SUPPLEMENTAL INFORMATION FOR:
Dosimetric variability across a library of computational tumor phantoms

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SECTION 1: TUMOR SELF-DOSE S-VALUES

Table 1: S-values for ^{211}At

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	8.97E-08	2.68E-08	1.13E-08	3.37E-09	1.42E-09	7.30E-10	4.23E-10	1.78E-10	9.14E-11	2.71E-11	1.15E-11	3.40E-12	1.43E-12	7.35E-13	4.26E-13
L = 0; Z = 0.25	8.87E-08	2.66E-08	1.13E-08	3.36E-09	1.42E-09	7.28E-10	4.22E-10	1.78E-10	9.13E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.33E-13	4.25E-13
L = 0; Z = 0.5	8.97E-08	2.68E-08	1.13E-08	3.37E-09	1.42E-09	7.30E-10	4.23E-10	1.79E-10	9.15E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.35E-13	4.25E-13
L = 0; Z = 2	8.95E-08	2.67E-08	1.13E-08	3.37E-09	1.42E-09	7.30E-10	4.23E-10	1.79E-10	9.15E-11	2.71E-11	1.15E-11	3.40E-12	1.44E-12	7.35E-13	4.26E-13
L = 0; Z = 4	8.91E-08	2.67E-08	1.13E-08	3.36E-09	1.42E-09	7.29E-10	4.22E-10	1.78E-10	9.14E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.35E-13	4.25E-13
L = 0.3; D = 12; C = 0.3	8.88E-08	2.65E-08	1.13E-08	3.35E-09	1.42E-09	7.28E-10	4.22E-10	1.78E-10	9.13E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.35E-13	4.25E-13
L = 0.3; D = 12; C = 0.6	8.67E-08	2.61E-08	1.11E-08	3.32E-09	1.41E-09	7.24E-10	4.20E-10	1.78E-10	9.11E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.35E-13	4.25E-13
L = 0.3; D = 12; C = 1	8.82E-08	2.64E-08	1.12E-08	3.34E-09	1.42E-09	7.26E-10	4.21E-10	1.78E-10	9.13E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.35E-13	4.25E-13
L = 0.3; D = 1.5; C = 0.3	8.96E-08	2.67E-08	1.13E-08	3.37E-09	1.42E-09	7.30E-10	4.23E-10	1.79E-10	9.15E-11	2.71E-11	1.15E-11	3.40E-12	1.44E-12	7.35E-13	4.26E-13
L = 0.3; D = 1.5; C = 0.6	8.95E-08	2.67E-08	1.13E-08	3.37E-09	1.42E-09	7.30E-10	4.23E-10	1.79E-10	9.15E-11	2.71E-11	1.15E-11	3.40E-12	1.44E-12	7.35E-13	4.26E-13
L = 0.3; D = 1.5; C = 1	8.96E-08	2.68E-08	1.13E-08	3.37E-09	1.42E-09	7.30E-10	4.23E-10	1.79E-10	9.15E-11	2.71E-11	1.14E-11	3.40E-12	1.43E-12	7.35E-13	4.26E-13
L = 0.3; D = 4; C = 0.3	8.92E-08	2.67E-08	1.13E-08	3.36E-09	1.42E-09	7.29E-10	4.22E-10	1.78E-10	9.14E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.35E-13	4.26E-13
L = 0.3; D = 4; C = 0.6	8.88E-08	2.66E-08	1.13E-08	3.36E-09	1.42E-09	7.28E-10	4.22E-10	1.78E-10	9.13E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.35E-13	4.26E-13
L = 0.3; D = 4; C = 1	8.93E-08	2.67E-08	1.13E-08	3.36E-09	1.42E-09	7.29E-10	4.22E-10	1.78E-10	9.14E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.35E-13	4.26E-13
L = 1; D = 12; C = 0.3	8.55E-08	2.58E-08	1.10E-08	3.30E-09	1.40E-09	7.21E-10	4.18E-10	1.77E-10	9.09E-11	2.70E-11	1.14E-11	3.39E-12	1.43E-12	7.34E-13	4.25E-13
L = 1; D = 12; C = 0.6	7.87E-08	2.43E-08	1.05E-08	3.21E-09	1.37E-09	7.09E-10	4.13E-10	1.75E-10	9.01E-11	2.69E-11	1.14E-11	3.38E-12	1.43E-12	7.32E-13	4.24E-13
L = 1; D = 12; C = 1	8.30E-08	2.53E-08	1.09E-08	3.27E-09	1.39E-09	7.17E-10	4.16E-10	1.77E-10	9.07E-11	2.70E-11	1.14E-11	3.38E-12	1.43E-12	7.33E-13	4.25E-13
L = 1; D = 1.5; C = 0.3	8.91E-08	2.67E-08	1.13E-08	3.36E-09	1.42E-09	7.29E-10	4.22E-10	1.78E-10	9.14E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.35E-13	4.26E-13
L = 1; D = 1.5; C = 0.6	8.88E-08	2.66E-08	1.13E-08	3.36E-09	1.42E-09	7.29E-10	4.22E-10	1.78E-10	9.14E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.35E-13	4.25E-13
L = 1; D = 1.5; C = 1	8.93E-08	2.67E-08	1.13E-08	3.37E-09	1.42E-09	7.29E-10	4.23E-10	1.78E-10	9.14E-11	2.71E-11	1.14E-11	3.40E-12	1.43E-12	7.35E-13	4.26E-13
L = 1; D = 4; C = 0.3	8.77E-08	2.64E-08	1.12E-08	3.35E-09	1.42E-09	7.27E-10	4.22E-10	1.78E-10	9.13E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.35E-13	4.25E-13
L = 1; D = 4; C = 0.6	8.58E-08	2.60E-08	1.11E-08	3.32E-09	1.41E-09	7.23E-10	4.19E-10	1.77E-10	9.10E-11	2.70E-11	1.14E-11	3.39E-12	1.43E-12	7.33E-13	4.25E-13
L = 1; D = 4; C = 1	8.77E-08	2.63E-08	1.12E-08	3.34E-09	1.41E-09	7.26E-10	4.21E-10	1.78E-10	9.12E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.35E-13	4.25E-13
L = 3; D = 12; C = 0.3	7.54E-08	2.36E-08	1.03E-08	3.16E-09	1.36E-09	7.02E-10	4.09E-10	1.74E-10	8.96E-11	2.67E-11	1.13E-11	3.37E-12	1.42E-12	7.30E-13	4.23E-13
L = 3; D = 12; C = 0.6	6.64E-08	2.19E-08	9.76E-09	3.05E-09	1.32E-09	6.88E-10	4.03E-10	1.72E-10	8.88E-11	2.66E-11	1.13E-11	3.36E-12	1.42E-12	7.30E-13	4.23E-13
L = 3; D = 12; C = 1	7.71E-08	2.40E-08	1.04E-08	3.19E-09	1.37E-09	7.07E-10	4.12E-10	1.75E-10	9.00E-11	2.68E-11	1.14E-11	3.38E-12	1.43E-12	7.32E-13	4.24E-13
L = 3; D = 1.5; C = 0.3	8.80E-08	2.64E-08	1.12E-08	3.35E-09	1.42E-09	7.27E-10	4.22E-10	1.78E-10	9.13E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.35E-13	4.25E-13
L = 3; D = 1.5; C = 0.6	8.73E-08	2.63E-08	1.12E-08	3.34E-09	1.41E-09	7.26E-10	4.21E-10	1.78E-10	9.12E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.34E-13	4.25E-13
L = 3; D = 1.5; C = 1	8.87E-08	2.66E-08	1.13E-08	3.36E-09	1.42E-09	7.29E-10	4.22E-10	1.78E-10	9.14E-11	2.71E-11	1.15E-11	3.40E-12	1.43E-12	7.35E-13	4.26E-13
L = 3; D = 4; C = 0.3	8.27E-08	2.54E-08	1.09E-08	3.28E-09	1.40E-09	7.19E-10	4.17E-10	1.77E-10	9.08E-11	2.70E-11	1.14E-11	3.39E-12	1.43E-12	7.33E-13	4.25E-13
L = 3; D = 4; C = 0.6	8.09E-08	2.50E-08	1.08E-08	3.26E-09	1.39E-09	7.16E-10	4.16E-10	1.76E-10	9.05E-11	2.69E-11	1.14E-11	3.38E-12	1.43E-12	7.32E-13	4.24E-13
L = 3; D = 4; C = 1	8.55E-08	2.59E-08	1.11E-08	3.32E-09	1.41E-09	7.24E-10	4.20E-10	1.78E-10	9.11E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.34E-13	4.25E-13
T = 0.8	8.98E-08	2.68E-08	1.14E-08	3.37E-09	1.43E-09	7.31E-10	4.23E-10	1.79E-10	9.15E-11	2.71E-11	1.15E-11	3.40E-12	1.43E-12	7.35E-13	4.26E-13
T = 0.6	8.93E-08	2.67E-08	1.13E-08	3.37E-09	1.42E-09	7.30E-10	4.23E-10	1.78E-10	9.14E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.35E-13	4.25E-13
T = 0.4	8.87E-08	2.66E-08	1.13E-08	3.36E-09	1.42E-09	7.29E-10	4.22E-10	1.78E-10	9.14E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.34E-13	4.25E-13
T = 0.2	8.68E-08	2.62E-08	1.11E-08	3.33E-09	1.41E-09	7.25E-10	4.20E-10	1.78E-10	9.12E-11	2.71E-11	1.14E-11	3.39E-12	1.43E-12	7.33E-13	4.24E-13

Table 2: S-values for ^{211}Po

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	2.70E-07	8.10E-08	3.44E-08	1.02E-08	4.33E-09	2.22E-09	1.29E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0; Z = 0.25	2.67E-07	8.03E-08	3.41E-08	1.02E-08	4.31E-09	2.21E-09	1.28E-09	5.42E-10	2.78E-10	8.24E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0; Z = 0.5	2.70E-07	8.09E-08	3.43E-08	1.02E-08	4.32E-09	2.22E-09	1.28E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0; Z = 2	2.70E-07	8.09E-08	3.43E-08	1.02E-08	4.33E-09	2.22E-09	1.28E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0; Z = 4	2.69E-07	8.07E-08	3.43E-08	1.02E-08	4.32E-09	2.22E-09	1.28E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0.3; D = 12; C = 0.3	2.68E-07	8.02E-08	3.41E-08	1.02E-08	4.30E-09	2.21E-09	1.28E-09	5.41E-10	2.77E-10	8.24E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 0.3; D = 12; C = 0.6	2.59E-07	7.83E-08	3.34E-08	1.00E-08	4.27E-09	2.19E-09	1.27E-09	5.39E-10	2.77E-10	8.22E-11	3.47E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 0.3; D = 12; C = 1	2.64E-07	7.94E-08	3.38E-08	1.01E-08	4.29E-09	2.20E-09	1.28E-09	5.41E-10	2.77E-10	8.23E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 0.3; D = 1.5; C = 0.3	2.70E-07	8.09E-08	3.43E-08	1.02E-08	4.33E-09	2.22E-09	1.29E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0.3; D = 1.5; C = 0.6	2.69E-07	8.08E-08	3.43E-08	1.02E-08	4.32E-09	2.22E-09	1.28E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0.3; D = 1.5; C = 1	2.70E-07	8.09E-08	3.43E-08	1.02E-08	4.33E-09	2.22E-09	1.29E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0.3; D = 4; C = 0.3	2.69E-07	8.06E-08	3.42E-08	1.02E-08	4.32E-09	2.22E-09	1.28E-09	5.42E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0.3; D = 4; C = 0.6	2.67E-07	8.02E-08	3.41E-08	1.02E-08	4.31E-09	2.21E-09	1.28E-09	5.42E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0.3; D = 4; C = 1	2.69E-07	8.06E-08	3.42E-08	1.02E-08	4.32E-09	2.21E-09	1.28E-09	5.42E-10	2.78E-10	8.24E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 1; D = 12; C = 0.3	2.56E-07	7.75E-08	3.31E-08	9.96E-09	4.24E-09	2.18E-09	1.27E-09	5.37E-10	2.76E-10	8.21E-11	3.47E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 1; D = 12; C = 0.6	2.28E-07	7.13E-08	3.11E-08	9.56E-09	4.11E-09	2.13E-09	1.24E-09	5.29E-10	2.73E-10	8.13E-11	3.44E-11	1.02E-11	4.33E-12	2.22E-12	1.29E-12
L = 1; D = 12; C = 1	2.46E-07	7.52E-08	3.24E-08	9.82E-09	4.19E-09	2.16E-09	1.26E-09	5.34E-10	2.75E-10	8.18E-11	3.46E-11	1.03E-11	4.34E-12	2.22E-12	1.29E-12
L = 1; D = 1.5; C = 0.3	2.68E-07	8.05E-08	3.42E-08	1.02E-08	4.32E-09	2.21E-09	1.28E-09	5.42E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 1; D = 1.5; C = 0.6	2.67E-07	8.03E-08	3.41E-08	1.02E-08	4.31E-09	2.21E-09	1.28E-09	5.42E-10	2.78E-10	8.24E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 1; D = 1.5; C = 1	2.69E-07	8.07E-08	3.43E-08	1.02E-08	4.32E-09	2.22E-09	1.28E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 1; D = 4; C = 0.3	2.62E-07	7.92E-08	3.38E-08	1.01E-08	4.29E-09	2.20E-09	1.28E-09	5.41E-10	2.77E-10	8.23E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 1; D = 4; C = 0.6	2.54E-07	7.75E-08	3.32E-08	1.00E-08	4.26E-09	2.19E-09	1.27E-09	5.39E-10	2.76E-10	8.21E-11	3.47E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 1; D = 4; C = 1	2.62E-07	7.92E-08	3.38E-08	1.01E-08	4.29E-09	2.20E-09	1.28E-09	5.41E-10	2.77E-10	8.23E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 3; D = 12; C = 0.3	2.19E-07	6.87E-08	3.01E-08	9.34E-09	4.04E-09	2.10E-09	1.23E-09	5.24E-10	2.71E-10	8.10E-11	3.43E-11	1.02E-11	4.32E-12	2.22E-12	1.28E-12
L = 3; D = 12; C = 0.6	1.78E-07	6.02E-08	2.74E-08	8.79E-09	3.86E-09	2.03E-09	1.19E-09	5.13E-10	2.66E-10	8.00E-11	3.40E-11	1.02E-11	4.31E-12	2.21E-12	1.28E-12
L = 3; D = 12; C = 1	2.22E-07	6.98E-08	3.06E-08	9.44E-09	4.07E-09	2.11E-09	1.23E-09	5.26E-10	2.71E-10	8.12E-11	3.44E-11	1.02E-11	4.33E-12	2.22E-12	1.29E-12
L = 3; D = 1.5; C = 0.3	2.62E-07	7.93E-08	3.38E-08	1.01E-08	4.29E-09	2.21E-09	1.28E-09	5.41E-10	2.77E-10	8.24E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 3; D = 1.5; C = 0.6	2.59E-07	7.87E-08	3.36E-08	1.01E-08	4.28E-09	2.20E-09	1.28E-09	5.40E-10	2.77E-10	8.23E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 3; D = 1.5; C = 1	2.65E-07	7.99E-08	3.40E-08	1.02E-08	4.30E-09	2.21E-09	1.28E-09	5.41E-10	2.78E-10	8.24E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 3; D = 4; C = 0.3	2.40E-07	7.48E-08	3.24E-08	9.84E-09	4.20E-09	2.17E-09	1.26E-09	5.35E-10	2.75E-10	8.18E-11	3.46E-11	1.03E-11	4.34E-12	2.23E-12	1.29E-12
L = 3; D = 4; C = 0.6	2.33E-07	7.34E-08	3.19E-08	9.74E-09	4.17E-09	2.16E-09	1.26E-09	5.33E-10	2.74E-10	8.17E-11	3.46E-11	1.03E-11	4.34E-12	2.22E-12	1.29E-12
L = 3; D = 4; C = 1	2.52E-07	7.71E-08	3.31E-08	9.97E-09	4.25E-09	2.18E-09	1.27E-09	5.38E-10	2.76E-10	8.21E-11	3.47E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
T = 0.8	2.70E-07	8.10E-08	3.44E-08	1.02E-08	4.33E-09	2.22E-09	1.29E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
T = 0.6	2.69E-07	8.07E-08	3.42E-08	1.02E-08	4.32E-09	2.22E-09	1.28E-09	5.42E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
T = 0.4	2.66E-07	8.00E-08	3.40E-08	1.02E-08	4.31E-09	2.21E-09	1.28E-09	5.42E-10	2.78E-10	8.24E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
T = 0.2	2.57E-07	7.84E-08	3.35E-08	1.01E-08	4.27E-09	2.20E-09	1.27E-09	5.40E-10	2.77E-10	8.22E-11	3.47E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12

Table 3: S-values for ^{225}Ac

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	2.12E-07	6.31E-08	2.67E-08	7.95E-09	3.36E-09	1.72E-09	9.97E-10	4.21E-10	2.16E-10	6.39E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 0; Z = 0.25	2.10E-07	6.27E-08	2.66E-08	7.92E-09	3.35E-09	1.72E-09	9.95E-10	4.20E-10	2.15E-10	6.39E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 0; Z = 0.5	2.12E-07	6.32E-08	2.67E-08	7.95E-09	3.36E-09	1.72E-09	9.97E-10	4.21E-10	2.16E-10	6.40E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 0; Z = 2	2.11E-07	6.31E-08	2.67E-08	7.94E-09	3.36E-09	1.72E-09	9.97E-10	4.21E-10	2.16E-10	6.40E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 0; Z = 4	2.11E-07	6.30E-08	2.67E-08	7.94E-09	3.36E-09	1.72E-09	9.97E-10	4.21E-10	2.16E-10	6.40E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 0.3; D = 12; C = 0.3	2.10E-07	6.27E-08	2.66E-08	7.91E-09	3.35E-09	1.72E-09	9.95E-10	4.20E-10	2.15E-10	6.39E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 0.3; D = 12; C = 0.6	2.05E-07	6.17E-08	2.63E-08	7.85E-09	3.33E-09	1.71E-09	9.91E-10	4.19E-10	2.15E-10	6.38E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 0.3; D = 12; C = 1	2.08E-07	6.24E-08	2.65E-08	7.89E-09	3.34E-09	1.71E-09	9.94E-10	4.20E-10	2.15E-10	6.39E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 0.3; D = 1.5; C = 0.3	2.12E-07	6.31E-08	2.67E-08	7.94E-09	3.36E-09	1.72E-09	9.97E-10	4.21E-10	2.16E-10	6.40E-11	2.70E-11	8.01E-12	3.38E-12	1.73E-12	1.00E-12
L = 0.3; D = 1.5; C = 0.6	2.12E-07	6.32E-08	2.67E-08	7.95E-09	3.36E-09	1.72E-09	9.97E-10	4.21E-10	2.16E-10	6.40E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 0.3; D = 1.5; C = 1	2.12E-07	6.32E-08	2.68E-08	7.95E-09	3.36E-09	1.72E-09	9.97E-10	4.21E-10	2.16E-10	6.40E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 0.3; D = 4; C = 0.3	2.11E-07	6.30E-08	2.67E-08	7.94E-09	3.36E-09	1.72E-09	9.97E-10	4.21E-10	2.16E-10	6.40E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 0.3; D = 4; C = 0.6	2.10E-07	6.28E-08	2.66E-08	7.93E-09	3.35E-09	1.72E-09	9.96E-10	4.21E-10	2.16E-10	6.39E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 0.3; D = 4; C = 1	2.11E-07	6.30E-08	2.67E-08	7.94E-09	3.36E-09	1.72E-09	9.96E-10	4.21E-10	2.16E-10	6.39E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 1; D = 12; C = 0.3	2.02E-07	6.11E-08	2.61E-08	7.81E-09	3.31E-09	1.70E-09	9.88E-10	4.18E-10	2.15E-10	6.37E-11	2.69E-11	7.99E-12	3.37E-12	1.73E-12	1.00E-12
L = 1; D = 12; C = 0.6	1.87E-07	5.80E-08	2.50E-08	7.60E-09	3.25E-09	1.67E-09	9.74E-10	4.14E-10	2.13E-10	6.33E-11	2.68E-11	7.96E-12	3.36E-12	1.72E-12	9.98E-13
L = 1; D = 12; C = 1	1.97E-07	5.99E-08	2.57E-08	7.73E-09	3.29E-09	1.69E-09	9.84E-10	4.17E-10	2.14E-10	6.36E-11	2.69E-11	7.98E-12	3.37E-12	1.73E-12	9.99E-13
L = 1; D = 1.5; C = 0.3	2.11E-07	6.30E-08	2.67E-08	7.94E-09	3.36E-09	1.72E-09	9.97E-10	4.21E-10	2.16E-10	6.40E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 1; D = 1.5; C = 0.6	2.10E-07	6.28E-08	2.66E-08	7.93E-09	3.35E-09	1.72E-09	9.97E-10	4.21E-10	2.16E-10	6.40E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 1; D = 1.5; C = 1	2.11E-07	6.30E-08	2.67E-08	7.94E-09	3.36E-09	1.72E-09	9.97E-10	4.21E-10	2.16E-10	6.39E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 1; D = 4; C = 0.3	2.08E-07	6.24E-08	2.65E-08	7.90E-09	3.34E-09	1.72E-09	9.94E-10	4.20E-10	2.15E-10	6.39E-11	2.70E-11	8.00E-12	3.37E-12	1.73E-12	1.00E-12
L = 1; D = 4; C = 0.6	2.03E-07	6.12E-08	2.61E-08	7.82E-09	3.32E-09	1.70E-09	9.88E-10	4.18E-10	2.14E-10	6.37E-11	2.69E-11	7.99E-12	3.37E-12	1.73E-12	1.00E-12
L = 1; D = 4; C = 1	2.08E-07	6.23E-08	2.65E-08	7.89E-09	3.34E-09	1.72E-09	9.94E-10	4.20E-10	2.15E-10	6.39E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 3; D = 12; C = 0.3	1.79E-07	5.61E-08	2.44E-08	7.46E-09	3.20E-09	1.66E-09	9.65E-10	4.11E-10	2.12E-10	6.31E-11	2.67E-11	7.94E-12	3.36E-12	1.72E-12	9.97E-13
L = 3; D = 12; C = 0.6	1.58E-07	5.19E-08	2.31E-08	7.23E-09	3.12E-09	1.63E-09	9.51E-10	4.07E-10	2.10E-10	6.28E-11	2.66E-11	7.92E-12	3.35E-12	1.72E-12	9.96E-13
L = 3; D = 12; C = 1	1.83E-07	5.69E-08	2.47E-08	7.53E-09	3.23E-09	1.67E-09	9.71E-10	4.13E-10	2.12E-10	6.32E-11	2.68E-11	7.95E-12	3.36E-12	1.72E-12	9.98E-13
L = 3; D = 1.5; C = 0.3	2.07E-07	6.22E-08	2.64E-08	7.89E-09	3.34E-09	1.71E-09	9.94E-10	4.20E-10	2.15E-10	6.39E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 3; D = 1.5; C = 0.6	2.06E-07	6.20E-08	2.64E-08	7.88E-09	3.34E-09	1.71E-09	9.93E-10	4.20E-10	2.15E-10	6.39E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 3; D = 1.5; C = 1	2.09E-07	6.26E-08	2.66E-08	7.92E-09	3.35E-09	1.72E-09	9.96E-10	4.21E-10	2.16E-10	6.40E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
L = 3; D = 4; C = 0.3	1.96E-07	6.01E-08	2.58E-08	7.76E-09	3.30E-09	1.70E-09	9.86E-10	4.17E-10	2.14E-10	6.37E-11	2.69E-11	7.99E-12	3.37E-12	1.73E-12	1.00E-12
L = 3; D = 4; C = 0.6	1.92E-07	5.92E-08	2.55E-08	7.69E-09	3.27E-09	1.68E-09	9.79E-10	4.15E-10	2.13E-10	6.34E-11	2.68E-11	7.97E-12	3.36E-12	1.72E-12	9.98E-13
L = 3; D = 4; C = 1	2.03E-07	6.13E-08	2.62E-08	7.83E-09	3.32E-09	1.71E-09	9.90E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.99E-12	3.37E-12	1.73E-12	1.00E-12
T = 0.8	2.12E-07	6.32E-08	2.68E-08	7.95E-09	3.36E-09	1.72E-09	9.98E-10	4.21E-10	2.16E-10	6.40E-11	2.70E-11	8.00E-12	3.38E-12	1.73E-12	1.00E-12
T = 0.6	2.11E-07	6.29E-08	2.67E-08	7.94E-09	3.36E-09	1.72E-09	9.96E-10	4.21E-10	2.16E-10	6.39E-11	2.70E-11	8.00E-12	3.37E-12	1.73E-12	1.00E-12
T = 0.4	2.09E-07	6.27E-08	2.66E-08	7.92E-09	3.35E-09	1.72E-09	9.96E-10	4.21E-10	2.15E-10	6.39E-11	2.70E-11	8.00E-12	3.37E-12	1.73E-12	1.00E-12
T = 0.2	2.05E-07	6.18E-08	2.63E-08	7.86E-09	3.33E-09	1.71E-09	9.92E-10	4.19E-10	2.15E-10	6.38E-11	2.70E-11	7.99E-12	3.37E-12	1.73E-12	1.00E-12

