1629 | 4.70E-3 | 3.53E-1 | 3.80E-1 | 7.33E-1 | 3.80E-1 | 7.33E-1 | 3.80E-1 | 7.33E-1 | 6.30E-15 | 3.63E-4 | 1.46E+4 | 6.30E-15 | 3.63E-4 | 1.46E+4 | 1.03E+06 | 4.61E+0 | 4.69E+18 | | | 6.94E-4 | 1.03E+06 | 4.61E+0 | 4.69E+18 | | | | |
| 1575 | 1653 | 4.04E-3 | 3.22E-1 | 3.39E-1 | 6.61E-1 | 3.39E-1 | 6.61E-1 | 3.39E-1 | 6.61E-1 | 5.35E-15 | 3.08E-4 | 1.27E+4 | 5.35E-15 | 3.08E-4 | 1.27E+4 | 8.73E+05 | 4.02E+0 | 4.10E+18 | | | 5.50E-4 | 8.73E+05 | 4.02E+0 | 4.10E+18 | | | | |
| 1600 | 1677 | 3.48E-3 | 2.94E-1 | 3.05E-1 | 5.99E-1 | 3.05E-1 | 5.99E-1 | 3.05E-1 | 5.99E-1 | 4.55E-15 | 2.62E-4 | 1.10E+4 | 4.55E-15 | 2.62E-4 | 1.10E+4 | 7.43E+05 | 3.50E+0 | 3.58E+18 | | | 4.67E-4 | 7.43E+05 | 3.50E+0 | 3.58E+18 | | | | |
| 1625 | 1701 | 3.00E-3 | 2.69E-1 | 2.71E-1 | 5.41E-1 | 2.71E-1 | 5.41E-1 | 2.71E-1 | 5.41E-1 | 3.86E-15 | 2.22E-4 | 9.57E+3 | 3.86E-15 | 2.22E-4 | 9.57E+3 | 6.31E+05 | 3.05E+0 | 3.13E+18 | | | 3.96E-4 | 6.31E+05 | 3.05E+0 | 3.13E+18 | | | | |
| 1650 | 1725 | 2.58E-3 | 2.48E-1 | 2.44E-1 | 4.91E-1 | 2.44E-1 | 4.91E-1 | 2.44E-1 | 4.91E-1 | 3.29E-15 | 1.89E-4 | 8.31E+3 | 3.29E-15 | 1.89E-4 | 8.31E+3 | 5.37E+05 | 2.65E+0 | 2.73E+18 | | | 3.37E-4 | 5.37E+05 | 2.65E+0 | 2.73E+18 | | | | |
| 1675 | 1749 | 2.23E-3 | 2.25E-1 | 2.20E-1 | 4.45E-1 | 2.20E-1 | 4.45E-1 | 2.20E-1 | 4.45E-1 | 2.81E-15 | 1.61E-4 | 7.23E+3 | 2.81E-15 | 1.61E-4 | 7.23E+3 | 4.58E+05 | 2.31E+0 | 2.39E+18 | | | 2.88E-4 | 4.58E+05 | 2.31E+0 | 2.39E+18 | | | | |

Table D3. Continued

| Ground range meter | Slant range meter | Dose | | | Reaction | ⁶⁰ Ca(n,γ) | | | ⁶³ Cu(n,p) | | | ¹⁵¹ Eu->grd | | | ¹⁵² Cu(n,γ) | | | ⁶² Ni(n,γ) | | | ³² S(n,p) | | | ³⁸ K(n,α) |
|-----------------------|----------------------|--------------|----------------------|--------------------|----------|-----------------------|---|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|-----------------------|----------------------|----------------------|