Table 4: S-values for ^{221}Fr

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	2.31E-07	6.90E-08	2.92E-08	8.69E-09	3.67E-09	1.88E-09	1.09E-09	4.60E-10	2.36E-10	6.99E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.10E-12
L = 0; Z = 0.25	2.29E-07	6.86E-08	2.91E-08	8.66E-09	3.66E-09	1.88E-09	1.09E-09	4.60E-10	2.36E-10	6.99E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.09E-12
L = 0; Z = 0.5	2.31E-07	6.89E-08	2.92E-08	8.68E-09	3.67E-09	1.88E-09	1.09E-09	4.60E-10	2.36E-10	7.00E-11	2.95E-11	8.76E-12	3.69E-12	1.89E-12	1.10E-12
L = 0; Z = 2	2.31E-07	6.90E-08	2.92E-08	8.69E-09	3.67E-09	1.88E-09	1.09E-09	4.61E-10	2.36E-10	7.00E-11	2.95E-11	8.76E-12	3.69E-12	1.89E-12	1.10E-12
L = 0; Z = 4	2.30E-07	6.88E-08	2.92E-08	8.68E-09	3.67E-09	1.88E-09	1.09E-09	4.61E-10	2.36E-10	7.00E-11	2.95E-11	8.76E-12	3.69E-12	1.89E-12	1.10E-12
L = 0.3; D = 12; C = 0.3	2.29E-07	6.84E-08	2.90E-08	8.65E-09	3.66E-09	1.88E-09	1.09E-09	4.59E-10	2.35E-10	6.98E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.09E-12
L = 0.3; D = 12; C = 0.6	2.23E-07	6.72E-08	2.86E-08	8.57E-09	3.64E-09	1.87E-09	1.08E-09	4.58E-10	2.35E-10	6.98E-11	2.95E-11	8.74E-12	3.69E-12	1.89E-12	1.09E-12
L = 0.3; D = 12; C = 1	2.26E-07	6.80E-08	2.89E-08	8.62E-09	3.65E-09	1.87E-09	1.09E-09	4.59E-10	2.35E-10	6.99E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.09E-12
L = 0.3; D = 1.5; C = 0.3	2.31E-07	6.90E-08	2.92E-08	8.69E-09	3.67E-09	1.88E-09	1.09E-09	4.61E-10	2.36E-10	7.00E-11	2.95E-11	8.76E-12	3.70E-12	1.89E-12	1.10E-12
L = 0.3; D = 1.5; C = 0.6	2.30E-07	6.89E-08	2.92E-08	8.69E-09	3.67E-09	1.88E-09	1.09E-09	4.61E-10	2.36E-10	7.00E-11	2.95E-11	8.76E-12	3.69E-12	1.89E-12	1.10E-12
L = 0.3; D = 1.5; C = 1	2.31E-07	6.89E-08	2.92E-08	8.69E-09	3.67E-09	1.88E-09	1.09E-09	4.61E-10	2.36E-10	7.00E-11	2.95E-11	8.76E-12	3.70E-12	1.89E-12	1.10E-12
L = 0.3; D = 4; C = 0.3	2.30E-07	6.88E-08	2.91E-08	8.67E-09	3.67E-09	1.88E-09	1.09E-09	4.60E-10	2.36E-10	6.99E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.10E-12
L = 0.3; D = 4; C = 0.6	2.29E-07	6.85E-08	2.91E-08	8.66E-09	3.67E-09	1.88E-09	1.09E-09	4.60E-10	2.36E-10	6.99E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.10E-12
L = 0.3; D = 4; C = 1	2.30E-07	6.88E-08	2.92E-08	8.68E-09	3.67E-09	1.88E-09	1.09E-09	4.60E-10	2.36E-10	6.99E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.09E-12
L = 1; D = 12; C = 0.3	2.20E-07	6.64E-08	2.83E-08	8.50E-09	3.61E-09	1.86E-09	1.08E-09	4.57E-10	2.34E-10	6.96E-11	2.94E-11	8.73E-12	3.69E-12	1.89E-12	1.09E-12
L = 1; D = 12; C = 0.6	2.01E-07	6.25E-08	2.71E-08	8.26E-09	3.53E-09	1.83E-09	1.06E-09	4.52E-10	2.32E-10	6.92E-11	2.93E-11	8.70E-12	3.68E-12	1.88E-12	1.09E-12
L = 1; D = 12; C = 1	2.12E-07	6.49E-08	2.79E-08	8.41E-09	3.58E-09	1.85E-09	1.07E-09	4.55E-10	2.34E-10	6.95E-11	2.94E-11	8.72E-12	3.68E-12	1.89E-12	1.09E-12
L = 1; D = 1.5; C = 0.3	2.29E-07	6.86E-08	2.91E-08	8.67E-09	3.67E-09	1.88E-09	1.09E-09	4.60E-10	2.36E-10	6.99E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.09E-12
L = 1; D = 1.5; C = 0.6	2.29E-07	6.85E-08	2.91E-08	8.66E-09	3.66E-09	1.88E-09	1.09E-09	4.60E-10	2.36E-10	6.99E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.09E-12
L = 1; D = 1.5; C = 1	2.30E-07	6.88E-08	2.92E-08	8.68E-09	3.67E-09	1.88E-09	1.09E-09	4.60E-10	2.36E-10	7.00E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.10E-12
L = 1; D = 4; C = 0.3	2.25E-07	6.77E-08	2.88E-08	8.61E-09	3.65E-09	1.87E-09	1.09E-09	4.59E-10	2.35E-10	6.98E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.09E-12
L = 1; D = 4; C = 0.6	2.19E-07	6.65E-08	2.84E-08	8.53E-09	3.62E-09	1.86E-09	1.08E-09	4.57E-10	2.35E-10	6.97E-11	2.95E-11	8.74E-12	3.69E-12	1.89E-12	1.09E-12
L = 1; D = 4; C = 1	2.25E-07	6.78E-08	2.88E-08	8.61E-09	3.65E-09	1.87E-09	1.09E-09	4.59E-10	2.35E-10	6.98E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.09E-12
L = 3; D = 12; C = 0.3	1.93E-07	6.05E-08	2.64E-08	8.11E-09	3.49E-09	1.81E-09	1.05E-09	4.49E-10	2.31E-10	6.90E-11	2.92E-11	8.68E-12	3.67E-12	1.88E-12	1.09E-12
L = 3; D = 12; C = 0.6	1.66E-07	5.51E-08	2.47E-08	7.77E-09	3.38E-09	1.76E-09	1.03E-09	4.41E-10	2.28E-10	6.84E-11	2.90E-11	8.65E-12	3.66E-12	1.88E-12	1.09E-12
L = 3; D = 12; C = 1	1.95E-07	6.12E-08	2.66E-08	8.16E-09	3.50E-09	1.81E-09	1.06E-09	4.50E-10	2.32E-10	6.91E-11	2.93E-11	8.70E-12	3.68E-12	1.88E-12	1.09E-12
L = 3; D = 1.5; C = 0.3	2.26E-07	6.79E-08	2.89E-08	8.62E-09	3.65E-09	1.87E-09	1.09E-09	4.59E-10	2.36E-10	6.99E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.09E-12
L = 3; D = 1.5; C = 0.6	2.23E-07	6.74E-08	2.87E-08	8.59E-09	3.64E-09	1.87E-09	1.08E-09	4.59E-10	2.35E-10	6.99E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.09E-12
L = 3; D = 1.5; C = 1	2.28E-07	6.83E-08	2.90E-08	8.65E-09	3.66E-09	1.88E-09	1.09E-09	4.60E-10	2.36E-10	6.99E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.09E-12
L = 3; D = 4; C = 0.3	2.10E-07	6.47E-08	2.78E-08	8.42E-09	3.59E-09	1.85E-09	1.07E-09	4.55E-10	2.34E-10	6.95E-11	2.94E-11	8.73E-12	3.69E-12	1.89E-12	1.09E-12
L = 3; D = 4; C = 0.6	2.05E-07	6.38E-08	2.75E-08	8.36E-09	3.57E-09	1.84E-09	1.07E-09	4.54E-10	2.33E-10	6.94E-11	2.94E-11	8.72E-12	3.68E-12	1.89E-12	1.09E-12
L = 3; D = 4; C = 1	2.19E-07	6.65E-08	2.84E-08	8.54E-09	3.62E-09	1.86E-09	1.08E-09	4.57E-10	2.35E-10	6.97E-11	2.95E-11	8.74E-12	3.69E-12	1.89E-12	1.09E-12
T = 0.8	2.31E-07	6.90E-08	2.92E-08	8.69E-09	3.67E-09	1.88E-09	1.09E-09	4.61E-10	2.36E-10	7.00E-11	2.95E-11	8.76E-12	3.70E-12	1.89E-12	1.10E-12
T = 0.6	2.30E-07	6.87E-08	2.91E-08	8.68E-09	3.67E-09	1.88E-09	1.09E-09	4.60E-10	2.36E-10	7.00E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.10E-12
T = 0.4	2.28E-07	6.84E-08	2.90E-08	8.65E-09	3.66E-09	1.88E-09	1.09E-09	4.60E-10	2.36E-10	6.99E-11	2.95E-11	8.75E-12	3.69E-12	1.89E-12	1.10E-12
T = 0.2	2.23E-07	6.73E-08	2.87E-08	8.58E-09	3.64E-09	1.87E-09	1.08E-09	4.59E-10	2.35E-10	6.98E-11	2.95E-11	8.74E-12	3.69E-12	1.89E-12	1.09E-12

Table 5: S-values for ^{217}At

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	2.58E-07	7.71E-08	3.27E-08	9.73E-09	4.11E-09	2.11E-09	1.22E-09	5.16E-10	2.64E-10	7.84E-11	3.31E-11	9.81E-12	4.14E-12	2.12E-12	1.23E-12
L = 0; Z = 0.25	2.55E-07	7.65E-08	3.25E-08	9.68E-09	4.10E-09	2.10E-09	1.22E-09	5.15E-10	2.64E-10	7.83E-11	3.31E-11	9.80E-12	4.14E-12	2.12E-12	1.23E-12
L = 0; Z = 0.5	2.57E-07	7.70E-08	3.26E-08	9.72E-09	4.11E-09	2.11E-09	1.22E-09	5.16E-10	2.64E-10	7.84E-11	3.31E-11	9.81E-12	4.14E-12	2.12E-12	1.23E-12
L = 0; Z = 2	2.57E-07	7.70E-08	3.26E-08	9.72E-09	4.11E-09	2.11E-09	1.22E-09	5.16E-10	2.64E-10	7.84E-11	3.31E-11	9.81E-12	4.14E-12	2.12E-12	1.23E-12
L = 0; Z = 4	2.56E-07	7.68E-08	3.26E-08	9.71E-09	4.11E-09	2.11E-09	1.22E-09	5.16E-10	2.64E-10	7.84E-11	3.31E-11	9.81E-12	4.14E-12	2.12E-12	1.23E-12
L = 0.3; D = 12; C = 0.3	2.55E-07	7.64E-08	3.24E-08	9.67E-09	4.09E-09	2.10E-09	1.22E-09	5.14E-10	2.64E-10	7.83E-11	3.30E-11	9.80E-12	4.14E-12	2.12E-12	1.23E-12
L = 0.3; D = 12; C = 0.6	2.48E-07	7.47E-08	3.19E-08	9.56E-09	4.06E-09	2.09E-09	1.21E-09	5.12E-10	2.63E-10	7.81E-11	3.30E-11	9.79E-12	4.13E-12	2.12E-12	1.23E-12
L = 0.3; D = 12; C = 1	2.52E-07	7.56E-08	3.22E-08	9.63E-09	4.08E-09	2.10E-09	1.22E-09	5.14E-10	2.64E-10	7.82E-11	3.30E-11	9.80E-12	4.14E-12	2.12E-12	1.23E-12
L = 0.3; D = 1.5; C = 0.3	2.57E-07	7.70E-08	3.27E-08	9.72E-09	4.11E-09	2.11E-09	1.22E-09	5.16E-10	2.64E-10	7.84E-11	3.31E-11	9.81E-12	4.14E-12	2.12E-12	1.23E-12
L = 0.3; D = 1.5; C = 0.6	2.57E-07	7.69E-08	3.26E-08	9.71E-09	4.11E-09	2.11E-09	1.22E-09	5.16E-10	2.64E-10	7.84E-11	3.31E-11	9.81E-12	4.14E-12	2.12E-12	1.23E-12
L = 0.3; D = 1.5; C = 1	2.57E-07	7.70E-08	3.26E-08	9.72E-09	4.11E-09	2.11E-09	1.22E-09	5.16E-10	2.64E-10	7.84E-11	3.31E-11	9.81E-12	4.14E-12	2.12E-12	1.23E-12
L = 0.3; D = 4; C = 0.3	2.56E-07	7.68E-08	3.26E-08	9.71E-09	4.11E-09	2.11E-09	1.22E-09	5.16E-10	2.64E-10	7.84E-11	3.31E-11	9.81E-12	4.14E-12	2.12E-12	1.23E-12
L = 0.3; D = 4; C = 0.6	2.55E-07	7.64E-08	3.24E-08	9.68E-09	4.10E-09	2.10E-09	1.22E-09	5.15E-10	2.64E-10	7.83E-11	3.31E-11	9.81E-12	4.14E-12	2.12E-12	1.23E-12
L = 0.3; D = 4; C = 1	2.56E-07	7.68E-08	3.26E-08	9.70E-09	4.10E-09	2.11E-09	1.22E-09	5.15E-10	2.64E-10	7.83E-11	3.31E-11	9.80E-12	4.14E-12	2.12E-12	1.23E-12
L = 1; D = 12; C = 0.3	2.45E-07	7.39E-08	3.16E-08	9.49E-09	4.04E-09	2.08E-09	1.21E-09	5.11E-10	2.62E-10	7.80E-11	3.30E-11	9.78E-12	4.13E-12	2.12E-12	1.22E-12
L = 1; D = 12; C = 0.6	2.19E-07	6.84E-08	2.98E-08	9.14E-09	3.92E-09	2.03E-09	1.18E-09	5.04E-10	2.59E-10	7.74E-11	3.28E-11	9.74E-12	4.12E-12	2.11E-12	1.22E-12
L = 1; D = 12; C = 1	2.35E-07	7.19E-08	3.09E-08	9.36E-09	3.99E-09	2.06E-09	1.20E-09	5.08E-10	2.61E-10	7.78E-11	3.29E-11	9.77E-12	4.13E-12	2.11E-12	1.22E-12
L = 1; D = 1.5; C = 0.3	2.56E-07	7.66E-08	3.25E-08	9.70E-09	4.10E-09	2.10E-09	1.22E-09	5.15E-10	2.64E-10	7.83E-11	3.31E-11	9.80E-12	4.14E-12	2.12E-12	1.23E-12
L = 1; D = 1.5; C = 0.6	2.54E-07	7.65E-08	3.25E-08	9.69E-09	4.10E-09	2.10E-09	1.22E-09	5.15E-10	2.64E-10	7.83E-11	3.31E-11	9.80E-12	4.14E-12	2.12E-12	1.23E-12
L = 1; D = 1.5; C = 1	2.56E-07	7.68E-08	3.26E-08	9.71E-09	4.11E-09	2.11E-09	1.22E-09	5.16E-10	2.64E-10	7.84E-11	3.31E-11	9.81E-12	4.14E-12	2.12E-12	1.23E-12
L = 1; D = 4; C = 0.3	2.50E-07	7.55E-08	3.22E-08	9.63E-09	4.08E-09	2.10E-09	1.22E-09	5.14E-10	2.64E-10	7.83E-11	3.30E-11	9.80E-12	4.14E-12	2.12E-12	1.23E-12
L = 1; D = 4; C = 0.6	2.43E-07	7.40E-08	3.17E-08	9.53E-09	4.05E-09	2.08E-09	1.21E-09	5.12E-10	2.63E-10	7.81E-11	3.30E-11	9.79E-12	4.13E-12	2.12E-12	1.23E-12
L = 1; D = 4; C = 1	2.50E-07	7.55E-08	3.22E-08	9.62E-09	4.08E-09	2.10E-09	1.21E-09	5.14E-10	2.64E-10	7.82E-11	3.30E-11	9.80E-12	4.14E-12	2.12E-12	1.23E-12
L = 3; D = 12; C = 0.3	2.11E-07	6.61E-08	2.89E-08	8.95E-09	3.86E-09	2.00E-09	1.17E-09	5.00E-10	2.58E-10	7.70E-11	3.26E-11	9.72E-12	4.11E-12	2.11E-12	1.22E-12
L = 3; D = 12; C = 0.6	1.74E-07	5.86E-08	2.65E-08	8.46E-09	3.71E-09	1.94E-09	1.14E-09	4.90E-10	2.53E-10	7.62E-11	3.24E-11	9.67E-12	4.10E-12	2.10E-12	1.22E-12
L = 3; D = 12; C = 1	2.14E-07	6.71E-08	2.93E-08	9.03E-09	3.89E-09	2.02E-09	1.18E-09	5.02E-10	2.58E-10	7.72E-11	3.27E-11	9.73E-12	4.11E-12	2.11E-12	1.22E-12
L = 3; D = 1.5; C = 0.3	2.50E-07	7.56E-08	3.22E-08	9.64E-09	4.08E-09	2.10E-09	1.22E-09	5.14E-10	2.64E-10	7.83E-11	3.31E-11	9.80E-12	4.14E-12	2.12E-12	1.23E-12
L = 3; D = 1.5; C = 0.6	2.48E-07	7.51E-08	3.20E-08	9.60E-09	4.07E-09	2.09E-09	1.21E-09	5.13E-10	2.63E-10	7.82E-11	3.30E-11	9.80E-12	4.13E-12	2.12E-12	1.23E-12
L = 3; D = 1.5; C = 1	2.53E-07	7.62E-08	3.24E-08	9.66E-09	4.09E-09	2.10E-09	1.22E-09	5.15E-10	2.64E-10	7.83E-11	3.31E-11	9.80E-12	4.14E-12	2.12E-12	1.23E-12
L = 3; D = 4; C = 0.3	2.31E-07	7.16E-08	3.09E-08	9.38E-09	4.00E-09	2.06E-09	1.20E-09	5.09E-10	2.61E-10	7.78E-11	3.29E-11	9.77E-12	4.13E-12	2.11E-12	1.22E-12
L = 3; D = 4; C = 0.6	2.25E-07	7.04E-08	3.05E-08	9.30E-09	3.98E-09	2.05E-09	1.20E-09	5.08E-10	2.61E-10	7.77E-11	3.29E-11	9.77E-12	4.13E-12	2.11E-12	1.22E-12
L = 3; D = 4; C = 1	2.41E-07	7.37E-08	3.16E-08	9.50E-09	4.04E-09	2.08E-09	1.21E-09	5.11E-10	2.62E-10	7.80E-11	3.30E-11	9.79E-12	4.13E-12	2.12E-12	1.23E-12
T = 0.8	2.58E-07	7.71E-08	3.27E-08	9.72E-09	4.11E-09	2.11E-09	1.22E-09	5.16E-10	2.64E-10	7.84E-11	3.31E-11	9.81E-12	4.14E-12	2.12E-12	1.23E-12
T = 0.6	2.56E-07	7.68E-08	3.26E-08	9.71E-09	4.11E-09	2.11E-09	1.22E-09	5.15E-10	2.64E-10	7.84E-11	3.31E-11	9.81E-12	4.14E-12	2.12E-12	1.23E-12
T = 0.4	2.53E-07	7.62E-08	3.24E-08	9.67E-09	4.10E-09	2.10E-09	1.22E-09	5.15E-10	2.64E-10	7.83E-11	3.31E-11	9.80E-12	4.14E-12	2.12E-12	1.23E-12
T = 0.2	2.46E-07	7.48E-08	3.19E-08	9.58E-09	4.07E-09	2.09E-09	1.21E-09	5.13E-10	2.63E-10	7.81E-11	3.30E-11	9.79E-12	4.13E-12	2.12E-12	1.23E-12

Table 6: S-values for ^{213}Bi

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	1.09E-08	3.86E-09	1.81E-09	6.11E-10	2.77E-10	1.47E-10	8.71E-11	3.77E-11	1.97E-11	5.99E-12	2.56E-12	7.71E-13	3.29E-13	1.70E-13	9.92E-14
L = 0; Z = 0.25	9.77E-09	3.43E-09	1.63E-09	5.54E-10	2.55E-10	1.38E-10	8.27E-11	3.65E-11	1.92E-11	5.87E-12	2.52E-12	7.63E-13	3.26E-13	1.68E-13	9.82E-14
L = 0; Z = 0.5	1.07E-08	3.75E-09	1.76E-09	5.98E-10	2.71E-10	1.45E-10	8.59E-11	3.75E-11	1.95E-11	5.95E-12	2.55E-12	7.70E-13	3.28E-13	1.70E-13	9.89E-14
L = 0; Z = 2	1.07E-08	3.77E-09	1.78E-09	6.02E-10	2.73E-10	1.46E-10	8.66E-11	3.78E-11	1.96E-11	5.98E-12	2.56E-12	7.72E-13	3.29E-13	1.70E-13	9.91E-14
L = 0; Z = 4	9.99E-09	3.50E-09	1.67E-09	5.73E-10	2.61E-10	1.41E-10	8.43E-11	3.70E-11	1.93E-11	5.90E-12	2.53E-12	7.66E-13	3.27E-13	1.69E-13	9.86E-14
L = 0.3; D = 12; C = 0.3	1.08E-08	3.84E-09	1.81E-09	6.08E-10	2.74E-10	1.46E-10	8.65E-11	3.76E-11	1.95E-11	5.94E-12	2.54E-12	7.67E-13	3.27E-13	1.69E-13	9.86E-14
L = 0.3; D = 12; C = 0.6	1.06E-08	3.76E-09	1.77E-09	5.97E-10	2.69E-10	1.43E-10	8.47E-11	3.69E-11	1.92E-11	5.81E-12	2.49E-12	7.52E-13	3.22E-13	1.67E-13	9.74E-14
L = 0.3; D = 12; C = 1	1.08E-08	3.80E-09	1.78E-09	6.03E-10	2.72E-10	1.45E-10	8.58E-11	3.73E-11	1.93E-11	5.87E-12	2.51E-12	7.60E-13	3.25E-13	1.68E-13	9.83E-14
L = 0.3; D = 1.5; C = 0.3	1.09E-08	3.83E-09	1.80E-09	6.10E-10	2.76E-10	1.47E-10	8.70E-11	3.76E-11	1.96E-11	5.98E-12	2.56E-12	7.71E-13	3.29E-13	1.70E-13	9.91E-14
L = 0.3; D = 1.5; C = 0.6	1.08E-08	3.83E-09	1.80E-09	6.07E-10	2.74E-10	1.46E-10	8.65E-11	3.77E-11	1.96E-11	5.96E-12	2.55E-12	7.70E-13	3.29E-13	1.70E-13	9.91E-14
L = 0.3; D = 1.5; C = 1	1.09E-08	3.84E-09	1.80E-09	6.08E-10	2.75E-10	1.46E-10	8.67E-11	3.75E-11	1.96E-11	5.97E-12	2.55E-12	7.71E-13	3.29E-13	1.70E-13	9.91E-14
L = 0.3; D = 4; C = 0.3	1.09E-08	3.84E-09	1.81E-09	6.10E-10	2.75E-10	1.46E-10	8.68E-11	3.78E-11	1.96E-11	5.95E-12	2.55E-12	7.70E-13	3.29E-13	1.70E-13	9.91E-14
L = 0.3; D = 4; C = 0.6	1.08E-08	3.79E-09	1.78E-09	6.00E-10	2.70E-10	1.44E-10	8.53E-11	3.71E-11	1.93E-11	5.88E-12	2.52E-12	7.63E-13	3.26E-13	1.69E-13	9.86E-14
L = 0.3; D = 4; C = 1	1.08E-08	3.81E-09	1.79E-09	6.05E-10	2.73E-10	1.45E-10	8.61E-11	3.75E-11	1.95E-11	5.93E-12	2.54E-12	7.68E-13	3.28E-13	1.70E-13	9.89E-14
L = 1; D = 12; C = 0.3	1.05E-08	3.70E-09	1.74E-09	5.88E-10	2.65E-10	1.41E-10	8.34E-11	3.63E-11	1.89E-11	5.73E-12	2.46E-12	7.44E-13	3.19E-13	1.65E-13	9.66E-14
L = 1; D = 12; C = 0.6	9.56E-09	3.38E-09	1.59E-09	5.28E-10	2.38E-10	1.26E-10	7.48E-11	3.25E-11	1.71E-11	5.24E-12	2.27E-12	6.97E-13	3.00E-13	1.57E-13	9.25E-14
L = 1; D = 12; C = 1	1.02E-08	3.61E-09	1.69E-09	5.71E-10	2.56E-10	1.37E-10	8.09E-11	3.52E-11	1.84E-11	5.60E-12	2.41E-12	7.26E-13	3.13E-13	1.63E-13	9.53E-14
L = 1; D = 1.5; C = 0.3	1.07E-08	3.77E-09	1.77E-09	5.98E-10	2.71E-10	1.44E-10	8.56E-11	3.73E-11	1.94E-11	5.92E-12	2.54E-12	7.68E-13	3.28E-13	1.70E-13	9.89E-14
L = 1; D = 1.5; C = 0.6	1.04E-08	3.64E-09	1.71E-09	5.76E-10	2.60E-10	1.39E-10	8.31E-11	3.65E-11	1.91E-11	5.84E-12	2.51E-12	7.62E-13	3.26E-13	1.69E-13	9.84E-14
L = 1; D = 1.5; C = 1	1.07E-08	3.77E-09	1.77E-09	5.96E-10	2.70E-10	1.44E-10	8.54E-11	3.73E-11	1.94E-11	5.93E-12	2.54E-12	7.68E-13	3.28E-13	1.70E-13	9.90E-14
L = 1; D = 4; C = 0.3	1.06E-08	3.71E-09	1.74E-09	5.86E-10	2.63E-10	1.41E-10	8.34E-11	3.64E-11	1.90E-11	5.79E-12	2.49E-12	7.55E-13	3.24E-13	1.68E-13	9.81E-14
L = 1; D = 4; C = 0.6	1.00E-08	3.49E-09	1.63E-09	5.42E-10	2.45E-10	1.30E-10	7.77E-11	3.42E-11	1.80E-11	5.58E-12	2.40E-12	7.36E-13	3.18E-13	1.65E-13	9.67E-14
L = 1; D = 4; C = 1	1.06E-08	3.70E-09	1.73E-09	5.82E-10	2.62E-10	1.40E-10	8.29E-11	3.62E-11	1.90E-11	5.77E-12	2.49E-12	7.55E-13	3.24E-13	1.68E-13	9.79E-14
L = 3; D = 12; C = 0.3	8.85E-09	3.13E-09	1.49E-09	4.97E-10	2.24E-10	1.19E-10	7.12E-11	3.12E-11	1.64E-11	5.06E-12	2.19E-12	6.76E-13	2.94E-13	1.53E-13	9.03E-14
L = 3; D = 12; C = 0.6	7.30E-09	2.60E-09	1.22E-09	3.99E-10	1.78E-10	9.54E-11	5.68E-11	2.50E-11	1.32E-11	4.16E-12	1.85E-12	5.94E-13	2.66E-13	1.42E-13	8.48E-14
L = 3; D = 12; C = 1	9.32E-09	3.29E-09	1.54E-09	5.15E-10	2.32E-10	1.23E-10	7.28E-11	3.17E-11	1.66E-11	5.11E-12	2.22E-12	6.83E-13	2.97E-13	1.55E-13	9.14E-14
L = 3; D = 1.5; C = 0.3	9.54E-09	3.33E-09	1.58E-09	5.29E-10	2.43E-10	1.31E-10	7.84E-11	3.49E-11	1.84E-11	5.70E-12	2.47E-12	7.52E-13	3.22E-13	1.67E-13	9.75E-14
L = 3; D = 1.5; C = 0.6	9.16E-09	3.20E-09	1.50E-09	5.06E-10	2.31E-10	1.26E-10	7.58E-11	3.40E-11	1.81E-11	5.66E-12	2.44E-12	7.46E-13	3.21E-13	1.66E-13	9.70E-14
L = 3; D = 1.5; C = 1	1.03E-08	3.61E-09	1.70E-09	5.73E-10	2.59E-10	1.39E-10	8.30E-11	3.64E-11	1.92E-11	5.84E-12	2.52E-12	7.62E-13	3.26E-13	1.69E-13	9.83E-14
L = 3; D = 4; C = 0.3	8.66E-09	3.05E-09	1.41E-09	4.75E-10	2.14E-10	1.15E-10	6.89E-11	3.09E-11	1.64E-11	5.21E-12	2.29E-12	7.13E-13	3.07E-13	1.61E-13	9.44E-14
L = 3; D = 4; C = 0.6	8.20E-09	2.86E-09	1.32E-09	4.38E-10	1.98E-10	1.06E-10	6.36E-11	2.85E-11	1.54E-11	4.95E-12	2.21E-12	6.97E-13	3.03E-13	1.59E-13	9.33E-14
L = 3; D = 4; C = 1	9.87E-09	3.44E-09	1.62E-09	5.38E-10	2.43E-10	1.29E-10	7.69E-11	3.39E-11	1.79E-11	5.54E-12	2.41E-12	7.34E-13	3.16E-13	1.64E-13	9.62E-14
T = 0.8	1.08E-08	3.82E-09	1.80E-09	6.07E-10	2.74E-10	1.46E-10	8.66E-11	3.75E-11	1.96E-11	5.97E-12	2.56E-12	7.72E-13	3.30E-13	1.70E-13	9.92E-14
T = 0.6	1.05E-08	3.68E-09	1.72E-09	5.85E-10	2.66E-10	1.42E-10	8.50E-11	3.72E-11	1.93E-11	5.91E-12	2.54E-12	7.67E-13	3.28E-13	1.69E-13	9.88E-14
T = 0.4	9.63E-09	3.36E-09	1.59E-09	5.37E-10	2.48E-10	1.34E-10	8.10E-11	3.59E-11	1.90E-11	5.81E-12	2.50E-12	7.60E-13	3.25E-13	1.68E-13	9.81E-14
T = 0.2	8.18E-09	2.83E-09	1.33E-09	4.56E-10	2.12E-10	1.16E-10	7.16E-11	3.25E-11	1.75E-11	5.55E-12	2.41E-12	7.39E-13	3.17E-13	1.65E-13	9.61E-14

Table 7: S-values for ^{213}Po

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	3.02E-07	9.07E-08	3.85E-08	1.15E-08	4.86E-09	2.49E-09	1.45E-09	6.11E-10	3.13E-10	9.28E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 0; Z = 0.25	2.98E-07	8.98E-08	3.82E-08	1.14E-08	4.84E-09	2.48E-09	1.44E-09	6.09E-10	3.12E-10	9.27E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 0; Z = 0.5	3.02E-07	9.06E-08	3.85E-08	1.15E-08	4.86E-09	2.49E-09	1.44E-09	6.10E-10	3.13E-10	9.28E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 0; Z = 2	3.02E-07	9.06E-08	3.85E-08	1.15E-08	4.86E-09	2.49E-09	1.44E-09	6.10E-10	3.13E-10	9.28E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 0; Z = 4	3.00E-07	9.03E-08	3.84E-08	1.15E-08	4.86E-09	2.49E-09	1.44E-09	6.10E-10	3.13E-10	9.28E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 0.3; D = 12; C = 0.3	2.99E-07	8.98E-08	3.82E-08	1.14E-08	4.83E-09	2.48E-09	1.44E-09	6.08E-10	3.12E-10	9.26E-11	3.91E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 0.3; D = 12; C = 0.6	2.89E-07	8.74E-08	3.73E-08	1.12E-08	4.78E-09	2.46E-09	1.43E-09	6.05E-10	3.11E-10	9.24E-11	3.91E-11	1.16E-11	4.89E-12	2.51E-12	1.45E-12
L = 0.3; D = 12; C = 1	2.95E-07	8.87E-08	3.78E-08	1.13E-08	4.81E-09	2.47E-09	1.44E-09	6.08E-10	3.12E-10	9.26E-11	3.91E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 0.3; D = 1.5; C = 0.3	3.02E-07	9.07E-08	3.85E-08	1.15E-08	4.86E-09	2.49E-09	1.44E-09	6.11E-10	3.13E-10	9.28E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 0.3; D = 1.5; C = 0.6	3.01E-07	9.05E-08	3.84E-08	1.15E-08	4.86E-09	2.49E-09	1.44E-09	6.10E-10	3.13E-10	9.28E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 0.3; D = 1.5; C = 1	3.02E-07	9.07E-08	3.85E-08	1.15E-08	4.86E-09	2.49E-09	1.44E-09	6.11E-10	3.13E-10	9.28E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 0.3; D = 4; C = 0.3	3.00E-07	9.03E-08	3.84E-08	1.15E-08	4.85E-09	2.49E-09	1.44E-09	6.10E-10	3.13E-10	9.28E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 0.3; D = 4; C = 0.6	2.98E-07	8.98E-08	3.82E-08	1.14E-08	4.84E-09	2.49E-09	1.44E-09	6.09E-10	3.12E-10	9.27E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 0.3; D = 4; C = 1	3.00E-07	9.03E-08	3.84E-08	1.15E-08	4.85E-09	2.49E-09	1.44E-09	6.10E-10	3.13E-10	9.27E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 1; D = 12; C = 0.3	2.86E-07	8.64E-08	3.69E-08	1.11E-08	4.74E-09	2.44E-09	1.42E-09	6.03E-10	3.10E-10	9.22E-11	3.90E-11	1.16E-11	4.89E-12	2.50E-12	1.45E-12
L = 1; D = 12; C = 0.6	2.50E-07	7.82E-08	3.42E-08	1.06E-08	4.57E-09	2.37E-09	1.39E-09	5.92E-10	3.05E-10	9.13E-11	3.87E-11	1.15E-11	4.87E-12	2.50E-12	1.45E-12
L = 1; D = 12; C = 1	2.73E-07	8.34E-08	3.60E-08	1.09E-08	4.68E-09	2.42E-09	1.41E-09	5.99E-10	3.08E-10	9.19E-11	3.89E-11	1.16E-11	4.88E-12	2.50E-12	1.45E-12
L = 1; D = 1.5; C = 0.3	2.99E-07	9.01E-08	3.83E-08	1.14E-08	4.85E-09	2.49E-09	1.44E-09	6.10E-10	3.13E-10	9.28E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 1; D = 1.5; C = 0.6	2.97E-07	8.98E-08	3.82E-08	1.14E-08	4.84E-09	2.49E-09	1.44E-09	6.09E-10	3.12E-10	9.27E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 1; D = 1.5; C = 1	3.00E-07	9.03E-08	3.84E-08	1.15E-08	4.86E-09	2.49E-09	1.44E-09	6.10E-10	3.13E-10	9.28E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 1; D = 4; C = 0.3	2.91E-07	8.84E-08	3.78E-08	1.13E-08	4.81E-09	2.47E-09	1.44E-09	6.07E-10	3.12E-10	9.26E-11	3.91E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 1; D = 4; C = 0.6	2.80E-07	8.61E-08	3.70E-08	1.12E-08	4.76E-09	2.45E-09	1.43E-09	6.05E-10	3.10E-10	9.23E-11	3.90E-11	1.16E-11	4.89E-12	2.51E-12	1.45E-12
L = 1; D = 4; C = 1	2.91E-07	8.83E-08	3.77E-08	1.13E-08	4.81E-09	2.47E-09	1.44E-09	6.07E-10	3.12E-10	9.26E-11	3.91E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 3; D = 12; C = 0.3	2.41E-07	7.51E-08	3.30E-08	1.03E-08	4.47E-09	2.33E-09	1.37E-09	5.86E-10	3.03E-10	9.07E-11	3.85E-11	1.15E-11	4.86E-12	2.49E-12	1.44E-12
L = 3; D = 12; C = 0.6	1.88E-07	6.37E-08	2.93E-08	9.55E-09	4.23E-09	2.23E-09	1.32E-09	5.70E-10	2.96E-10	8.94E-11	3.81E-11	1.14E-11	4.84E-12	2.48E-12	1.44E-12
L = 3; D = 12; C = 1	2.43E-07	7.64E-08	3.36E-08	1.04E-08	4.51E-09	2.35E-09	1.37E-09	5.88E-10	3.04E-10	9.10E-11	3.86E-11	1.15E-11	4.87E-12	2.50E-12	1.45E-12
L = 3; D = 1.5; C = 0.3	2.91E-07	8.85E-08	3.78E-08	1.13E-08	4.82E-09	2.48E-09	1.44E-09	6.08E-10	3.12E-10	9.26E-11	3.91E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 3; D = 1.5; C = 0.6	2.87E-07	8.77E-08	3.75E-08	1.13E-08	4.80E-09	2.47E-09	1.43E-09	6.07E-10	3.11E-10	9.25E-11	3.91E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 3; D = 1.5; C = 1	2.96E-07	8.94E-08	3.81E-08	1.14E-08	4.83E-09	2.48E-09	1.44E-09	6.09E-10	3.12E-10	9.27E-11	3.91E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
L = 3; D = 4; C = 0.3	2.61E-07	8.23E-08	3.58E-08	1.09E-08	4.69E-09	2.42E-09	1.41E-09	6.00E-10	3.08E-10	9.19E-11	3.89E-11	1.16E-11	4.88E-12	2.50E-12	1.45E-12
L = 3; D = 4; C = 0.6	2.52E-07	8.04E-08	3.52E-08	1.08E-08	4.65E-09	2.41E-09	1.40E-09	5.98E-10	3.08E-10	9.18E-11	3.89E-11	1.16E-11	4.88E-12	2.50E-12	1.45E-12
L = 3; D = 4; C = 1	2.77E-07	8.55E-08	3.68E-08	1.11E-08	4.75E-09	2.45E-09	1.42E-09	6.03E-10	3.10E-10	9.22E-11	3.90E-11	1.16E-11	4.89E-12	2.51E-12	1.45E-12
T = 0.8	3.02E-07	9.07E-08	3.85E-08	1.15E-08	4.86E-09	2.49E-09	1.45E-09	6.11E-10	3.13E-10	9.28E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
T = 0.6	3.00E-07	9.03E-08	3.84E-08	1.15E-08	4.85E-09	2.49E-09	1.44E-09	6.10E-10	3.13E-10	9.28E-11	3.92E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
T = 0.4	2.96E-07	8.94E-08	3.81E-08	1.14E-08	4.84E-09	2.48E-09	1.44E-09	6.09E-10	3.12E-10	9.27E-11	3.91E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12
T = 0.2	2.84E-07	8.72E-08	3.74E-08	1.13E-08	4.79E-09	2.46E-09	1.43E-09	6.06E-10	3.11E-10	9.25E-11	3.91E-11	1.16E-11	4.90E-12	2.51E-12	1.45E-12