| | | Neutron dose | Secondary gamma dose | Primary gamma dose | | Total gamma dose | Units in atoms (unless otherwise indicated) | ⁴⁰ Ca(n,γ) | ³⁵ Cl(n,γ) | ⁵⁸ Co(n,γ) | ⁶³ Cu(n,p) | ¹⁵¹ Eu->grd | ¹⁵² Cu(n,γ) | ⁶² Ni(n,γ) | ³² S(n,p) | ⁶⁰ Ca(n,γ) | ³⁵ Cl(n,γ) | ⁵⁸ Co(n,γ) | ⁶³ Cu(n,p) | ¹⁵¹ Eu->grd | ¹⁵² Cu(n,γ) | ⁶² Ni(n,γ) | ³² S(n,p) | |
| 1700 | 1773 | 1.92E-3 | 2.08E-1 | 1.97E-1 | 4.03E-1 | 0.00E+00 | 2.39E-15 | 1.37E-4 | 6.29E+3 | 1.23E-3 | 2.45E-4 | 3.90E+05 | 2.01E+0 | 2.08E+18 | | | | | | | | | | |
| 1725 | 1797 | 1.66E-3 | 1.89E-1 | 1.77E-1 | 3.65E-1 | 0.00E+00 | 2.04E-15 | 1.17E-4 | 5.47E+3 | 1.05E-3 | 2.09E-4 | 3.33E+05 | 1.75E+0 | 1.82E+18 | | | | | | | | | | |
| 1750 | 1821 | 1.43E-3 | 1.73E-1 | 1.59E-1 | 3.31E-1 | 0.00E+00 | 1.73E-15 | 9.99E-5 | 4.76E+3 | 8.98E-4 | 1.78E-4 | 2.84E+05 | 1.53E+0 | 1.59E+18 | | | | | | | | | | |
| 1775 | 1845 | 1.23E-3 | 1.58E-1 | 1.42E-1 | 3.00E-1 | 0.00E+00 | 1.48E-15 | 8.52E-5 | 4.14E+3 | 6.55E-4 | 1.52E-4 | 2.42E+05 | 1.33E+0 | 1.39E+18 | | | | | | | | | | |
| 1800 | 1869 | 1.07E-3 | 1.45E-1 | 1.28E-1 | 2.73E-1 | 0.00E+00 | 1.27E-15 | 7.28E-5 | 3.61E+3 | 5.85E-4 | 1.29E-4 | 2.07E+05 | 1.16E+0 | 1.21E+18 | | | | | | | | | | |
| 1825 | 1893 | 9.21E-4 | 1.33E-1 | 1.15E-1 | 2.48E-1 | 0.00E+00 | 1.09E-15 | 6.23E-5 | 3.14E+3 | 5.60E-4 | 1.11E-4 | 1.77E+05 | 1.01E+0 | 1.06E+18 | | | | | | | | | | |
| 1850 | 1917 | 7.96E-4 | 1.22E-1 | 1.03E-1 | 2.25E-1 | 0.00E+00 | 9.27E-16 | 5.32E-5 | 2.74E+3 | 4.78E-4 | 9.45E-5 | 1.51E+05 | 8.86E-1 | 9.27E+19 | | | | | | | | | | |
| 1875 | 1941 | 6.89E-4 | 1.12E-1 | 9.30E-2 | 2.05E-1 | 0.00E+00 | 7.95E-16 | 4.56E-5 | 2.39E+3 | 4.10E-4 | 8.09E-5 | 1.30E+05 | 7.73E-1 | 8.10E+19 | | | | | | | | | | |
| 1900 | 1965 | 5.96E-4 | 1.02E-1 | 8.37E-2 | 1.86E-1 | 0.00E+00 | 6.80E-16 | 3.90E-5 | 2.08E+3 | 3.51E-4 | 6.92E-5 | 1.11E+05 | 6.74E-1 | 7.08E+19 | | | | | | | | | | |
| 1925 | 1989 | 5.16E-4 | 9.39E-2 | 7.51E-2 | 1.69E-1 | 0.00E+00 | 5.89E-16 | 3.34E-5 | 1.81E+3 | 3.01E-4 | 5.93E-5 | 9.52E+04 | 5.89E-1 | 6.19E+19 | | | | | | | | | | |
| 1950 | 2014 | 4.47E-4 | 8.61E-2 | 6.74E-2 | 1.54E-1 | 0.00E+00 | 4.99E-16 | 2.86E-5 | 1.58E+3 | 2.58E-4 | 5.07E-5 | 8.16E+04 | 5.14E-1 | 5.47E+19 | | | | | | | | | | |
| 1975 | 2038 | 3.87E-4 | 7.90E-2 | 6.06E-2 | 1.40E-1 | 0.00E+00 | 4.28E-16 | 2.46E-5 | 1.38E+3 | 2.21E-4 | 4.35E-5 | 7.00E+04 | 4.49E-1 | 4.74E+19 | | | | | | | | | | |
| 2000 | 2062 | 3.35E-4 | 7.25E-2 | 5.50E-2 | 1.28E-1 | 0.00E+00 | 3.68E-16 | 2.11E-5 | 1.20E+3 | 1.90E-4 | 3.74E-5 | 6.01E+04 | 3.92E-1 | 4.14E+19 | | | | | | | | | | |
| 2025 | 2086 | 2.91E-4 | 6.68E-2 | 4.98E-2 | 1.16E-1 | 0.00E+00 | 3.17E-16 | 1.81E-5 | 1.05E+3 | 1.63E-4 | 3.21E-5 | 5.17E+04 | 3.62E+19 | | | | | | | | | | | |
| 2050 | 2111 | 2.52E-4 | 6.11E-2 | 4.49E-2 | 1.06E-1 | 0.00E+00 | 2.72E-16 | 1.56E-5 | 9.16E+2 | 1.40E-4 | 2.76E-5 | 4.44E+04 | 3.00E-1 | 3.17E+19 | | | | | | | | | | |
| 2075 | 2135 | 2.19E-4 | 5.62E-2 | 4.01E-2 | 9.63E-2 | 0.00E+00 | 2.34E-16 | 1.34E-5 | 8.00E+2 | 1.20E-4 | 2.37E-5 | 3.81E+04 | 2.62E-1 | 2.77E+19 | | | | | | | | | | |
| 2100 | 2159 | 1.90E-4 | 5.18E-2 | 3.65E-2 | 8.81E-2 | 0.00E+00 | 2.01E-16 | 1.15E-5 | 6.99E+2 | 1.04E-4 | 2.04E-5 | 3.28E+04 | 2.29E-1 | 2.43E+19 | | | | | | | | | | |
| 2125 | 2183 | 1.65E-4 | 4.74E-2 | 3.27E-2 | 8.01E-2 | 0.00E+00 | 1.73E-16 | 9.90E-6 | 6.11E+2 | 8.92E-5 | 1.75E-5 | 2.83E+04 | 2.00E-1 | 2.13E+19 | | | | | | | | | | |
| 2150 | 2208 | 1.43E-4 | 4.38E-2 | 2.96E-2 | 7.32E-2 | 0.00E+00 | 1.49E-16 | 8.53E-6 | 5.33E+2 | 7.98E-5 | 1.51E-5 | 2.43E+04 | 1.75E-1 | 1.86E+19 | | | | | | | | | | |
| 2175 | 2232 | 1.25E-4 | 4.01E-2 | 2.70E-2 | 6.70E-2 | 0.00E+00 | 1.29E-16 | 7.36E-6 | 4.66E+2 | 6.92E-5 | 1.30E-5 | 2.10E+04 | 1.53E-1 | 1.63E+19 | | | | | | | | | | |
| 2200 | 2257 | 1.08E-4 | 3.68E-2 | 2.41E-2 | 6.09E-2 | 0.00E+00 | 1.11E-16 | 6.33E-6 | 4.08E+2 | 5.70E-5 | 1.12E-5 | 1.81E+04 | 1.34E-1 | 1.43E+19 | | | | | | | | | | |
| 2225 | 2281 | 9.41E-5 | 3.39E-2 | 2.19E-2 | 5.58E-2 | 0.00E+00 | 9.55E-17 | 5.47E-6 | 3.56E+2 | 4.92E-5 | 9.66E-6 | 1.56E+04 | 1.17E-1 | 1.25E+19 | | | | | | | | | | |