Table 8: S-values for ^{209}Tl

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	7.18E-09	2.96E-09	1.55E-09	5.86E-10	2.82E-10	1.58E-10	9.67E-11	4.39E-11	2.37E-11	7.62E-12	3.41E-12	1.09E-12	4.87E-13	2.64E-13	1.61E-13
L = 0; Z = 0.25	5.94E-09	2.45E-09	1.28E-09	4.98E-10	2.47E-10	1.40E-10	8.71E-11	4.05E-11	2.21E-11	7.21E-12	3.24E-12	1.04E-12	4.67E-13	2.50E-13	1.52E-13
L = 0; Z = 0.5	6.74E-09	2.78E-09	1.45E-09	5.59E-10	2.73E-10	1.52E-10	9.40E-11	4.30E-11	2.33E-11	7.48E-12	3.35E-12	1.08E-12	4.84E-13	2.62E-13	1.59E-13
L = 0; Z = 2	6.78E-09	2.80E-09	1.47E-09	5.63E-10	2.75E-10	1.54E-10	9.47E-11	4.34E-11	2.33E-11	7.49E-12	3.35E-12	1.08E-12	4.85E-13	2.61E-13	1.58E-13
L = 0; Z = 4	6.09E-09	2.50E-09	1.32E-09	5.12E-10	2.53E-10	1.43E-10	8.93E-11	4.14E-11	2.25E-11	7.32E-12	3.27E-12	1.05E-12	4.72E-13	2.53E-13	1.54E-13
L = 0.3; D = 12; C = 0.3	7.05E-09	2.90E-09	1.51E-09	5.78E-10	2.81E-10	1.57E-10	9.59E-11	4.35E-11	2.34E-11	7.57E-12	3.38E-12	1.08E-12	4.84E-13	2.63E-13	1.60E-13
L = 0.3; D = 12; C = 0.6	6.97E-09	2.86E-09	1.49E-09	5.71E-10	2.76E-10	1.53E-10	9.39E-11	4.25E-11	2.29E-11	7.35E-12	3.29E-12	1.06E-12	4.76E-13	2.56E-13	1.56E-13
L = 0.3; D = 12; C = 1	6.97E-09	2.87E-09	1.50E-09	5.72E-10	2.78E-10	1.55E-10	9.48E-11	4.31E-11	2.32E-11	7.41E-12	3.31E-12	1.07E-12	4.78E-13	2.59E-13	1.58E-13
L = 0.3; D = 1.5; C = 0.3	7.06E-09	2.90E-09	1.52E-09	5.81E-10	2.82E-10	1.57E-10	9.61E-11	4.37E-11	2.35E-11	7.59E-12	3.38E-12	1.09E-12	4.88E-13	2.64E-13	1.60E-13
L = 0.3; D = 1.5; C = 0.6	7.03E-09	2.89E-09	1.50E-09	5.76E-10	2.80E-10	1.56E-10	9.55E-11	4.36E-11	2.35E-11	7.59E-12	3.38E-12	1.09E-12	4.86E-13	2.64E-13	1.61E-13
L = 0.3; D = 1.5; C = 1	7.11E-09	2.92E-09	1.52E-09	5.84E-10	2.82E-10	1.57E-10	9.65E-11	4.40E-11	2.37E-11	7.62E-12	3.39E-12	1.09E-12	4.87E-13	2.62E-13	1.60E-13
L = 0.3; D = 4; C = 0.3	7.00E-09	2.89E-09	1.51E-09	5.76E-10	2.80E-10	1.56E-10	9.58E-11	4.36E-11	2.34E-11	7.55E-12	3.37E-12	1.08E-12	4.85E-13	2.63E-13	1.60E-13
L = 0.3; D = 4; C = 0.6	6.98E-09	2.88E-09	1.51E-09	5.72E-10	2.76E-10	1.54E-10	9.42E-11	4.30E-11	2.31E-11	7.44E-12	3.33E-12	1.07E-12	4.81E-13	2.59E-13	1.58E-13
L = 0.3; D = 4; C = 1	7.04E-09	2.90E-09	1.51E-09	5.76E-10	2.79E-10	1.55E-10	9.53E-11	4.34E-11	2.33E-11	7.48E-12	3.35E-12	1.08E-12	4.84E-13	2.62E-13	1.60E-13
L = 1; D = 12; C = 0.3	6.91E-09	2.82E-09	1.47E-09	5.59E-10	2.70E-10	1.51E-10	9.19E-11	4.17E-11	2.24E-11	7.21E-12	3.22E-12	1.04E-12	4.67E-13	2.53E-13	1.55E-13
L = 1; D = 12; C = 0.6	6.19E-09	2.55E-09	1.32E-09	4.98E-10	2.39E-10	1.32E-10	8.07E-11	3.66E-11	1.96E-11	6.28E-12	2.81E-12	9.20E-13	4.21E-13	2.31E-13	1.42E-13
L = 1; D = 12; C = 1	6.69E-09	2.77E-09	1.44E-09	5.39E-10	2.60E-10	1.45E-10	8.81E-11	4.01E-11	2.15E-11	6.89E-12	3.09E-12	9.93E-13	4.51E-13	2.45E-13	1.50E-13
L = 1; D = 1.5; C = 0.3	6.86E-09	2.81E-09	1.46E-09	5.58E-10	2.71E-10	1.51E-10	9.30E-11	4.24E-11	2.29E-11	7.40E-12	3.33E-12	1.07E-12	4.83E-13	2.62E-13	1.59E-13
L = 1; D = 1.5; C = 0.6	6.55E-09	2.69E-09	1.40E-09	5.31E-10	2.58E-10	1.45E-10	8.90E-11	4.10E-11	2.22E-11	7.22E-12	3.25E-12	1.05E-12	4.74E-13	2.56E-13	1.56E-13
L = 1; D = 1.5; C = 1	6.89E-09	2.84E-09	1.48E-09	5.63E-10	2.74E-10	1.53E-10	9.38E-11	4.27E-11	2.31E-11	7.43E-12	3.34E-12	1.08E-12	4.83E-13	2.61E-13	1.59E-13
L = 1; D = 4; C = 0.3	6.73E-09	2.78E-09	1.45E-09	5.50E-10	2.66E-10	1.48E-10	9.08E-11	4.14E-11	2.23E-11	7.18E-12	3.23E-12	1.05E-12	4.73E-13	2.57E-13	1.57E-13
L = 1; D = 4; C = 0.6	6.26E-09	2.57E-09	1.33E-09	5.04E-10	2.44E-10	1.36E-10	8.33E-11	3.77E-11	2.05E-11	6.68E-12	3.04E-12	9.95E-13	4.53E-13	2.47E-13	1.50E-13
L = 1; D = 4; C = 1	6.79E-09	2.76E-09	1.44E-09	5.49E-10	2.66E-10	1.47E-10	9.03E-11	4.12E-11	2.22E-11	7.17E-12	3.22E-12	1.04E-12	4.74E-13	2.56E-13	1.56E-13
L = 3; D = 12; C = 0.3	5.69E-09	2.31E-09	1.20E-09	4.54E-10	2.20E-10	1.23E-10	7.55E-11	3.43E-11	1.85E-11	6.00E-12	2.69E-12	8.81E-13	4.05E-13	2.21E-13	1.36E-13
L = 3; D = 12; C = 0.6	4.59E-09	1.84E-09	9.40E-10	3.46E-10	1.65E-10	9.07E-11	5.53E-11	2.51E-11	1.36E-11	4.46E-12	2.03E-12	6.97E-13	3.30E-13	1.84E-13	1.15E-13
L = 3; D = 12; C = 1	6.18E-09	2.53E-09	1.31E-09	4.90E-10	2.34E-10	1.29E-10	7.89E-11	3.55E-11	1.90E-11	6.12E-12	2.75E-12	9.01E-13	4.14E-13	2.26E-13	1.39E-13
L = 3; D = 1.5; C = 0.3	5.75E-09	2.35E-09	1.21E-09	4.68E-10	2.30E-10	1.31E-10	8.12E-11	3.77E-11	2.06E-11	6.82E-12	3.10E-12	1.01E-12	4.55E-13	2.45E-13	1.49E-13
L = 3; D = 1.5; C = 0.6	5.50E-09	2.25E-09	1.16E-09	4.44E-10	2.16E-10	1.22E-10	7.65E-11	3.61E-11	1.99E-11	6.65E-12	3.02E-12	9.88E-13	4.46E-13	2.41E-13	1.46E-13
L = 3; D = 1.5; C = 1	6.50E-09	2.67E-09	1.38E-09	5.27E-10	2.56E-10	1.44E-10	8.85E-11	4.07E-11	2.21E-11	7.22E-12	3.25E-12	1.05E-12	4.74E-13	2.55E-13	1.56E-13
L = 3; D = 4; C = 0.3	5.09E-09	2.08E-09	1.08E-09	4.07E-10	1.99E-10	1.12E-10	6.96E-11	3.24E-11	1.77E-11	5.89E-12	2.70E-12	9.03E-13	4.16E-13	2.28E-13	1.39E-13
L = 3; D = 4; C = 0.6	4.85E-09	1.94E-09	9.93E-10	3.72E-10	1.79E-10	1.00E-10	6.20E-11	2.87E-11	1.58E-11	5.35E-12	2.49E-12	8.55E-13	3.98E-13	2.18E-13	1.34E-13
L = 3; D = 4; C = 1	6.26E-09	2.54E-09	1.32E-09	4.99E-10	2.42E-10	1.34E-10	8.19E-11	3.74E-11	2.02E-11	6.57E-12	3.01E-12	9.85E-13	4.50E-13	2.43E-13	1.49E-13
T = 0.8	7.07E-09	2.89E-09	1.51E-09	5.78E-10	2.80E-10	1.56E-10	9.58E-11	4.37E-11	2.36E-11	7.61E-12	3.39E-12	1.09E-12	4.87E-13	2.63E-13	1.60E-13
T = 0.6	6.67E-09	2.77E-09	1.44E-09	5.52E-10	2.68E-10	1.50E-10	9.27E-11	4.25E-11	2.31E-11	7.49E-12	3.34E-12	1.07E-12	4.82E-13	2.59E-13	1.57E-13
T = 0.4	5.92E-09	2.42E-09	1.25E-09	4.78E-10	2.36E-10	1.34E-10	8.38E-11	3.93E-11	2.16E-11	7.10E-12	3.21E-12	1.03E-12	4.65E-13	2.49E-13	1.51E-13
T = 0.2	4.46E-09	1.82E-09	9.41E-10	3.63E-10	1.81E-10	1.05E-10	6.70E-11	3.25E-11	1.83E-11	6.26E-12	2.88E-12	9.49E-13	4.28E-13	2.30E-13	1.40E-13

Table 9: S-values for ^{209}Pb

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	5.18E-09	1.74E-09	7.79E-10	2.44E-10	1.06E-10	5.52E-11	3.23E-11	1.38E-11	7.14E-12	2.14E-12	9.07E-13	2.70E-13	1.14E-13	5.87E-14	3.40E-14
L = 0; Z = 0.25	4.57E-09	1.58E-09	7.23E-10	2.33E-10	1.02E-10	5.37E-11	3.16E-11	1.36E-11	7.04E-12	2.12E-12	9.02E-13	2.69E-13	1.14E-13	5.85E-14	3.39E-14
L = 0; Z = 0.5	5.03E-09	1.70E-09	7.66E-10	2.42E-10	1.05E-10	5.49E-11	3.22E-11	1.38E-11	7.13E-12	2.14E-12	9.07E-13	2.70E-13	1.14E-13	5.87E-14	3.40E-14
L = 0; Z = 2	5.06E-09	1.71E-09	7.70E-10	2.43E-10	1.06E-10	5.51E-11	3.23E-11	1.38E-11	7.14E-12	2.14E-12	9.07E-13	2.70E-13	1.14E-13	5.87E-14	3.40E-14
L = 0; Z = 4	4.72E-09	1.63E-09	7.43E-10	2.38E-10	1.04E-10	5.44E-11	3.20E-11	1.37E-11	7.09E-12	2.13E-12	9.04E-13	2.70E-13	1.14E-13	5.86E-14	3.40E-14
L = 0.3; D = 12; C = 0.3	5.17E-09	1.73E-09	7.72E-10	2.42E-10	1.05E-10	5.48E-11	3.20E-11	1.37E-11	7.08E-12	2.12E-12	9.01E-13	2.69E-13	1.14E-13	5.84E-14	3.39E-14
L = 0.3; D = 12; C = 0.6	5.07E-09	1.69E-09	7.56E-10	2.36E-10	1.02E-10	5.33E-11	3.12E-11	1.34E-11	6.91E-12	2.08E-12	8.86E-13	2.66E-13	1.13E-13	5.80E-14	3.37E-14
L = 0.3; D = 12; C = 1	5.11E-09	1.71E-09	7.65E-10	2.40E-10	1.04E-10	5.41E-11	3.16E-11	1.35E-11	6.99E-12	2.10E-12	8.94E-13	2.67E-13	1.13E-13	5.82E-14	3.38E-14
L = 0.3; D = 1.5; C = 0.3	5.18E-09	1.74E-09	7.80E-10	2.45E-10	1.06E-10	5.52E-11	3.23E-11	1.38E-11	7.15E-12	2.14E-12	9.09E-13	2.71E-13	1.14E-13	5.87E-14	3.40E-14
L = 0.3; D = 1.5; C = 0.6	5.16E-09	1.73E-09	7.76E-10	2.44E-10	1.06E-10	5.51E-11	3.23E-11	1.38E-11	7.14E-12	2.14E-12	9.07E-13	2.70E-13	1.14E-13	5.87E-14	3.40E-14
L = 0.3; D = 1.5; C = 1	5.18E-09	1.74E-09	7.79E-10	2.45E-10	1.06E-10	5.53E-11	3.24E-11	1.39E-11	7.14E-12	2.14E-12	9.09E-13	2.71E-13	1.14E-13	5.87E-14	3.40E-14
L = 0.3; D = 4; C = 0.3	5.15E-09	1.72E-09	7.74E-10	2.43E-10	1.05E-10	5.49E-11	3.21E-11	1.38E-11	7.11E-12	2.13E-12	9.06E-13	2.70E-13	1.14E-13	5.86E-14	3.40E-14
L = 0.3; D = 4; C = 0.6	5.08E-09	1.70E-09	7.63E-10	2.39E-10	1.04E-10	5.42E-11	3.17E-11	1.36E-11	7.05E-12	2.12E-12	9.01E-13	2.69E-13	1.14E-13	5.85E-14	3.39E-14
L = 0.3; D = 4; C = 1	5.18E-09	1.73E-09	7.73E-10	2.43E-10	1.05E-10	5.50E-11	3.22E-11	1.38E-11	7.13E-12	2.14E-12	9.07E-13	2.71E-13	1.14E-13	5.87E-14	3.40E-14
L = 1; D = 12; C = 0.3	4.95E-09	1.66E-09	7.41E-10	2.33E-10	1.01E-10	5.25E-11	3.07E-11	1.32E-11	6.82E-12	2.06E-12	8.77E-13	2.64E-13	1.12E-13	5.77E-14	3.35E-14
L = 1; D = 12; C = 0.6	4.40E-09	1.46E-09	6.51E-10	2.03E-10	8.82E-11	4.62E-11	2.72E-11	1.18E-11	6.18E-12	1.91E-12	8.26E-13	2.53E-13	1.09E-13	5.63E-14	3.28E-14
L = 1; D = 12; C = 1	4.83E-09	1.60E-09	7.13E-10	2.23E-10	9.65E-11	5.03E-11	2.95E-11	1.27E-11	6.59E-12	2.00E-12	8.60E-13	2.60E-13	1.11E-13	5.72E-14	3.33E-14
L = 1; D = 1.5; C = 0.3	5.02E-09	1.68E-09	7.56E-10	2.39E-10	1.04E-10	5.44E-11	3.19E-11	1.37E-11	7.08E-12	2.13E-12	9.04E-13	2.70E-13	1.14E-13	5.86E-14	3.39E-14
L = 1; D = 1.5; C = 0.6	4.78E-09	1.62E-09	7.29E-10	2.33E-10	1.02E-10	5.35E-11	3.15E-11	1.36E-11	7.03E-12	2.11E-12	9.00E-13	2.69E-13	1.14E-13	5.85E-14	3.39E-14
L = 1; D = 1.5; C = 1	5.03E-09	1.69E-09	7.57E-10	2.39E-10	1.04E-10	5.44E-11	3.19E-11	1.37E-11	7.09E-12	2.13E-12	9.04E-13	2.70E-13	1.14E-13	5.86E-14	3.39E-14
L = 1; D = 4; C = 0.3	4.91E-09	1.65E-09	7.38E-10	2.32E-10	1.01E-10	5.29E-11	3.10E-11	1.34E-11	6.94E-12	2.10E-12	8.94E-13	2.68E-13	1.13E-13	5.83E-14	3.38E-14
L = 1; D = 4; C = 0.6	4.51E-09	1.51E-09	6.77E-10	2.15E-10	9.43E-11	4.98E-11	2.94E-11	1.28E-11	6.71E-12	2.05E-12	8.79E-13	2.64E-13	1.13E-13	5.79E-14	3.36E-14
L = 1; D = 4; C = 1	4.90E-09	1.63E-09	7.33E-10	2.30E-10	1.00E-10	5.25E-11	3.09E-11	1.33E-11	6.91E-12	2.09E-12	8.90E-13	2.67E-13	1.13E-13	5.82E-14	3.38E-14
L = 3; D = 12; C = 0.3	4.06E-09	1.36E-09	6.10E-10	1.93E-10	8.46E-11	4.44E-11	2.62E-11	1.14E-11	5.99E-12	1.85E-12	8.04E-13	2.47E-13	1.07E-13	5.54E-14	3.24E-14
L = 3; D = 12; C = 0.6	2.98E-09	9.85E-10	4.43E-10	1.42E-10	6.32E-11	3.40E-11	2.04E-11	9.23E-12	4.97E-12	1.62E-12	7.25E-13	2.31E-13	1.02E-13	5.34E-14	3.14E-14
L = 3; D = 12; C = 1	4.26E-09	1.41E-09	6.25E-10	1.95E-10	8.53E-11	4.47E-11	2.63E-11	1.15E-11	6.02E-12	1.86E-12	8.13E-13	2.50E-13	1.08E-13	5.58E-14	3.26E-14
L = 3; D = 1.5; C = 0.3	4.30E-09	1.48E-09	6.78E-10	2.20E-10	9.77E-11	5.16E-11	3.06E-11	1.33E-11	6.90E-12	2.09E-12	8.92E-13	2.67E-13	1.13E-13	5.83E-14	3.38E-14
L = 3; D = 1.5; C = 0.6	4.03E-09	1.40E-09	6.49E-10	2.14E-10	9.56E-11	5.08E-11	3.01E-11	1.31E-11	6.84E-12	2.08E-12	8.89E-13	2.67E-13	1.13E-13	5.82E-14	3.38E-14
L = 3; D = 1.5; C = 1	4.75E-09	1.61E-09	7.28E-10	2.32E-10	1.02E-10	5.35E-11	3.14E-11	1.35E-11	7.02E-12	2.11E-12	9.00E-13	2.69E-13	1.14E-13	5.84E-14	3.39E-14
L = 3; D = 4; C = 0.3	3.71E-09	1.27E-09	5.82E-10	1.90E-10	8.53E-11	4.56E-11	2.73E-11	1.20E-11	6.37E-12	1.98E-12	8.54E-13	2.60E-13	1.11E-13	5.73E-14	3.33E-14
L = 3; D = 4; C = 0.6	3.35E-09	1.13E-09	5.21E-10	1.73E-10	7.88E-11	4.26E-11	2.58E-11	1.16E-11	6.18E-12	1.94E-12	8.43E-13	2.57E-13	1.10E-13	5.69E-14	3.32E-14
L = 3; D = 4; C = 1	4.45E-09	1.49E-09	6.68E-10	2.13E-10	9.36E-11	4.94E-11	2.92E-11	1.27E-11	6.66E-12	2.04E-12	8.74E-13	2.64E-13	1.12E-13	5.78E-14	3.35E-14
T = 0.8	5.15E-09	1.73E-09	7.77E-10	2.44E-10	1.06E-10	5.51E-11	3.23E-11	1.38E-11	7.14E-12	2.14E-12	9.08E-13	2.70E-13	1.14E-13	5.87E-14	3.40E-14
T = 0.6	4.88E-09	1.65E-09	7.49E-10	2.38E-10	1.04E-10	5.44E-11	3.19E-11	1.37E-11	7.09E-12	2.13E-12	9.05E-13	2.70E-13	1.14E-13	5.86E-14	3.40E-14
T = 0.4	4.38E-09	1.52E-09	6.99E-10	2.28E-10	1.01E-10	5.29E-11	3.12E-11	1.35E-11	6.98E-12	2.11E-12	8.98E-13	2.69E-13	1.14E-13	5.85E-14	3.39E-14
T = 0.2	3.44E-09	1.24E-09	5.90E-10	2.01E-10	9.18E-11	4.93E-11	2.94E-11	1.29E-11	6.76E-12	2.07E-12	8.85E-13	2.66E-13	1.13E-13	5.80E-14	3.37E-14