| 2250 | 2305 | 8.19E-5 | 3.12E-2 | 1.99E-2 | 5.10E-2 | 0.00E+00 | 8.24E-17 | 4.72E-6 | 3.12E+2 | 4.24E-5 | 8.32E-6 | 1.35E+04 | 1.03E-1 | 1.09E+19 | | | | | | | | | | |
| 2275 | 2330 | 7.12E-5 | 2.87E-2 | 1.79E-2 | 4.66E-2 | 0.00E+00 | 7.12E-17 | 4.07E-6 | 2.72E+2 | 3.67E-5 | 7.19E-6 | 1.16E+04 | 9.00E-2 | 9.58E+20 | | | | | | | | | | |
| 2300 | 2354 | 6.20E-5 | 2.64E-2 | 1.62E-2 | 4.26E-2 | 0.00E+00 | 6.14E-17 | 3.51E-6 | 2.38E+2 | 3.16E-5 | 6.20E-6 | 1.00E+04 | 8.00E-2 | 8.39E+20 | | | | | | | | | | |
| 2325 | 2379 | 5.40E-5 | 2.43E-2 | 1.47E-2 | 3.90E-2 | 0.00E+00 | 5.31E-17 | 3.04E-6 | 2.09E+2 | 2.74E-5 | 5.36E-6 | 8.68E+03 | 6.90E-2 | 7.35E+20 | | | | | | | | | | |
| 2350 | 2403 | 4.70E-5 | 2.24E-2 | 1.33E-2 | 3.57E-2 | 0.00E+00 | 4.59E-17 | 2.62E-6 | 1.82E+2 | 2.36E-5 | 4.63E-6 | 7.49E+03 | 6.05E-2 | 6.44E+20 | | | | | | | | | | |
| 2375 | 2427 | 4.09E-5 | 2.06E-2 | 1.20E-2 | 3.26E-2 | 0.00E+00 | 3.97E-17 | 2.27E-6 | 1.60E+2 | 2.04E-5 | 4.00E-6 | 6.48E+03 | 5.30E-2 | 5.65E+20 | | | | | | | | | | |
| 2400 | 2452 | 3.57E-5 | 1.90E-2 | 1.09E-2 | 2.98E-2 | 0.00E+00 | 3.47E-17 | 1.96E-6 | 1.40E+2 | 1.76E-5 | 3.45E-6 | 5.59E+03 | 4.64E-2 | 4.95E+20 | | | | | | | | | | |
| 2425 | 2476 | 3.11E-5 | 1.75E-2 | 9.82E-3 | 2.73E-2 | 0.00E+00 | 2.96E-17 | 1.69E-6 | 1.22E+2 | 1.53E-5 | 2.99E-6 | 4.84E+03 | 4.07E-2 | 4.34E+20 | | | | | | | | | | |
| 2450 | 2501 | 2.71E-5 | 1.61E-2 | 8.92E-3 | 2.50E-2 | 0.00E+00 | 2.56E-17 | 1.46E-6 | 1.07E+2 | 1.32E-5 | 2.58E-6 | 4.18E+03 | 3.56E-2 | 3.80E+20 | | | | | | | | | | |
| 2475 | 2525 | 2.36E-5 | 1.48E-2 | 8.10E-3 | 2.29E-2 | 0.00E+00 | 2.21E-17 | 1.26E-6 | 9.38E+1 | 1.14E-5 | 2.33E-6 | 3.61E+03 | 3.12E-2 | 3.33E+20 | | | | | | | | | | |
| 2500 | 2550 | 2.05E-5 | 1.37E-2 | 7.40E-3 | 2.11E-2 | 0.00E+00 | 1.90E-17 | 1.09E-6 | 8.20E+1 | 9.80E-6 | 1.92E-6 | 3.11E+03 | 2.73E-2 | 2.92E+20 | | | | | | | | | | |

Note: Values of ⁴¹Ca/g Ca were not calculated.