Table 10: S-values for ^{223}Ra

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	2.10E-07	6.27E-08	2.65E-08	7.89E-09	3.34E-09	1.71E-09	9.93E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.98E-12	3.37E-12	1.73E-12	1.00E-12
L = 0; Z = 0.25	2.08E-07	6.22E-08	2.64E-08	7.86E-09	3.32E-09	1.70E-09	9.91E-10	4.19E-10	2.14E-10	6.36E-11	2.69E-11	7.97E-12	3.36E-12	1.72E-12	9.98E-13
L = 0; Z = 0.5	2.10E-07	6.27E-08	2.65E-08	7.89E-09	3.34E-09	1.71E-09	9.93E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.97E-12	3.37E-12	1.73E-12	9.99E-13
L = 0; Z = 2	2.09E-07	6.25E-08	2.65E-08	7.88E-09	3.34E-09	1.71E-09	9.93E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.98E-12	3.37E-12	1.73E-12	9.99E-13
L = 0; Z = 4	2.09E-07	6.24E-08	2.64E-08	7.87E-09	3.33E-09	1.71E-09	9.92E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.97E-12	3.37E-12	1.72E-12	9.99E-13
L = 0.3; D = 12; C = 0.3	2.08E-07	6.21E-08	2.63E-08	7.85E-09	3.32E-09	1.70E-09	9.90E-10	4.18E-10	2.14E-10	6.36E-11	2.69E-11	7.97E-12	3.37E-12	1.73E-12	9.99E-13
L = 0.3; D = 12; C = 0.6	2.03E-07	6.12E-08	2.60E-08	7.78E-09	3.30E-09	1.69E-09	9.83E-10	4.16E-10	2.14E-10	6.36E-11	2.68E-11	7.97E-12	3.37E-12	1.72E-12	9.99E-13
L = 0.3; D = 12; C = 1	2.07E-07	6.19E-08	2.63E-08	7.83E-09	3.31E-09	1.70E-09	9.86E-10	4.18E-10	2.14E-10	6.36E-11	2.69E-11	7.97E-12	3.37E-12	1.73E-12	9.99E-13
L = 0.3; D = 1.5; C = 0.3	2.10E-07	6.26E-08	2.65E-08	7.88E-09	3.34E-09	1.71E-09	9.93E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.98E-12	3.37E-12	1.73E-12	1.00E-12
L = 0.3; D = 1.5; C = 0.6	2.09E-07	6.26E-08	2.65E-08	7.89E-09	3.34E-09	1.71E-09	9.93E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.98E-12	3.37E-12	1.73E-12	1.00E-12
L = 0.3; D = 1.5; C = 1	2.10E-07	6.26E-08	2.65E-08	7.89E-09	3.35E-09	1.71E-09	9.93E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.98E-12	3.37E-12	1.73E-12	9.99E-13
L = 0.3; D = 4; C = 0.3	2.09E-07	6.24E-08	2.64E-08	7.87E-09	3.33E-09	1.71E-09	9.91E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.98E-12	3.37E-12	1.73E-12	1.00E-12
L = 0.3; D = 4; C = 0.6	2.08E-07	6.22E-08	2.64E-08	7.86E-09	3.32E-09	1.71E-09	9.91E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.98E-12	3.37E-12	1.73E-12	9.99E-13
L = 0.3; D = 4; C = 1	2.09E-07	6.25E-08	2.65E-08	7.88E-09	3.33E-09	1.71E-09	9.92E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.98E-12	3.37E-12	1.73E-12	9.99E-13
L = 1; D = 12; C = 0.3	2.01E-07	6.05E-08	2.58E-08	7.74E-09	3.28E-09	1.69E-09	9.79E-10	4.15E-10	2.13E-10	6.35E-11	2.68E-11	7.96E-12	3.36E-12	1.72E-12	9.98E-13
L = 1; D = 12; C = 0.6	1.86E-07	5.75E-08	2.48E-08	7.53E-09	3.22E-09	1.66E-09	9.66E-10	4.10E-10	2.11E-10	6.29E-11	2.67E-11	7.94E-12	3.36E-12	1.72E-12	9.97E-13
L = 1; D = 12; C = 1	1.96E-07	5.94E-08	2.54E-08	7.66E-09	3.26E-09	1.68E-09	9.75E-10	4.13E-10	2.12E-10	6.33E-11	2.68E-11	7.95E-12	3.36E-12	1.72E-12	9.98E-13
L = 1; D = 1.5; C = 0.3	2.09E-07	6.24E-08	2.64E-08	7.87E-09	3.33E-09	1.71E-09	9.92E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.98E-12	3.37E-12	1.73E-12	9.99E-13
L = 1; D = 1.5; C = 0.6	2.08E-07	6.22E-08	2.64E-08	7.86E-09	3.33E-09	1.71E-09	9.91E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.98E-12	3.37E-12	1.73E-12	9.99E-13
L = 1; D = 1.5; C = 1	2.09E-07	6.25E-08	2.65E-08	7.88E-09	3.33E-09	1.71E-09	9.92E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.98E-12	3.37E-12	1.73E-12	9.99E-13
L = 1; D = 4; C = 0.3	2.06E-07	6.18E-08	2.63E-08	7.84E-09	3.32E-09	1.70E-09	9.90E-10	4.18E-10	2.15E-10	6.37E-11	2.69E-11	7.97E-12	3.37E-12	1.73E-12	9.99E-13
L = 1; D = 4; C = 0.6	2.01E-07	6.08E-08	2.59E-08	7.76E-09	3.29E-09	1.69E-09	9.81E-10	4.15E-10	2.13E-10	6.35E-11	2.68E-11	7.96E-12	3.36E-12	1.72E-12	9.98E-13
L = 1; D = 4; C = 1	2.06E-07	6.18E-08	2.62E-08	7.83E-09	3.31E-09	1.70E-09	9.86E-10	4.18E-10	2.14E-10	6.36E-11	2.69E-11	7.97E-12	3.37E-12	1.72E-12	9.99E-13
L = 3; D = 12; C = 0.3	1.78E-07	5.56E-08	2.42E-08	7.40E-09	3.18E-09	1.64E-09	9.58E-10	4.08E-10	2.10E-10	6.26E-11	2.65E-11	7.91E-12	3.35E-12	1.72E-12	9.95E-13
L = 3; D = 12; C = 0.6	1.58E-07	5.18E-08	2.31E-08	7.19E-09	3.11E-09	1.62E-09	9.44E-10	4.03E-10	2.08E-10	6.23E-11	2.64E-11	7.88E-12	3.34E-12	1.72E-12	9.95E-13
L = 3; D = 12; C = 1	1.83E-07	5.68E-08	2.46E-08	7.49E-09	3.21E-09	1.66E-09	9.65E-10	4.10E-10	2.11E-10	6.28E-11	2.66E-11	7.93E-12	3.35E-12	1.72E-12	9.96E-13
L = 3; D = 1.5; C = 0.3	2.06E-07	6.19E-08	2.63E-08	7.84E-09	3.32E-09	1.70E-09	9.90E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.97E-12	3.37E-12	1.72E-12	9.99E-13
L = 3; D = 1.5; C = 0.6	2.05E-07	6.16E-08	2.62E-08	7.82E-09	3.31E-09	1.70E-09	9.86E-10	4.18E-10	2.14E-10	6.36E-11	2.69E-11	7.97E-12	3.36E-12	1.72E-12	9.98E-13
L = 3; D = 1.5; C = 1	2.08E-07	6.22E-08	2.64E-08	7.86E-09	3.32E-09	1.71E-09	9.91E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.98E-12	3.37E-12	1.73E-12	9.99E-13
L = 3; D = 4; C = 0.3	1.95E-07	5.95E-08	2.55E-08	7.69E-09	3.27E-09	1.68E-09	9.77E-10	4.14E-10	2.13E-10	6.34E-11	2.68E-11	7.96E-12	3.36E-12	1.72E-12	9.97E-13
L = 3; D = 4; C = 0.6	1.91E-07	5.88E-08	2.53E-08	7.65E-09	3.26E-09	1.68E-09	9.74E-10	4.13E-10	2.12E-10	6.31E-11	2.68E-11	7.95E-12	3.36E-12	1.72E-12	9.97E-13
L = 3; D = 4; C = 1	2.00E-07	6.07E-08	2.59E-08	7.77E-09	3.30E-09	1.69E-09	9.82E-10	4.16E-10	2.14E-10	6.35E-11	2.68E-11	7.96E-12	3.36E-12	1.72E-12	9.98E-13
T = 0.8	2.10E-07	6.28E-08	2.66E-08	7.92E-09	3.35E-09	1.72E-09	9.94E-10	4.20E-10	2.15E-10	6.37E-11	2.69E-11	7.98E-12	3.37E-12	1.73E-12	9.99E-13
T = 0.6	2.09E-07	6.25E-08	2.65E-08	7.88E-09	3.33E-09	1.71E-09	9.92E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.97E-12	3.37E-12	1.73E-12	9.99E-13
T = 0.4	2.08E-07	6.23E-08	2.64E-08	7.86E-09	3.33E-09	1.71E-09	9.91E-10	4.19E-10	2.15E-10	6.37E-11	2.69E-11	7.97E-12	3.37E-12	1.72E-12	9.99E-13
T = 0.2	2.03E-07	6.13E-08	2.61E-08	7.80E-09	3.30E-09	1.70E-09	9.84E-10	4.16E-10	2.14E-10	6.36E-11	2.68E-11	7.96E-12	3.36E-12	1.72E-12	9.97E-13

Table 11: S-values for ^{219}Rn

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	2.47E-07	7.39E-08	3.13E-08	9.32E-09	3.94E-09	2.02E-09	1.17E-09	4.94E-10	2.53E-10	7.51E-11	3.17E-11	9.40E-12	3.97E-12	2.03E-12	1.18E-12
L = 0; Z = 0.25	2.45E-07	7.34E-08	3.11E-08	9.28E-09	3.93E-09	2.01E-09	1.17E-09	4.93E-10	2.53E-10	7.50E-11	3.17E-11	9.39E-12	3.96E-12	2.03E-12	1.18E-12
L = 0; Z = 0.5	2.47E-07	7.38E-08	3.13E-08	9.31E-09	3.93E-09	2.02E-09	1.17E-09	4.94E-10	2.53E-10	7.51E-11	3.17E-11	9.40E-12	3.97E-12	2.03E-12	1.18E-12
L = 0; Z = 2	2.47E-07	7.38E-08	3.13E-08	9.32E-09	3.94E-09	2.02E-09	1.17E-09	4.94E-10	2.53E-10	7.51E-11	3.17E-11	9.40E-12	3.97E-12	2.03E-12	1.18E-12
L = 0; Z = 4	2.46E-07	7.36E-08	3.12E-08	9.31E-09	3.94E-09	2.02E-09	1.17E-09	4.94E-10	2.53E-10	7.51E-11	3.17E-11	9.39E-12	3.96E-12	2.03E-12	1.18E-12
L = 0.3; D = 12; C = 0.3	2.45E-07	7.33E-08	3.11E-08	9.27E-09	3.92E-09	2.01E-09	1.17E-09	4.92E-10	2.52E-10	7.49E-11	3.16E-11	9.39E-12	3.96E-12	2.03E-12	1.18E-12
L = 0.3; D = 12; C = 0.6	2.38E-07	7.18E-08	3.06E-08	9.17E-09	3.89E-09	2.00E-09	1.16E-09	4.91E-10	2.52E-10	7.48E-11	3.16E-11	9.38E-12	3.96E-12	2.03E-12	1.17E-12
L = 0.3; D = 12; C = 1	2.42E-07	7.26E-08	3.09E-08	9.23E-09	3.91E-09	2.01E-09	1.16E-09	4.92E-10	2.52E-10	7.49E-11	3.16E-11	9.39E-12	3.96E-12	2.03E-12	1.18E-12
L = 0.3; D = 1.5; C = 0.3	2.47E-07	7.39E-08	3.13E-08	9.32E-09	3.94E-09	2.02E-09	1.17E-09	4.94E-10	2.53E-10	7.51E-11	3.17E-11	9.40E-12	3.97E-12	2.03E-12	1.18E-12
L = 0.3; D = 1.5; C = 0.6	2.46E-07	7.37E-08	3.12E-08	9.31E-09	3.94E-09	2.02E-09	1.17E-09	4.94E-10	2.53E-10	7.50E-11	3.17E-11	9.39E-12	3.96E-12	2.03E-12	1.18E-12
L = 0.3; D = 1.5; C = 1	2.47E-07	7.38E-08	3.13E-08	9.31E-09	3.94E-09	2.02E-09	1.17E-09	4.94E-10	2.53E-10	7.51E-11	3.17E-11	9.40E-12	3.97E-12	2.03E-12	1.18E-12
L = 0.3; D = 4; C = 0.3	2.45E-07	7.36E-08	3.12E-08	9.29E-09	3.93E-09	2.02E-09	1.17E-09	4.94E-10	2.53E-10	7.50E-11	3.17E-11	9.39E-12	3.96E-12	2.03E-12	1.18E-12
L = 0.3; D = 4; C = 0.6	2.45E-07	7.33E-08	3.11E-08	9.28E-09	3.93E-09	2.02E-09	1.17E-09	4.93E-10	2.53E-10	7.50E-11	3.17E-11	9.39E-12	3.96E-12	2.03E-12	1.18E-12
L = 0.3; D = 4; C = 1	2.46E-07	7.37E-08	3.12E-08	9.30E-09	3.93E-09	2.02E-09	1.17E-09	4.94E-10	2.53E-10	7.50E-11	3.17E-11	9.39E-12	3.96E-12	2.03E-12	1.18E-12
L = 1; D = 12; C = 0.3	2.35E-07	7.09E-08	3.03E-08	9.09E-09	3.87E-09	1.99E-09	1.15E-09	4.89E-10	2.51E-10	7.47E-11	3.16E-11	9.37E-12	3.96E-12	2.03E-12	1.17E-12
L = 1; D = 12; C = 0.6	2.12E-07	6.61E-08	2.87E-08	8.79E-09	3.77E-09	1.95E-09	1.14E-09	4.83E-10	2.49E-10	7.41E-11	3.14E-11	9.33E-12	3.94E-12	2.02E-12	1.17E-12
L = 1; D = 12; C = 1	2.26E-07	6.92E-08	2.97E-08	8.99E-09	3.83E-09	1.98E-09	1.15E-09	4.87E-10	2.50E-10	7.45E-11	3.15E-11	9.36E-12	3.95E-12	2.03E-12	1.17E-12
L = 1; D = 1.5; C = 0.3	2.45E-07	7.35E-08	3.12E-08	9.29E-09	3.93E-09	2.02E-09	1.17E-09	4.93E-10	2.53E-10	7.50E-11	3.17E-11	9.39E-12	3.96E-12	2.03E-12	1.18E-12
L = 1; D = 1.5; C = 0.6	2.44E-07	7.33E-08	3.11E-08	9.27E-09	3.92E-09	2.01E-09	1.17E-09	4.93E-10	2.53E-10	7.50E-11	3.17E-11	9.39E-12	3.96E-12	2.03E-12	1.18E-12
L = 1; D = 1.5; C = 1	2.46E-07	7.37E-08	3.12E-08	9.31E-09	3.94E-09	2.02E-09	1.17E-09	4.94E-10	2.53E-10	7.51E-11	3.17E-11	9.39E-12	3.96E-12	2.03E-12	1.18E-12
L = 1; D = 4; C = 0.3	2.40E-07	7.24E-08	3.08E-08	9.22E-09	3.91E-09	2.01E-09	1.16E-09	4.92E-10	2.52E-10	7.49E-11	3.16E-11	9.39E-12	3.96E-12	2.03E-12	1.18E-12
L = 1; D = 4; C = 0.6	2.33E-07	7.10E-08	3.04E-08	9.12E-09	3.88E-09	1.99E-09	1.16E-09	4.90E-10	2.52E-10	7.48E-11	3.16E-11	9.38E-12	3.96E-12	2.03E-12	1.17E-12
L = 1; D = 4; C = 1	2.40E-07	7.25E-08	3.09E-08	9.23E-09	3.91E-09	2.01E-09	1.16E-09	4.92E-10	2.52E-10	7.49E-11	3.16E-11	9.39E-12	3.96E-12	2.03E-12	1.17E-12
L = 3; D = 12; C = 0.3	2.03E-07	6.38E-08	2.79E-08	8.61E-09	3.71E-09	1.92E-09	1.12E-09	4.79E-10	2.47E-10	7.38E-11	3.13E-11	9.31E-12	3.94E-12	2.02E-12	1.17E-12
L = 3; D = 12; C = 0.6	1.71E-07	5.73E-08	2.59E-08	8.21E-09	3.58E-09	1.87E-09	1.10E-09	4.71E-10	2.44E-10	7.32E-11	3.11E-11	9.28E-12	3.93E-12	2.01E-12	1.17E-12
L = 3; D = 12; C = 1	2.06E-07	6.46E-08	2.82E-08	8.67E-09	3.73E-09	1.93E-09	1.13E-09	4.81E-10	2.48E-10	7.40E-11	3.13E-11	9.32E-12	3.94E-12	2.02E-12	1.17E-12
L = 3; D = 1.5; C = 0.3	2.40E-07	7.24E-08	3.08E-08	9.22E-09	3.91E-09	2.01E-09	1.16E-09	4.92E-10	2.52E-10	7.49E-11	3.16E-11	9.38E-12	3.96E-12	2.03E-12	1.17E-12
L = 3; D = 1.5; C = 0.6	2.38E-07	7.21E-08	3.07E-08	9.20E-09	3.90E-09	2.00E-09	1.16E-09	4.92E-10	2.52E-10	7.49E-11	3.16E-11	9.38E-12	3.96E-12	2.03E-12	1.17E-12
L = 3; D = 1.5; C = 1	2.43E-07	7.31E-08	3.10E-08	9.26E-09	3.92E-09	2.01E-09	1.17E-09	4.93E-10	2.53E-10	7.50E-11	3.17E-11	9.39E-12	3.96E-12	2.03E-12	1.17E-12
L = 3; D = 4; C = 0.3	2.23E-07	6.88E-08	2.97E-08	8.99E-09	3.83E-09	1.98E-09	1.15E-09	4.87E-10	2.50E-10	7.45E-11	3.15E-11	9.36E-12	3.95E-12	2.03E-12	1.17E-12
L = 3; D = 4; C = 0.6	2.17E-07	6.78E-08	2.94E-08	8.93E-09	3.82E-09	1.97E-09	1.15E-09	4.86E-10	2.50E-10	7.45E-11	3.15E-11	9.36E-12	3.95E-12	2.03E-12	1.17E-12
L = 3; D = 4; C = 1	2.32E-07	7.09E-08	3.04E-08	9.13E-09	3.88E-09	1.99E-09	1.16E-09	4.90E-10	2.52E-10	7.48E-11	3.16E-11	9.38E-12	3.96E-12	2.03E-12	1.17E-12
T = 0.8	2.47E-07	7.39E-08	3.13E-08	9.31E-09	3.94E-09	2.02E-09	1.17E-09	4.94E-10	2.53E-10	7.51E-11	3.17E-11	9.40E-12	3.97E-12	2.03E-12	1.18E-12
T = 0.6	2.46E-07	7.36E-08	3.12E-08	9.30E-09	3.93E-09	2.02E-09	1.17E-09	4.94E-10	2.53E-10	7.50E-11	3.17E-11	9.39E-12	3.96E-12	2.03E-12	1.18E-12
T = 0.4	2.43E-07	7.31E-08	3.11E-08	9.27E-09	3.92E-09	2.01E-09	1.17E-09	4.93E-10	2.53E-10	7.50E-11	3.17E-11	9.39E-12	3.96E-12	2.03E-12	1.18E-12
T = 0.2	2.37E-07	7.17E-08	3.06E-08	9.18E-09	3.90E-09	2.00E-09	1.16E-09	4.91E-10	2.52E-10	7.48E-11	3.16E-11	9.38E-12	3.96E-12	2.03E-12	1.17E-12

Table 12: S-values for ^{215}Po

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	2.69E-07	8.04E-08	3.41E-08	1.02E-08	4.30E-09	2.20E-09	1.28E-09	5.39E-10	2.76E-10	8.19E-11	3.46E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 0; Z = 0.25	2.65E-07	7.97E-08	3.39E-08	1.01E-08	4.28E-09	2.20E-09	1.27E-09	5.38E-10	2.76E-10	8.18E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 0; Z = 0.5	2.68E-07	8.03E-08	3.41E-08	1.01E-08	4.29E-09	2.20E-09	1.28E-09	5.39E-10	2.76E-10	8.19E-11	3.46E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 0; Z = 2	2.68E-07	8.03E-08	3.41E-08	1.01E-08	4.29E-09	2.20E-09	1.28E-09	5.39E-10	2.76E-10	8.19E-11	3.46E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 0; Z = 4	2.67E-07	8.01E-08	3.40E-08	1.01E-08	4.29E-09	2.20E-09	1.28E-09	5.39E-10	2.76E-10	8.19E-11	3.46E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 0.3; D = 12; C = 0.3	2.66E-07	7.96E-08	3.38E-08	1.01E-08	4.27E-09	2.19E-09	1.27E-09	5.37E-10	2.75E-10	8.17E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 0.3; D = 12; C = 0.6	2.58E-07	7.78E-08	3.32E-08	9.97E-09	4.24E-09	2.18E-09	1.26E-09	5.35E-10	2.74E-10	8.16E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 0.3; D = 12; C = 1	2.62E-07	7.88E-08	3.36E-08	1.00E-08	4.26E-09	2.19E-09	1.27E-09	5.37E-10	2.75E-10	8.17E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 0.3; D = 1.5; C = 0.3	2.68E-07	8.04E-08	3.41E-08	1.02E-08	4.29E-09	2.20E-09	1.28E-09	5.39E-10	2.76E-10	8.19E-11	3.46E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 0.3; D = 1.5; C = 0.6	2.68E-07	8.02E-08	3.40E-08	1.01E-08	4.29E-09	2.20E-09	1.27E-09	5.39E-10	2.76E-10	8.19E-11	3.46E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 0.3; D = 1.5; C = 1	2.68E-07	8.03E-08	3.41E-08	1.01E-08	4.29E-09	2.20E-09	1.28E-09	5.39E-10	2.76E-10	8.19E-11	3.46E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 0.3; D = 4; C = 0.3	2.67E-07	8.01E-08	3.40E-08	1.01E-08	4.29E-09	2.20E-09	1.27E-09	5.38E-10	2.76E-10	8.19E-11	3.46E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 0.3; D = 4; C = 0.6	2.65E-07	7.97E-08	3.39E-08	1.01E-08	4.28E-09	2.20E-09	1.27E-09	5.38E-10	2.76E-10	8.18E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 0.3; D = 4; C = 1	2.67E-07	8.01E-08	3.40E-08	1.01E-08	4.29E-09	2.20E-09	1.27E-09	5.38E-10	2.76E-10	8.18E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 1; D = 12; C = 0.3	2.55E-07	7.69E-08	3.29E-08	9.89E-09	4.21E-09	2.17E-09	1.26E-09	5.33E-10	2.74E-10	8.14E-11	3.44E-11	1.02E-11	4.31E-12	2.21E-12	1.28E-12
L = 1; D = 12; C = 0.6	2.27E-07	7.09E-08	3.09E-08	9.50E-09	4.08E-09	2.11E-09	1.23E-09	5.25E-10	2.71E-10	8.08E-11	3.42E-11	1.02E-11	4.30E-12	2.20E-12	1.28E-12
L = 1; D = 12; C = 1	2.44E-07	7.48E-08	3.22E-08	9.75E-09	4.16E-09	2.15E-09	1.25E-09	5.30E-10	2.73E-10	8.12E-11	3.43E-11	1.02E-11	4.31E-12	2.21E-12	1.28E-12
L = 1; D = 1.5; C = 0.3	2.66E-07	7.99E-08	3.39E-08	1.01E-08	4.28E-09	2.20E-09	1.27E-09	5.38E-10	2.76E-10	8.18E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 1; D = 1.5; C = 0.6	2.65E-07	7.97E-08	3.39E-08	1.01E-08	4.28E-09	2.20E-09	1.27E-09	5.38E-10	2.76E-10	8.18E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 1; D = 1.5; C = 1	2.67E-07	8.01E-08	3.40E-08	1.01E-08	4.29E-09	2.20E-09	1.27E-09	5.39E-10	2.76E-10	8.19E-11	3.46E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 1; D = 4; C = 0.3	2.60E-07	7.87E-08	3.35E-08	1.00E-08	4.26E-09	2.19E-09	1.27E-09	5.37E-10	2.75E-10	8.17E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 1; D = 4; C = 0.6	2.52E-07	7.70E-08	3.30E-08	9.93E-09	4.22E-09	2.17E-09	1.26E-09	5.35E-10	2.74E-10	8.15E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 1; D = 4; C = 1	2.60E-07	7.86E-08	3.35E-08	1.00E-08	4.26E-09	2.19E-09	1.27E-09	5.37E-10	2.75E-10	8.17E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 3; D = 12; C = 0.3	2.18E-07	6.83E-08	3.00E-08	9.29E-09	4.01E-09	2.09E-09	1.22E-09	5.21E-10	2.69E-10	8.04E-11	3.41E-11	1.01E-11	4.29E-12	2.20E-12	1.27E-12
L = 3; D = 12; C = 0.6	1.77E-07	5.99E-08	2.73E-08	8.74E-09	3.84E-09	2.01E-09	1.18E-09	5.09E-10	2.64E-10	7.94E-11	3.38E-11	1.01E-11	4.28E-12	2.19E-12	1.27E-12
L = 3; D = 12; C = 1	2.21E-07	6.94E-08	3.04E-08	9.38E-09	4.04E-09	2.10E-09	1.23E-09	5.23E-10	2.70E-10	8.06E-11	3.42E-11	1.02E-11	4.30E-12	2.20E-12	1.28E-12
L = 3; D = 1.5; C = 0.3	2.60E-07	7.88E-08	3.36E-08	1.01E-08	4.26E-09	2.19E-09	1.27E-09	5.37E-10	2.75E-10	8.18E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 3; D = 1.5; C = 0.6	2.58E-07	7.82E-08	3.34E-08	1.00E-08	4.25E-09	2.18E-09	1.27E-09	5.36E-10	2.75E-10	8.17E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 3; D = 1.5; C = 1	2.64E-07	7.94E-08	3.38E-08	1.01E-08	4.27E-09	2.19E-09	1.27E-09	5.37E-10	2.75E-10	8.18E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
L = 3; D = 4; C = 0.3	2.39E-07	7.43E-08	3.22E-08	9.77E-09	4.17E-09	2.15E-09	1.25E-09	5.31E-10	2.73E-10	8.12E-11	3.44E-11	1.02E-11	4.31E-12	2.21E-12	1.28E-12
L = 3; D = 4; C = 0.6	2.32E-07	7.30E-08	3.17E-08	9.68E-09	4.15E-09	2.14E-09	1.25E-09	5.29E-10	2.72E-10	8.11E-11	3.43E-11	1.02E-11	4.31E-12	2.21E-12	1.28E-12
L = 3; D = 4; C = 1	2.50E-07	7.66E-08	3.29E-08	9.90E-09	4.21E-09	2.17E-09	1.26E-09	5.34E-10	2.74E-10	8.15E-11	3.44E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
T = 0.8	2.68E-07	8.04E-08	3.41E-08	1.02E-08	4.29E-09	2.20E-09	1.28E-09	5.39E-10	2.76E-10	8.19E-11	3.46E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
T = 0.6	2.67E-07	8.01E-08	3.40E-08	1.01E-08	4.29E-09	2.20E-09	1.27E-09	5.38E-10	2.76E-10	8.19E-11	3.46E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
T = 0.4	2.64E-07	7.94E-08	3.38E-08	1.01E-08	4.28E-09	2.19E-09	1.27E-09	5.38E-10	2.76E-10	8.18E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12
T = 0.2	2.56E-07	7.79E-08	3.33E-08	9.99E-09	4.24E-09	2.18E-09	1.27E-09	5.36E-10	2.75E-10	8.16E-11	3.45E-11	1.02E-11	4.32E-12	2.21E-12	1.28E-12

Table 13: S-values for ^{211}Pb

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	6.30E-09	2.51E-09	1.25E-09	4.44E-10	2.06E-10	1.11E-10	6.66E-11	2.94E-11	1.54E-11	4.72E-12	2.03E-12	6.12E-13	2.61E-13	1.35E-13	7.85E-14
L = 0; Z = 0.25	5.28E-09	2.10E-09	1.07E-09	3.91E-10	1.85E-10	1.02E-10	6.22E-11	2.79E-11	1.48E-11	4.61E-12	1.99E-12	6.04E-13	2.58E-13	1.33E-13	7.77E-14
L = 0; Z = 0.5	6.01E-09	2.39E-09	1.20E-09	4.31E-10	2.01E-10	1.09E-10	6.55E-11	2.90E-11	1.53E-11	4.70E-12	2.02E-12	6.12E-13	2.61E-13	1.35E-13	7.85E-14
L = 0; Z = 2	6.02E-09	2.39E-09	1.21E-09	4.34E-10	2.01E-10	1.09E-10	6.57E-11	2.90E-11	1.53E-11	4.70E-12	2.02E-12	6.11E-13	2.61E-13	1.34E-13	7.83E-14
L = 0; Z = 4	5.38E-09	2.15E-09	1.10E-09	4.03E-10	1.91E-10	1.05E-10	6.34E-11	2.83E-11	1.50E-11	4.64E-12	2.00E-12	6.08E-13	2.59E-13	1.34E-13	7.81E-14
L = 0.3; D = 12; C = 0.3	6.31E-09	2.50E-09	1.25E-09	4.44E-10	2.05E-10	1.10E-10	6.61E-11	2.91E-11	1.52E-11	4.67E-12	2.01E-12	6.06E-13	2.59E-13	1.34E-13	7.79E-14
L = 0.3; D = 12; C = 0.6	6.15E-09	2.44E-09	1.22E-09	4.34E-10	2.00E-10	1.08E-10	6.45E-11	2.83E-11	1.48E-11	4.53E-12	1.95E-12	5.90E-13	2.53E-13	1.31E-13	7.66E-14
L = 0.3; D = 12; C = 1	6.20E-09	2.46E-09	1.23E-09	4.38E-10	2.03E-10	1.09E-10	6.54E-11	2.87E-11	1.51E-11	4.60E-12	1.98E-12	5.99E-13	2.56E-13	1.32E-13	7.73E-14
L = 0.3; D = 1.5; C = 0.3	6.25E-09	2.48E-09	1.24E-09	4.44E-10	2.05E-10	1.11E-10	6.65E-11	2.94E-11	1.54E-11	4.73E-12	2.03E-12	6.12E-13	2.61E-13	1.35E-13	7.85E-14
L = 0.3; D = 1.5; C = 0.6	6.22E-09	2.47E-09	1.23E-09	4.39E-10	2.03E-10	1.10E-10	6.57E-11	2.90E-11	1.52E-11	4.69E-12	2.01E-12	6.10E-13	2.60E-13	1.34E-13	7.82E-14
L = 0.3; D = 1.5; C = 1	6.24E-09	2.47E-09	1.24E-09	4.43E-10	2.05E-10	1.11E-10	6.63E-11	2.93E-11	1.54E-11	4.71E-12	2.03E-12	6.12E-13	2.61E-13	1.35E-13	7.85E-14
L = 0.3; D = 4; C = 0.3	6.25E-09	2.48E-09	1.24E-09	4.42E-10	2.04E-10	1.10E-10	6.60E-11	2.91E-11	1.53E-11	4.68E-12	2.01E-12	6.08E-13	2.60E-13	1.34E-13	7.81E-14
L = 0.3; D = 4; C = 0.6	6.17E-09	2.44E-09	1.22E-09	4.34E-10	2.01E-10	1.08E-10	6.49E-11	2.86E-11	1.50E-11	4.62E-12	1.99E-12	6.03E-13	2.58E-13	1.34E-13	7.78E-14
L = 0.3; D = 4; C = 1	6.24E-09	2.48E-09	1.24E-09	4.40E-10	2.03E-10	1.10E-10	6.59E-11	2.89E-11	1.52E-11	4.68E-12	2.01E-12	6.08E-13	2.60E-13	1.34E-13	7.82E-14
L = 1; D = 12; C = 0.3	6.11E-09	2.42E-09	1.21E-09	4.28E-10	1.97E-10	1.06E-10	6.36E-11	2.79E-11	1.46E-11	4.49E-12	1.93E-12	5.85E-13	2.51E-13	1.30E-13	7.60E-14
L = 1; D = 12; C = 0.6	5.48E-09	2.15E-09	1.07E-09	3.76E-10	1.72E-10	9.24E-11	5.52E-11	2.42E-11	1.27E-11	3.92E-12	1.71E-12	5.27E-13	2.30E-13	1.21E-13	7.15E-14
L = 1; D = 12; C = 1	5.93E-09	2.33E-09	1.16E-09	4.10E-10	1.88E-10	1.01E-10	6.04E-11	2.65E-11	1.39E-11	4.28E-12	1.84E-12	5.64E-13	2.43E-13	1.27E-13	7.43E-14
L = 1; D = 1.5; C = 0.3	6.12E-09	2.42E-09	1.21E-09	4.31E-10	1.99E-10	1.08E-10	6.46E-11	2.85E-11	1.50E-11	4.63E-12	2.00E-12	6.07E-13	2.59E-13	1.34E-13	7.82E-14
L = 1; D = 1.5; C = 0.6	5.80E-09	2.30E-09	1.15E-09	4.11E-10	1.91E-10	1.04E-10	6.26E-11	2.79E-11	1.48E-11	4.59E-12	1.98E-12	6.03E-13	2.58E-13	1.33E-13	7.77E-14
L = 1; D = 1.5; C = 1	6.09E-09	2.41E-09	1.21E-09	4.32E-10	2.00E-10	1.08E-10	6.49E-11	2.87E-11	1.51E-11	4.67E-12	2.01E-12	6.10E-13	2.60E-13	1.34E-13	7.83E-14
L = 1; D = 4; C = 0.3	6.04E-09	2.38E-09	1.19E-09	4.22E-10	1.94E-10	1.05E-10	6.29E-11	2.77E-11	1.46E-11	4.50E-12	1.94E-12	5.93E-13	2.55E-13	1.32E-13	7.71E-14
L = 1; D = 4; C = 0.6	5.59E-09	2.20E-09	1.09E-09	3.85E-10	1.78E-10	9.60E-11	5.76E-11	2.56E-11	1.36E-11	4.26E-12	1.86E-12	5.75E-13	2.49E-13	1.30E-13	7.58E-14
L = 1; D = 4; C = 1	5.96E-09	2.36E-09	1.19E-09	4.20E-10	1.94E-10	1.04E-10	6.24E-11	2.76E-11	1.46E-11	4.50E-12	1.95E-12	5.95E-13	2.55E-13	1.32E-13	7.72E-14
L = 3; D = 12; C = 0.3	5.02E-09	1.97E-09	9.77E-10	3.46E-10	1.60E-10	8.63E-11	5.18E-11	2.29E-11	1.21E-11	3.76E-12	1.64E-12	5.09E-13	2.23E-13	1.17E-13	6.94E-14
L = 3; D = 12; C = 0.6	3.90E-09	1.50E-09	7.40E-10	2.55E-10	1.17E-10	6.28E-11	3.78E-11	1.69E-11	8.99E-12	2.90E-12	1.30E-12	4.27E-13	1.94E-13	1.05E-13	6.32E-14
L = 3; D = 12; C = 1	5.33E-09	2.09E-09	1.04E-09	3.62E-10	1.65E-10	8.86E-11	5.30E-11	2.32E-11	1.22E-11	3.79E-12	1.65E-12	5.14E-13	2.25E-13	1.19E-13	7.02E-14
L = 3; D = 1.5; C = 0.3	5.07E-09	2.02E-09	1.01E-09	3.65E-10	1.73E-10	9.49E-11	5.78E-11	2.62E-11	1.40E-11	4.42E-12	1.93E-12	5.92E-13	2.54E-13	1.32E-13	7.70E-14
L = 3; D = 1.5; C = 0.6	4.79E-09	1.88E-09	9.39E-10	3.43E-10	1.62E-10	9.01E-11	5.54E-11	2.54E-11	1.36E-11	4.35E-12	1.90E-12	5.86E-13	2.52E-13	1.31E-13	7.65E-14
L = 3; D = 1.5; C = 1	5.72E-09	2.26E-09	1.14E-09	4.04E-10	1.89E-10	1.03E-10	6.18E-11	2.76E-11	1.47E-11	4.55E-12	1.97E-12	6.01E-13	2.57E-13	1.33E-13	7.75E-14
L = 3; D = 4; C = 0.3	4.41E-09	1.75E-09	8.74E-10	3.13E-10	1.48E-10	8.09E-11	4.91E-11	2.23E-11	1.20E-11	3.87E-12	1.73E-12	5.46E-13	2.40E-13	1.26E-13	7.39E-14
L = 3; D = 4; C = 0.6	4.09E-09	1.59E-09	7.92E-10	2.80E-10	1.31E-10	7.16E-11	4.39E-11	2.02E-11	1.10E-11	3.64E-12	1.65E-12	5.30E-13	2.34E-13	1.23E-13	7.27E-14
L = 3; D = 4; C = 1	5.45E-09	2.15E-09	1.07E-09	3.78E-10	1.74E-10	9.41E-11	5.66E-11	2.52E-11	1.33E-11	4.21E-12	1.85E-12	5.72E-13	2.48E-13	1.29E-13	7.56E-14
T = 0.8	6.24E-09	2.48E-09	1.24E-09	4.42E-10	2.04E-10	1.10E-10	6.63E-11	2.92E-11	1.53E-11	4.71E-12	2.02E-12	6.12E-13	2.61E-13	1.35E-13	7.84E-14
T = 0.6	5.90E-09	2.34E-09	1.17E-09	4.17E-10	1.95E-10	1.06E-10	6.43E-11	2.86E-11	1.51E-11	4.66E-12	2.01E-12	6.08E-13	2.60E-13	1.34E-13	7.81E-14
T = 0.4	5.19E-09	2.06E-09	1.03E-09	3.74E-10	1.77E-10	9.81E-11	5.98E-11	2.71E-11	1.45E-11	4.55E-12	1.97E-12	6.00E-13	2.57E-13	1.33E-13	7.76E-14
T = 0.2	3.88E-09	1.53E-09	7.77E-10	2.90E-10	1.42E-10	8.07E-11	5.05E-11	2.37E-11	1.30E-11	4.24E-12	1.87E-12	5.82E-13	2.51E-13	1.30E-13	7.61E-14

Table 14: S-values for ^{211}Bi

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	2.40E-07	7.17E-08	3.04E-08	9.04E-09	3.82E-09	1.96E-09	1.13E-09	4.79E-10	2.45E-10	7.28E-11	3.07E-11	9.11E-12	3.84E-12	1.97E-12	1.14E-12
L = 0; Z = 0.25	2.38E-07	7.12E-08	3.02E-08	9.00E-09	3.81E-09	1.95E-09	1.13E-09	4.78E-10	2.45E-10	7.27E-11	3.07E-11	9.10E-12	3.84E-12	1.97E-12	1.14E-12
L = 0; Z = 0.5	2.39E-07	7.16E-08	3.03E-08	9.03E-09	3.82E-09	1.96E-09	1.13E-09	4.79E-10	2.45E-10	7.28E-11	3.07E-11	9.11E-12	3.84E-12	1.97E-12	1.14E-12
L = 0; Z = 2	2.40E-07	7.16E-08	3.04E-08	9.04E-09	3.82E-09	1.96E-09	1.13E-09	4.79E-10	2.45E-10	7.28E-11	3.07E-11	9.11E-12	3.84E-12	1.97E-12	1.14E-12
L = 0; Z = 4	2.39E-07	7.15E-08	3.03E-08	9.03E-09	3.82E-09	1.96E-09	1.13E-09	4.79E-10	2.45E-10	7.28E-11	3.07E-11	9.11E-12	3.84E-12	1.97E-12	1.14E-12
L = 0.3; D = 12; C = 0.3	2.38E-07	7.11E-08	3.02E-08	8.99E-09	3.80E-09	1.95E-09	1.13E-09	4.77E-10	2.45E-10	7.27E-11	3.07E-11	9.10E-12	3.84E-12	1.97E-12	1.14E-12
L = 0.3; D = 12; C = 0.6	2.31E-07	6.97E-08	2.97E-08	8.90E-09	3.78E-09	1.94E-09	1.13E-09	4.76E-10	2.44E-10	7.26E-11	3.07E-11	9.09E-12	3.84E-12	1.97E-12	1.14E-12
L = 0.3; D = 12; C = 1	2.35E-07	7.05E-08	3.00E-08	8.96E-09	3.79E-09	1.95E-09	1.13E-09	4.77E-10	2.45E-10	7.26E-11	3.07E-11	9.10E-12	3.84E-12	1.97E-12	1.14E-12
L = 0.3; D = 1.5; C = 0.3	2.40E-07	7.16E-08	3.04E-08	9.04E-09	3.82E-09	1.96E-09	1.13E-09	4.79E-10	2.45E-10	7.28E-11	3.07E-11	9.11E-12	3.84E-12	1.97E-12	1.14E-12
L = 0.3; D = 1.5; C = 0.6	2.39E-07	7.15E-08	3.03E-08	9.03E-09	3.82E-09	1.96E-09	1.13E-09	4.79E-10	2.45E-10	7.28E-11	3.07E-11	9.11E-12	3.84E-12	1.97E-12	1.14E-12
L = 0.3; D = 1.5; C = 1	2.40E-07	7.16E-08	3.03E-08	9.03E-09	3.82E-09	1.96E-09	1.13E-09	4.79E-10	2.45E-10	7.28E-11	3.07E-11	9.11E-12	3.84E-12	1.97E-12	1.14E-12
L = 0.3; D = 4; C = 0.3	2.38E-07	7.14E-08	3.03E-08	9.01E-09	3.81E-09	1.95E-09	1.13E-09	4.79E-10	2.45E-10	7.28E-11	3.07E-11	9.11E-12	3.84E-12	1.97E-12	1.14E-12
L = 0.3; D = 4; C = 0.6	2.37E-07	7.12E-08	3.02E-08	9.00E-09	3.81E-09	1.95E-09	1.13E-09	4.78E-10	2.45E-10	7.27E-11	3.07E-11	9.10E-12	3.84E-12	1.97E-12	1.14E-12
L = 0.3; D = 4; C = 1	2.39E-07	7.15E-08	3.03E-08	9.02E-09	3.81E-09	1.96E-09	1.13E-09	4.79E-10	2.45E-10	7.27E-11	3.07E-11	9.10E-12	3.84E-12	1.97E-12	1.14E-12
L = 1; D = 12; C = 0.3	2.28E-07	6.89E-08	2.94E-08	8.83E-09	3.75E-09	1.93E-09	1.12E-09	4.75E-10	2.44E-10	7.24E-11	3.06E-11	9.08E-12	3.83E-12	1.96E-12	1.14E-12
L = 1; D = 12; C = 0.6	2.07E-07	6.44E-08	2.80E-08	8.54E-09	3.66E-09	1.89E-09	1.10E-09	4.69E-10	2.41E-10	7.19E-11	3.04E-11	9.05E-12	3.82E-12	1.96E-12	1.14E-12
L = 1; D = 12; C = 1	2.20E-07	6.73E-08	2.89E-08	8.73E-09	3.72E-09	1.92E-09	1.11E-09	4.73E-10	2.43E-10	7.22E-11	3.05E-11	9.07E-12	3.83E-12	1.96E-12	1.14E-12
L = 1; D = 1.5; C = 0.3	2.38E-07	7.13E-08	3.02E-08	9.01E-09	3.81E-09	1.95E-09	1.13E-09	4.78E-10	2.45E-10	7.27E-11	3.07E-11	9.10E-12	3.84E-12	1.97E-12	1.14E-12
L = 1; D = 1.5; C = 0.6	2.37E-07	7.11E-08	3.02E-08	8.99E-09	3.81E-09	1.95E-09	1.13E-09	4.78E-10	2.45E-10	7.27E-11	3.07E-11	9.10E-12	3.84E-12	1.97E-12	1.14E-12
L = 1; D = 1.5; C = 1	2.39E-07	7.15E-08	3.03E-08	9.03E-09	3.82E-09	1.96E-09	1.13E-09	4.79E-10	2.45E-10	7.28E-11	3.07E-11	9.11E-12	3.84E-12	1.97E-12	1.14E-12
L = 1; D = 4; C = 0.3	2.33E-07	7.03E-08	2.99E-08	8.95E-09	3.79E-09	1.95E-09	1.13E-09	4.77E-10	2.45E-10	7.26E-11	3.07E-11	9.10E-12	3.84E-12	1.97E-12	1.14E-12
L = 1; D = 4; C = 0.6	2.27E-07	6.90E-08	2.95E-08	8.86E-09	3.76E-09	1.93E-09	1.12E-09	4.75E-10	2.44E-10	7.25E-11	3.06E-11	9.09E-12	3.84E-12	1.97E-12	1.14E-12
L = 1; D = 4; C = 1	2.33E-07	7.03E-08	2.99E-08	8.95E-09	3.79E-09	1.95E-09	1.13E-09	4.77E-10	2.45E-10	7.26E-11	3.07E-11	9.10E-12	3.84E-12	1.97E-12	1.14E-12
L = 3; D = 12; C = 0.3	1.98E-07	6.22E-08	2.72E-08	8.37E-09	3.61E-09	1.87E-09	1.09E-09	4.65E-10	2.40E-10	7.16E-11	3.03E-11	9.03E-12	3.82E-12	1.96E-12	1.13E-12
L = 3; D = 12; C = 0.6	1.69E-07	5.62E-08	2.53E-08	8.01E-09	3.49E-09	1.82E-09	1.07E-09	4.57E-10	2.36E-10	7.10E-11	3.02E-11	9.00E-12	3.81E-12	1.95E-12	1.13E-12
L = 3; D = 12; C = 1	2.01E-07	6.30E-08	2.75E-08	8.44E-09	3.63E-09	1.88E-09	1.10E-09	4.66E-10	2.40E-10	7.17E-11	3.04E-11	9.04E-12	3.82E-12	1.96E-12	1.13E-12
L = 3; D = 1.5; C = 0.3	2.33E-07	7.03E-08	2.99E-08	8.95E-09	3.79E-09	1.95E-09	1.13E-09	4.77E-10	2.45E-10	7.27E-11	3.07E-11	9.10E-12	3.84E-12	1.97E-12	1.14E-12
L = 3; D = 1.5; C = 0.6	2.32E-07	7.00E-08	2.98E-08	8.93E-09	3.79E-09	1.94E-09	1.13E-09	4.77E-10	2.45E-10	7.26E-11	3.07E-11	9.10E-12	3.84E-12	1.97E-12	1.14E-12
L = 3; D = 1.5; C = 1	2.36E-07	7.09E-08	3.01E-08	8.98E-09	3.80E-09	1.95E-09	1.13E-09	4.78E-10	2.45E-10	7.27E-11	3.07E-11	9.10E-12	3.84E-12	1.97E-12	1.14E-12
L = 3; D = 4; C = 0.3	2.17E-07	6.70E-08	2.88E-08	8.73E-09	3.72E-09	1.92E-09	1.11E-09	4.73E-10	2.43E-10	7.23E-11	3.06E-11	9.07E-12	3.83E-12	1.96E-12	1.14E-12
L = 3; D = 4; C = 0.6	2.12E-07	6.61E-08	2.86E-08	8.68E-09	3.71E-09	1.91E-09	1.11E-09	4.72E-10	2.42E-10	7.22E-11	3.05E-11	9.07E-12	3.83E-12	1.96E-12	1.14E-12
L = 3; D = 4; C = 1	2.26E-07	6.89E-08	2.95E-08	8.86E-09	3.76E-09	1.93E-09	1.12E-09	4.75E-10	2.44E-10	7.25E-11	3.06E-11	9.09E-12	3.84E-12	1.97E-12	1.14E-12
T = 0.8	2.40E-07	7.16E-08	3.04E-08	9.03E-09	3.82E-09	1.96E-09	1.13E-09	4.79E-10	2.45E-10	7.28E-11	3.07E-11	9.11E-12	3.84E-12	1.97E-12	1.14E-12
T = 0.6	2.39E-07	7.14E-08	3.03E-08	9.02E-09	3.81E-09	1.96E-09	1.13E-09	4.79E-10	2.45E-10	7.27E-11	3.07E-11	9.10E-12	3.84E-12	1.97E-12	1.14E-12
T = 0.4	2.36E-07	7.10E-08	3.01E-08	8.99E-09	3.81E-09	1.95E-09	1.13E-09	4.78E-10	2.45E-10	7.27E-11	3.07E-11	9.10E-12	3.84E-12	1.97E-12	1.14E-12
T = 0.2	2.30E-07	6.97E-08	2.97E-08	8.91E-09	3.78E-09	1.94E-09	1.13E-09	4.77E-10	2.44E-10	7.26E-11	3.07E-11	9.09E-12	3.84E-12	1.97E-12	1.14E-12

Table 15: S-values for ^{211}Po

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	2.70E-07	8.10E-08	3.44E-08	1.02E-08	4.33E-09	2.22E-09	1.29E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0; Z = 0.25	2.67E-07	8.03E-08	3.41E-08	1.02E-08	4.31E-09	2.21E-09	1.28E-09	5.42E-10	2.78E-10	8.24E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0; Z = 0.5	2.70E-07	8.09E-08	3.43E-08	1.02E-08	4.32E-09	2.22E-09	1.28E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0; Z = 2	2.70E-07	8.09E-08	3.43E-08	1.02E-08	4.33E-09	2.22E-09	1.28E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0; Z = 4	2.69E-07	8.07E-08	3.43E-08	1.02E-08	4.32E-09	2.22E-09	1.28E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0.3; D = 12; C = 0.3	2.68E-07	8.02E-08	3.41E-08	1.02E-08	4.30E-09	2.21E-09	1.28E-09	5.41E-10	2.77E-10	8.24E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 0.3; D = 12; C = 0.6	2.59E-07	7.83E-08	3.34E-08	1.00E-08	4.27E-09	2.19E-09	1.27E-09	5.39E-10	2.77E-10	8.22E-11	3.47E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 0.3; D = 12; C = 1	2.64E-07	7.94E-08	3.38E-08	1.01E-08	4.29E-09	2.20E-09	1.28E-09	5.41E-10	2.77E-10	8.23E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 0.3; D = 1.5; C = 0.3	2.70E-07	8.09E-08	3.43E-08	1.02E-08	4.33E-09	2.22E-09	1.29E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0.3; D = 1.5; C = 0.6	2.69E-07	8.08E-08	3.43E-08	1.02E-08	4.32E-09	2.22E-09	1.28E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0.3; D = 1.5; C = 1	2.70E-07	8.09E-08	3.43E-08	1.02E-08	4.33E-09	2.22E-09	1.29E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0.3; D = 4; C = 0.3	2.69E-07	8.06E-08	3.42E-08	1.02E-08	4.32E-09	2.22E-09	1.28E-09	5.42E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0.3; D = 4; C = 0.6	2.67E-07	8.02E-08	3.41E-08	1.02E-08	4.31E-09	2.21E-09	1.28E-09	5.42E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 0.3; D = 4; C = 1	2.69E-07	8.06E-08	3.42E-08	1.02E-08	4.32E-09	2.21E-09	1.28E-09	5.42E-10	2.78E-10	8.24E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 1; D = 12; C = 0.3	2.56E-07	7.75E-08	3.31E-08	9.96E-09	4.24E-09	2.18E-09	1.27E-09	5.37E-10	2.76E-10	8.21E-11	3.47E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 1; D = 12; C = 0.6	2.28E-07	7.13E-08	3.11E-08	9.56E-09	4.11E-09	2.13E-09	1.24E-09	5.29E-10	2.73E-10	8.13E-11	3.44E-11	1.02E-11	4.33E-12	2.22E-12	1.29E-12
L = 1; D = 12; C = 1	2.46E-07	7.52E-08	3.24E-08	9.82E-09	4.19E-09	2.16E-09	1.26E-09	5.34E-10	2.75E-10	8.18E-11	3.46E-11	1.03E-11	4.34E-12	2.22E-12	1.29E-12
L = 1; D = 1.5; C = 0.3	2.68E-07	8.05E-08	3.42E-08	1.02E-08	4.32E-09	2.21E-09	1.28E-09	5.42E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 1; D = 1.5; C = 0.6	2.67E-07	8.03E-08	3.41E-08	1.02E-08	4.31E-09	2.21E-09	1.28E-09	5.42E-10	2.78E-10	8.24E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 1; D = 1.5; C = 1	2.69E-07	8.07E-08	3.43E-08	1.02E-08	4.32E-09	2.22E-09	1.28E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
L = 1; D = 4; C = 0.3	2.62E-07	7.92E-08	3.38E-08	1.01E-08	4.29E-09	2.20E-09	1.28E-09	5.41E-10	2.77E-10	8.23E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 1; D = 4; C = 0.6	2.54E-07	7.75E-08	3.32E-08	1.00E-08	4.26E-09	2.19E-09	1.27E-09	5.39E-10	2.76E-10	8.21E-11	3.47E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 1; D = 4; C = 1	2.62E-07	7.92E-08	3.38E-08	1.01E-08	4.29E-09	2.20E-09	1.28E-09	5.41E-10	2.77E-10	8.23E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 3; D = 12; C = 0.3	2.19E-07	6.87E-08	3.01E-08	9.34E-09	4.04E-09	2.10E-09	1.23E-09	5.24E-10	2.71E-10	8.10E-11	3.43E-11	1.02E-11	4.32E-12	2.22E-12	1.28E-12
L = 3; D = 12; C = 0.6	1.78E-07	6.02E-08	2.74E-08	8.79E-09	3.86E-09	2.03E-09	1.19E-09	5.13E-10	2.66E-10	8.00E-11	3.40E-11	1.02E-11	4.31E-12	2.21E-12	1.28E-12
L = 3; D = 12; C = 1	2.22E-07	6.98E-08	3.06E-08	9.44E-09	4.07E-09	2.11E-09	1.23E-09	5.26E-10	2.71E-10	8.12E-11	3.44E-11	1.02E-11	4.33E-12	2.22E-12	1.29E-12
L = 3; D = 1.5; C = 0.3	2.62E-07	7.93E-08	3.38E-08	1.01E-08	4.29E-09	2.21E-09	1.28E-09	5.41E-10	2.77E-10	8.24E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 3; D = 1.5; C = 0.6	2.59E-07	7.87E-08	3.36E-08	1.01E-08	4.28E-09	2.20E-09	1.28E-09	5.40E-10	2.77E-10	8.23E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 3; D = 1.5; C = 1	2.65E-07	7.99E-08	3.40E-08	1.02E-08	4.30E-09	2.21E-09	1.28E-09	5.41E-10	2.78E-10	8.24E-11	3.48E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
L = 3; D = 4; C = 0.3	2.40E-07	7.48E-08	3.24E-08	9.84E-09	4.20E-09	2.17E-09	1.26E-09	5.35E-10	2.75E-10	8.18E-11	3.46E-11	1.03E-11	4.34E-12	2.23E-12	1.29E-12
L = 3; D = 4; C = 0.6	2.33E-07	7.34E-08	3.19E-08	9.74E-09	4.17E-09	2.16E-09	1.26E-09	5.33E-10	2.74E-10	8.17E-11	3.46E-11	1.03E-11	4.34E-12	2.22E-12	1.29E-12
L = 3; D = 4; C = 1	2.52E-07	7.71E-08	3.31E-08	9.97E-09	4.25E-09	2.18E-09	1.27E-09	5.38E-10	2.76E-10	8.21E-11	3.47E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12
T = 0.8	2.70E-07	8.10E-08	3.44E-08	1.02E-08	4.33E-09	2.22E-09	1.29E-09	5.43E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
T = 0.6	2.69E-07	8.07E-08	3.42E-08	1.02E-08	4.32E-09	2.22E-09	1.28E-09	5.42E-10	2.78E-10	8.25E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
T = 0.4	2.66E-07	8.00E-08	3.40E-08	1.02E-08	4.31E-09	2.21E-09	1.28E-09	5.42E-10	2.78E-10	8.24E-11	3.48E-11	1.03E-11	4.36E-12	2.23E-12	1.29E-12
T = 0.2	2.57E-07	7.84E-08	3.35E-08	1.01E-08	4.27E-09	2.20E-09	1.27E-09	5.40E-10	2.77E-10	8.22E-11	3.47E-11	1.03E-11	4.35E-12	2.23E-12	1.29E-12

Table 16: S-values for ^{207}Tl

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	6.33E-09	2.57E-09	1.30E-09	4.70E-10	2.19E-10	1.19E-10	7.13E-11	3.16E-11	1.66E-11	5.10E-12	2.19E-12	6.60E-13	2.81E-13	1.44E-13	8.39E-14
L = 0; Z = 0.25	5.25E-09	2.14E-09	1.10E-09	4.11E-10	1.97E-10	1.09E-10	6.64E-11	2.99E-11	1.59E-11	4.95E-12	2.14E-12	6.50E-13	2.77E-13	1.43E-13	8.32E-14
L = 0; Z = 0.5	6.04E-09	2.46E-09	1.25E-09	4.58E-10	2.15E-10	1.17E-10	7.04E-11	3.12E-11	1.65E-11	5.07E-12	2.18E-12	6.58E-13	2.80E-13	1.44E-13	8.38E-14
L = 0; Z = 2	6.06E-09	2.46E-09	1.25E-09	4.58E-10	2.15E-10	1.17E-10	7.06E-11	3.13E-11	1.65E-11	5.07E-12	2.18E-12	6.58E-13	2.80E-13	1.44E-13	8.38E-14
L = 0; Z = 4	5.38E-09	2.20E-09	1.13E-09	4.23E-10	2.02E-10	1.12E-10	6.79E-11	3.04E-11	1.61E-11	5.00E-12	2.16E-12	6.55E-13	2.79E-13	1.44E-13	8.36E-14
L = 0.3; D = 12; C = 0.3	6.30E-09	2.56E-09	1.30E-09	4.68E-10	2.18E-10	1.18E-10	7.09E-11	3.13E-11	1.65E-11	5.05E-12	2.17E-12	6.53E-13	2.78E-13	1.43E-13	8.32E-14
L = 0.3; D = 12; C = 0.6	6.18E-09	2.51E-09	1.27E-09	4.60E-10	2.13E-10	1.15E-10	6.92E-11	3.05E-11	1.60E-11	4.90E-12	2.10E-12	6.35E-13	2.71E-13	1.40E-13	8.16E-14
L = 0.3; D = 12; C = 1	6.25E-09	2.53E-09	1.29E-09	4.65E-10	2.16E-10	1.17E-10	7.03E-11	3.10E-11	1.63E-11	4.98E-12	2.14E-12	6.46E-13	2.76E-13	1.42E-13	8.27E-14
L = 0.3; D = 1.5; C = 0.3	6.28E-09	2.55E-09	1.30E-09	4.69E-10	2.19E-10	1.19E-10	7.14E-11	3.15E-11	1.66E-11	5.09E-12	2.19E-12	6.59E-13	2.81E-13	1.44E-13	8.39E-14
L = 0.3; D = 1.5; C = 0.6	6.25E-09	2.53E-09	1.28E-09	4.64E-10	2.16E-10	1.17E-10	7.05E-11	3.12E-11	1.64E-11	5.06E-12	2.18E-12	6.57E-13	2.79E-13	1.44E-13	8.37E-14
L = 0.3; D = 1.5; C = 1	6.28E-09	2.55E-09	1.29E-09	4.68E-10	2.18E-10	1.18E-10	7.10E-11	3.14E-11	1.65E-11	5.08E-12	2.18E-12	6.59E-13	2.80E-13	1.44E-13	8.38E-14
L = 0.3; D = 4; C = 0.3	6.28E-09	2.54E-09	1.29E-09	4.67E-10	2.17E-10	1.18E-10	7.08E-11	3.13E-11	1.65E-11	5.06E-12	2.17E-12	6.56E-13	2.80E-13	1.44E-13	8.36E-14
L = 0.3; D = 4; C = 0.6	6.21E-09	2.51E-09	1.28E-09	4.60E-10	2.14E-10	1.16E-10	6.96E-11	3.07E-11	1.62E-11	4.98E-12	2.14E-12	6.50E-13	2.77E-13	1.43E-13	8.32E-14
L = 0.3; D = 4; C = 1	6.28E-09	2.54E-09	1.29E-09	4.66E-10	2.17E-10	1.18E-10	7.06E-11	3.12E-11	1.64E-11	5.04E-12	2.17E-12	6.55E-13	2.79E-13	1.44E-13	8.35E-14
L = 1; D = 12; C = 0.3	6.14E-09	2.47E-09	1.25E-09	4.50E-10	2.09E-10	1.13E-10	6.79E-11	2.99E-11	1.57E-11	4.83E-12	2.08E-12	6.29E-13	2.69E-13	1.39E-13	8.10E-14
L = 1; D = 12; C = 0.6	5.51E-09	2.21E-09	1.12E-09	3.98E-10	1.84E-10	9.92E-11	5.92E-11	2.60E-11	1.36E-11	4.21E-12	1.83E-12	5.66E-13	2.46E-13	1.29E-13	7.59E-14
L = 1; D = 12; C = 1	5.95E-09	2.39E-09	1.21E-09	4.36E-10	2.02E-10	1.09E-10	6.51E-11	2.87E-11	1.50E-11	4.61E-12	1.98E-12	6.05E-13	2.60E-13	1.35E-13	7.91E-14
L = 1; D = 1.5; C = 0.3	6.15E-09	2.49E-09	1.26E-09	4.54E-10	2.12E-10	1.15E-10	6.93E-11	3.07E-11	1.62E-11	5.01E-12	2.16E-12	6.53E-13	2.79E-13	1.44E-13	8.35E-14
L = 1; D = 1.5; C = 0.6	5.83E-09	2.35E-09	1.19E-09	4.32E-10	2.02E-10	1.10E-10	6.67E-11	2.98E-11	1.58E-11	4.94E-12	2.14E-12	6.49E-13	2.78E-13	1.43E-13	8.32E-14
L = 1; D = 1.5; C = 1	6.14E-09	2.48E-09	1.26E-09	4.57E-10	2.13E-10	1.16E-10	6.96E-11	3.09E-11	1.63E-11	5.04E-12	2.17E-12	6.56E-13	2.80E-13	1.44E-13	8.37E-14
L = 1; D = 4; C = 0.3	6.03E-09	2.44E-09	1.23E-09	4.46E-10	2.07E-10	1.12E-10	6.74E-11	2.98E-11	1.57E-11	4.85E-12	2.09E-12	6.37E-13	2.73E-13	1.41E-13	8.24E-14
L = 1; D = 4; C = 0.6	5.57E-09	2.25E-09	1.13E-09	4.06E-10	1.88E-10	1.02E-10	6.15E-11	2.73E-11	1.45E-11	4.56E-12	2.00E-12	6.17E-13	2.67E-13	1.39E-13	8.10E-14
L = 1; D = 4; C = 1	5.98E-09	2.43E-09	1.23E-09	4.44E-10	2.06E-10	1.11E-10	6.69E-11	2.96E-11	1.56E-11	4.83E-12	2.09E-12	6.38E-13	2.73E-13	1.41E-13	8.23E-14
L = 3; D = 12; C = 0.3	5.05E-09	2.02E-09	1.02E-09	3.66E-10	1.70E-10	9.24E-11	5.56E-11	2.46E-11	1.30E-11	4.04E-12	1.76E-12	5.45E-13	2.38E-13	1.25E-13	7.37E-14
L = 3; D = 12; C = 0.6	3.95E-09	1.56E-09	7.72E-10	2.71E-10	1.24E-10	6.70E-11	4.01E-11	1.79E-11	9.54E-12	3.06E-12	1.38E-12	4.51E-13	2.04E-13	1.11E-13	6.67E-14
L = 3; D = 12; C = 1	5.35E-09	2.15E-09	1.08E-09	3.85E-10	1.78E-10	9.54E-11	5.71E-11	2.50E-11	1.32E-11	4.08E-12	1.77E-12	5.51E-13	2.40E-13	1.26E-13	7.46E-14
L = 3; D = 1.5; C = 0.3	5.08E-09	2.06E-09	1.04E-09	3.85E-10	1.83E-10	1.01E-10	6.18E-11	2.81E-11	1.50E-11	4.76E-12	2.08E-12	6.38E-13	2.74E-13	1.42E-13	8.25E-14
L = 3; D = 1.5; C = 0.6	4.78E-09	1.92E-09	9.76E-10	3.57E-10	1.71E-10	9.52E-11	5.85E-11	2.69E-11	1.45E-11	4.65E-12	2.04E-12	6.29E-13	2.71E-13	1.40E-13	8.19E-14
L = 3; D = 1.5; C = 1	5.76E-09	2.32E-09	1.18E-09	4.27E-10	2.00E-10	1.10E-10	6.63E-11	2.97E-11	1.58E-11	4.91E-12	2.13E-12	6.46E-13	2.76E-13	1.43E-13	8.29E-14
L = 3; D = 4; C = 0.3	4.47E-09	1.79E-09	9.05E-10	3.31E-10	1.56E-10	8.60E-11	5.23E-11	2.38E-11	1.28E-11	4.14E-12	1.85E-12	5.84E-13	2.56E-13	1.34E-13	7.87E-14
L = 3; D = 4; C = 0.6	4.11E-09	1.64E-09	8.18E-10	2.94E-10	1.38E-10	7.58E-11	4.63E-11	2.13E-11	1.16E-11	3.87E-12	1.76E-12	5.65E-13	2.49E-13	1.31E-13	7.75E-14
L = 3; D = 4; C = 1	5.50E-09	2.20E-09	1.11E-09	3.99E-10	1.85E-10	1.00E-10	6.04E-11	2.69E-11	1.43E-11	4.50E-12	1.98E-12	6.14E-13	2.65E-13	1.38E-13	8.07E-14
T = 0.8	6.25E-09	2.54E-09	1.29E-09	4.67E-10	2.18E-10	1.18E-10	7.10E-11	3.14E-11	1.65E-11	5.08E-12	2.18E-12	6.58E-13	2.80E-13	1.44E-13	8.38E-14
T = 0.6	5.92E-09	2.40E-09	1.21E-09	4.41E-10	2.07E-10	1.14E-10	6.88E-11	3.07E-11	1.63E-11	5.03E-12	2.17E-12	6.55E-13	2.79E-13	1.44E-13	8.36E-14
T = 0.4	5.20E-09	2.10E-09	1.07E-09	3.92E-10	1.87E-10	1.04E-10	6.38E-11	2.91E-11	1.56E-11	4.90E-12	2.12E-12	6.47E-13	2.77E-13	1.43E-13	8.31E-14
T = 0.2	3.87E-09	1.55E-09	7.93E-10	2.99E-10	1.48E-10	8.43E-11	5.29E-11	2.50E-11	1.38E-11	4.52E-12	2.00E-12	6.23E-13	2.69E-13	1.40E-13	8.16E-14

Table 17: S-values for ^{177}Lu

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	4.51E-09	1.43E-09	6.24E-10	1.91E-10	8.21E-11	4.25E-11	2.48E-11	1.05E-11	5.43E-12	1.63E-12	6.90E-13	2.06E-13	8.77E-14	4.51E-14	2.63E-14
L = 0; Z = 0.25	4.16E-09	1.35E-09	6.01E-10	1.87E-10	8.07E-11	4.19E-11	2.45E-11	1.04E-11	5.38E-12	1.61E-12	6.86E-13	2.05E-13	8.72E-14	4.49E-14	2.61E-14
L = 0; Z = 0.5	4.44E-09	1.41E-09	6.20E-10	1.91E-10	8.20E-11	4.25E-11	2.48E-11	1.06E-11	5.44E-12	1.63E-12	6.91E-13	2.06E-13	8.77E-14	4.53E-14	2.63E-14
L = 0; Z = 2	4.46E-09	1.42E-09	6.23E-10	1.91E-10	8.21E-11	4.25E-11	2.48E-11	1.06E-11	5.43E-12	1.62E-12	6.89E-13	2.06E-13	8.77E-14	4.52E-14	2.62E-14
L = 0; Z = 4	4.28E-09	1.38E-09	6.08E-10	1.88E-10	8.10E-11	4.21E-11	2.46E-11	1.05E-11	5.41E-12	1.62E-12	6.88E-13	2.06E-13	8.74E-14	4.50E-14	2.62E-14
L = 0.3; D = 12; C = 0.3	4.49E-09	1.43E-09	6.21E-10	1.90E-10	8.16E-11	4.22E-11	2.46E-11	1.05E-11	5.41E-12	1.62E-12	6.88E-13	2.06E-13	8.77E-14	4.51E-14	2.63E-14
L = 0.3; D = 12; C = 0.6	4.39E-09	1.39E-09	6.06E-10	1.85E-10	7.96E-11	4.12E-11	2.41E-11	1.03E-11	5.30E-12	1.60E-12	6.79E-13	2.04E-13	8.71E-14	4.50E-14	2.62E-14
L = 0.3; D = 12; C = 1	4.44E-09	1.40E-09	6.12E-10	1.88E-10	8.04E-11	4.16E-11	2.43E-11	1.04E-11	5.35E-12	1.61E-12	6.84E-13	2.05E-13	8.75E-14	4.51E-14	2.63E-14
L = 0.3; D = 1.5; C = 0.3	4.51E-09	1.43E-09	6.25E-10	1.92E-10	8.22E-11	4.26E-11	2.48E-11	1.05E-11	5.43E-12	1.62E-12	6.89E-13	2.06E-13	8.77E-14	4.52E-14	2.63E-14
L = 0.3; D = 1.5; C = 0.6	4.50E-09	1.43E-09	6.25E-10	1.92E-10	8.23E-11	4.26E-11	2.48E-11	1.06E-11	5.44E-12	1.63E-12	6.91E-13	2.07E-13	8.78E-14	4.51E-14	2.63E-14
L = 0.3; D = 1.5; C = 1	4.52E-09	1.43E-09	6.25E-10	1.92E-10	8.22E-11	4.25E-11	2.48E-11	1.05E-11	5.43E-12	1.62E-12	6.89E-13	2.06E-13	8.77E-14	4.51E-14	2.63E-14
L = 0.3; D = 4; C = 0.3	4.52E-09	1.43E-09	6.26E-10	1.91E-10	8.19E-11	4.24E-11	2.47E-11	1.05E-11	5.42E-12	1.62E-12	6.89E-13	2.06E-13	8.78E-14	4.52E-14	2.63E-14
L = 0.3; D = 4; C = 0.6	4.44E-09	1.41E-09	6.15E-10	1.89E-10	8.13E-11	4.22E-11	2.46E-11	1.05E-11	5.40E-12	1.62E-12	6.89E-13	2.06E-13	8.76E-14	4.51E-14	2.63E-14
L = 0.3; D = 4; C = 1	4.45E-09	1.41E-09	6.15E-10	1.89E-10	8.11E-11	4.20E-11	2.46E-11	1.05E-11	5.41E-12	1.62E-12	6.89E-13	2.06E-13	8.77E-14	4.52E-14	2.63E-14
L = 1; D = 12; C = 0.3	4.31E-09	1.36E-09	5.96E-10	1.83E-10	7.85E-11	4.07E-11	2.38E-11	1.02E-11	5.25E-12	1.58E-12	6.75E-13	2.03E-13	8.67E-14	4.48E-14	2.61E-14
L = 1; D = 12; C = 0.6	3.81E-09	1.21E-09	5.27E-10	1.62E-10	7.06E-11	3.69E-11	2.17E-11	9.42E-12	4.92E-12	1.51E-12	6.52E-13	1.98E-13	8.50E-14	4.41E-14	2.57E-14
L = 1; D = 12; C = 1	4.14E-09	1.31E-09	5.70E-10	1.75E-10	7.53E-11	3.91E-11	2.29E-11	9.84E-12	5.12E-12	1.55E-12	6.66E-13	2.01E-13	8.61E-14	4.45E-14	2.60E-14
L = 1; D = 1.5; C = 0.3	4.41E-09	1.41E-09	6.15E-10	1.90E-10	8.15E-11	4.22E-11	2.46E-11	1.05E-11	5.41E-12	1.62E-12	6.88E-13	2.06E-13	8.77E-14	4.51E-14	2.63E-14
L = 1; D = 1.5; C = 0.6	4.22E-09	1.36E-09	6.01E-10	1.86E-10	8.05E-11	4.18E-11	2.44E-11	1.04E-11	5.39E-12	1.62E-12	6.87E-13	2.06E-13	8.75E-14	4.51E-14	2.62E-14
L = 1; D = 1.5; C = 1	4.40E-09	1.41E-09	6.14E-10	1.89E-10	8.15E-11	4.22E-11	2.46E-11	1.05E-11	5.41E-12	1.62E-12	6.89E-13	2.06E-13	8.77E-14	4.51E-14	2.63E-14
L = 1; D = 4; C = 0.3	4.30E-09	1.37E-09	5.98E-10	1.84E-10	7.95E-11	4.13E-11	2.42E-11	1.03E-11	5.34E-12	1.61E-12	6.84E-13	2.05E-13	8.74E-14	4.50E-14	2.62E-14
L = 1; D = 4; C = 0.6	3.95E-09	1.27E-09	5.58E-10	1.74E-10	7.58E-11	3.96E-11	2.33E-11	1.00E-11	5.21E-12	1.58E-12	6.74E-13	2.03E-13	8.66E-14	4.47E-14	2.61E-14
L = 1; D = 4; C = 1	4.25E-09	1.35E-09	5.92E-10	1.83E-10	7.90E-11	4.11E-11	2.41E-11	1.03E-11	5.33E-12	1.60E-12	6.83E-13	2.05E-13	8.72E-14	4.50E-14	2.62E-14
L = 3; D = 12; C = 0.3	3.58E-09	1.15E-09	5.05E-10	1.57E-10	6.84E-11	3.58E-11	2.11E-11	9.16E-12	4.79E-12	1.47E-12	6.37E-13	1.95E-13	8.37E-14	4.35E-14	2.54E-14
L = 3; D = 12; C = 0.6	2.68E-09	8.64E-10	3.88E-10	1.24E-10	5.57E-11	3.00E-11	1.80E-11	8.07E-12	4.31E-12	1.37E-12	6.03E-13	1.87E-13	8.13E-14	4.24E-14	2.49E-14
L = 3; D = 12; C = 1	3.65E-09	1.16E-09	5.06E-10	1.57E-10	6.84E-11	3.59E-11	2.11E-11	9.17E-12	4.80E-12	1.49E-12	6.44E-13	1.97E-13	8.45E-14	4.39E-14	2.56E-14
L = 3; D = 1.5; C = 0.3	3.94E-09	1.29E-09	5.74E-10	1.80E-10	7.83E-11	4.09E-11	2.40E-11	1.03E-11	5.33E-12	1.61E-12	6.84E-13	2.05E-13	8.72E-14	4.49E-14	2.61E-14
L = 3; D = 1.5; C = 0.6	3.73E-09	1.24E-09	5.56E-10	1.76E-10	7.72E-11	4.05E-11	2.37E-11	1.02E-11	5.29E-12	1.60E-12	6.80E-13	2.04E-13	8.68E-14	4.48E-14	2.61E-14
L = 3; D = 1.5; C = 1	4.23E-09	1.36E-09	5.97E-10	1.85E-10	8.01E-11	4.17E-11	2.44E-11	1.04E-11	5.38E-12	1.61E-12	6.86E-13	2.06E-13	8.75E-14	4.52E-14	2.62E-14
L = 3; D = 4; C = 0.3	3.42E-09	1.12E-09	5.02E-10	1.61E-10	7.09E-11	3.76E-11	2.23E-11	9.71E-12	5.08E-12	1.55E-12	6.65E-13	2.01E-13	8.59E-14	4.44E-14	2.59E-14
L = 3; D = 4; C = 0.6	3.10E-09	1.02E-09	4.61E-10	1.50E-10	6.75E-11	3.60E-11	2.15E-11	9.45E-12	4.97E-12	1.53E-12	6.57E-13	1.99E-13	8.52E-14	4.41E-14	2.57E-14
L = 3; D = 4; C = 1	3.91E-09	1.25E-09	5.53E-10	1.72E-10	7.49E-11	3.92E-11	2.31E-11	9.96E-12	5.19E-12	1.58E-12	6.74E-13	2.03E-13	8.65E-14	4.47E-14	2.60E-14
T = 0.8	4.48E-09	1.43E-09	6.24E-10	1.91E-10	8.21E-11	4.25E-11	2.47E-11	1.05E-11	5.43E-12	1.62E-12	6.90E-13	2.06E-13	8.77E-14	4.52E-14	2.64E-14
T = 0.6	4.36E-09	1.40E-09	6.15E-10	1.90E-10	8.16E-11	4.23E-11	2.47E-11	1.05E-11	5.42E-12	1.62E-12	6.88E-13	2.06E-13	8.76E-14	4.51E-14	2.63E-14
T = 0.4	4.05E-09	1.33E-09	5.91E-10	1.85E-10	8.02E-11	4.16E-11	2.43E-11	1.04E-11	5.37E-12	1.61E-12	6.85E-13	2.05E-13	8.71E-14	4.49E-14	2.61E-14
T = 0.2	3.41E-09	1.16E-09	5.31E-10	1.72E-10	7.60E-11	3.99E-11	2.35E-11	1.01E-11	5.26E-12	1.59E-12	6.77E-13	2.03E-13	8.63E-14	4.45E-14	2.59E-14

Table 18: S-values for ^{131}I

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	5.27E-09	1.74E-09	7.76E-10	2.44E-10	1.06E-10	5.54E-11	3.25E-11	1.40E-11	7.31E-12	2.24E-12	9.72E-13	3.02E-13	1.33E-13	7.14E-14	4.30E-14
L = 0; Z = 0.25	4.67E-09	1.60E-09	7.27E-10	2.33E-10	1.02E-10	5.37E-11	3.16E-11	1.37E-11	7.14E-12	2.19E-12	9.51E-13	2.95E-13	1.29E-13	6.84E-14	4.09E-14
L = 0; Z = 0.5	5.08E-09	1.71E-09	7.65E-10	2.41E-10	1.05E-10	5.51E-11	3.23E-11	1.39E-11	7.25E-12	2.23E-12	9.67E-13	3.00E-13	1.32E-13	7.05E-14	4.23E-14
L = 0; Z = 2	5.15E-09	1.72E-09	7.72E-10	2.43E-10	1.06E-10	5.52E-11	3.24E-11	1.40E-11	7.28E-12	2.23E-12	9.67E-13	3.01E-13	1.32E-13	7.04E-14	4.23E-14
L = 0; Z = 4	4.82E-09	1.65E-09	7.41E-10	2.38E-10	1.03E-10	5.44E-11	3.20E-11	1.38E-11	7.21E-12	2.21E-12	9.52E-13	2.91E-13	1.29E-13	6.78E-14	4.11E-14
L = 0.3; D = 12; C = 0.3	5.19E-09	1.72E-09	7.70E-10	2.42E-10	1.05E-10	5.50E-11	3.23E-11	1.39E-11	7.25E-12	2.22E-12	9.65E-13	3.01E-13	1.33E-13	7.11E-14	4.28E-14
L = 0.3; D = 12; C = 0.6	5.11E-09	1.69E-09	7.52E-10	2.35E-10	1.02E-10	5.34E-11	3.14E-11	1.36E-11	7.08E-12	2.18E-12	9.53E-13	2.98E-13	1.32E-13	7.03E-14	4.25E-14
L = 0.3; D = 12; C = 1	5.16E-09	1.71E-09	7.61E-10	2.38E-10	1.04E-10	5.42E-11	3.18E-11	1.37E-11	7.17E-12	2.20E-12	9.58E-13	2.99E-13	1.32E-13	7.08E-14	4.27E-14
L = 0.3; D = 1.5; C = 0.3	5.22E-09	1.74E-09	7.75E-10	2.43E-10	1.06E-10	5.53E-11	3.25E-11	1.40E-11	7.29E-12	2.24E-12	9.69E-13	3.03E-13	1.33E-13	7.11E-14	4.29E-14
L = 0.3; D = 1.5; C = 0.6	5.20E-09	1.73E-09	7.73E-10	2.43E-10	1.06E-10	5.53E-11	3.25E-11	1.40E-11	7.28E-12	2.23E-12	9.71E-13	3.02E-13	1.33E-13	7.08E-14	4.27E-14
L = 0.3; D = 1.5; C = 1	5.24E-09	1.74E-09	7.75E-10	2.43E-10	1.06E-10	5.52E-11	3.24E-11	1.40E-11	7.29E-12	2.23E-12	9.67E-13	3.01E-13	1.32E-13	7.07E-14	4.27E-14
L = 0.3; D = 4; C = 0.3	5.21E-09	1.74E-09	7.74E-10	2.43E-10	1.06E-10	5.51E-11	3.24E-11	1.40E-11	7.27E-12	2.22E-12	9.66E-13	3.02E-13	1.33E-13	7.09E-14	4.27E-14
L = 0.3; D = 4; C = 0.6	5.14E-09	1.70E-09	7.62E-10	2.39E-10	1.04E-10	5.44E-11	3.20E-11	1.38E-11	7.23E-12	2.22E-12	9.64E-13	3.00E-13	1.32E-13	7.05E-14	4.25E-14
L = 0.3; D = 4; C = 1	5.17E-09	1.71E-09	7.66E-10	2.41E-10	1.05E-10	5.48E-11	3.22E-11	1.39E-11	7.26E-12	2.23E-12	9.70E-13	3.02E-13	1.33E-13	7.10E-14	4.28E-14
L = 1; D = 12; C = 0.3	5.01E-09	1.65E-09	7.37E-10	2.31E-10	1.01E-10	5.25E-11	3.09E-11	1.34E-11	6.99E-12	2.15E-12	9.40E-13	2.95E-13	1.31E-13	7.00E-14	4.21E-14
L = 1; D = 12; C = 0.6	4.44E-09	1.46E-09	6.50E-10	2.03E-10	8.86E-11	4.67E-11	2.76E-11	1.21E-11	6.40E-12	2.01E-12	8.88E-13	2.82E-13	1.26E-13	6.74E-14	4.07E-14
L = 1; D = 12; C = 1	4.85E-09	1.60E-09	7.10E-10	2.21E-10	9.64E-11	5.04E-11	2.97E-11	1.29E-11	6.76E-12	2.10E-12	9.22E-13	2.91E-13	1.29E-13	6.92E-14	4.17E-14
L = 1; D = 1.5; C = 0.3	5.06E-09	1.68E-09	7.53E-10	2.38E-10	1.04E-10	5.47E-11	3.22E-11	1.39E-11	7.26E-12	2.22E-12	9.66E-13	3.01E-13	1.33E-13	7.08E-14	4.27E-14
L = 1; D = 1.5; C = 0.6	4.87E-09	1.63E-09	7.33E-10	2.33E-10	1.02E-10	5.38E-11	3.17E-11	1.38E-11	7.19E-12	2.21E-12	9.59E-13	2.98E-13	1.31E-13	7.01E-14	4.22E-14
L = 1; D = 1.5; C = 1	5.07E-09	1.69E-09	7.58E-10	2.40E-10	1.05E-10	5.48E-11	3.22E-11	1.39E-11	7.24E-12	2.22E-12	9.62E-13	3.00E-13	1.32E-13	7.06E-14	4.25E-14
L = 1; D = 4; C = 0.3	5.00E-09	1.65E-09	7.38E-10	2.32E-10	1.02E-10	5.31E-11	3.13E-11	1.36E-11	7.10E-12	2.19E-12	9.52E-13	2.98E-13	1.32E-13	7.02E-14	4.23E-14
L = 1; D = 4; C = 0.6	4.55E-09	1.51E-09	6.77E-10	2.14E-10	9.48E-11	5.02E-11	2.97E-11	1.30E-11	6.86E-12	2.13E-12	9.31E-13	2.92E-13	1.29E-13	6.88E-14	4.14E-14
L = 1; D = 4; C = 1	4.93E-09	1.64E-09	7.29E-10	2.30E-10	1.01E-10	5.27E-11	3.11E-11	1.36E-11	7.11E-12	2.20E-12	9.53E-13	2.98E-13	1.32E-13	7.03E-14	4.22E-14
L = 3; D = 12; C = 0.3	4.11E-09	1.37E-09	6.12E-10	1.94E-10	8.50E-11	4.49E-11	2.66E-11	1.17E-11	6.16E-12	1.94E-12	8.60E-13	2.74E-13	1.22E-13	6.55E-14	3.94E-14
L = 3; D = 12; C = 0.6	3.09E-09	1.02E-09	4.56E-10	1.46E-10	6.54E-11	3.52E-11	2.13E-11	9.66E-12	5.25E-12	1.72E-12	7.77E-13	2.53E-13	1.14E-13	6.15E-14	3.72E-14
L = 3; D = 12; C = 1	4.27E-09	1.40E-09	6.22E-10	1.95E-10	8.55E-11	4.49E-11	2.66E-11	1.17E-11	6.19E-12	1.96E-12	8.74E-13	2.80E-13	1.25E-13	6.68E-14	4.05E-14
L = 3; D = 1.5; C = 0.3	4.41E-09	1.50E-09	6.86E-10	2.22E-10	9.84E-11	5.21E-11	3.08E-11	1.35E-11	7.05E-12	2.17E-12	9.41E-13	2.92E-13	1.28E-13	6.82E-14	4.09E-14
L = 3; D = 1.5; C = 0.6	4.09E-09	1.41E-09	6.50E-10	2.14E-10	9.57E-11	5.08E-11	3.03E-11	1.32E-11	6.92E-12	2.14E-12	9.32E-13	2.89E-13	1.27E-13	6.74E-14	4.03E-14
L = 3; D = 1.5; C = 1	4.82E-09	1.62E-09	7.29E-10	2.32E-10	1.02E-10	5.37E-11	3.17E-11	1.37E-11	7.17E-12	2.20E-12	9.56E-13	2.98E-13	1.31E-13	6.97E-14	4.18E-14
L = 3; D = 4; C = 0.3	3.79E-09	1.29E-09	5.88E-10	1.92E-10	8.60E-11	4.60E-11	2.76E-11	1.23E-11	6.51E-12	2.04E-12	8.94E-13	2.81E-13	1.24E-13	6.59E-14	3.94E-14
L = 3; D = 4; C = 0.6	3.39E-09	1.14E-09	5.27E-10	1.75E-10	7.95E-11	4.33E-11	2.61E-11	1.18E-11	6.31E-12	2.00E-12	8.83E-13	2.77E-13	1.22E-13	6.50E-14	3.88E-14
L = 3; D = 4; C = 1	4.49E-09	1.49E-09	6.67E-10	2.13E-10	9.39E-11	4.97E-11	2.95E-11	1.30E-11	6.85E-12	2.13E-12	9.31E-13	2.91E-13	1.29E-13	6.84E-14	4.12E-14
T = 0.8	5.19E-09	1.72E-09	7.71E-10	2.43E-10	1.06E-10	5.54E-11	3.25E-11	1.40E-11	7.30E-12	2.24E-12	9.71E-13	3.02E-13	1.33E-13	7.09E-14	4.25E-14
T = 0.6	4.97E-09	1.67E-09	7.53E-10	2.39E-10	1.05E-10	5.47E-11	3.22E-11	1.39E-11	7.25E-12	2.22E-12	9.64E-13	2.99E-13	1.32E-13	7.04E-14	4.23E-14
T = 0.4	4.47E-09	1.54E-09	7.06E-10	2.29E-10	1.01E-10	5.33E-11	3.15E-11	1.37E-11	7.12E-12	2.19E-12	9.50E-13	2.95E-13	1.29E-13	6.83E-14	4.09E-14
T = 0.2	3.56E-09	1.27E-09	5.98E-10	2.03E-10	9.23E-11	4.95E-11	2.96E-11	1.30E-11	6.82E-12	2.11E-12	9.14E-13	2.83E-13	1.23E-13	6.53E-14	3.88E-14

Table 19: S-values for ^{90}Y

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**S-value [Gy/Bq*s]**														
L = 0; Z = 1.0	5.96E-09	2.61E-09	1.43E-09	5.90E-10	3.03E-10	1.76E-10	1.10E-10	5.14E-11	2.79E-11	8.91E-12	3.90E-12	1.20E-12	5.14E-13	2.66E-13	1.55E-13
L = 0; Z = 0.25	4.90E-09	2.14E-09	1.17E-09	4.88E-10	2.53E-10	1.49E-10	9.51E-11	4.58E-11	2.55E-11	8.39E-12	3.74E-12	1.17E-12	5.04E-13	2.62E-13	1.53E-13
L = 0; Z = 0.5	5.66E-09	2.47E-09	1.36E-09	5.64E-10	2.90E-10	1.70E-10	1.07E-10	5.03E-11	2.74E-11	8.81E-12	3.87E-12	1.19E-12	5.13E-13	2.66E-13	1.55E-13
L = 0; Z = 2	5.72E-09	2.49E-09	1.37E-09	5.67E-10	2.92E-10	1.70E-10	1.07E-10	5.05E-11	2.75E-11	8.83E-12	3.88E-12	1.19E-12	5.13E-13	2.65E-13	1.55E-13
L = 0; Z = 4	5.03E-09	2.20E-09	1.21E-09	5.01E-10	2.62E-10	1.55E-10	9.89E-11	4.75E-11	2.62E-11	8.57E-12	3.79E-12	1.18E-12	5.08E-13	2.64E-13	1.54E-13
L = 0.3; D = 12; C = 0.3	5.95E-09	2.60E-09	1.42E-09	5.88E-10	3.02E-10	1.75E-10	1.10E-10	5.12E-11	2.78E-11	8.86E-12	3.88E-12	1.19E-12	5.10E-13	2.63E-13	1.53E-13
L = 0.3; D = 12; C = 0.6	5.83E-09	2.55E-09	1.40E-09	5.79E-10	2.98E-10	1.72E-10	1.08E-10	5.02E-11	2.72E-11	8.64E-12	3.77E-12	1.15E-12	4.94E-13	2.56E-13	1.50E-13
L = 0.3; D = 12; C = 1	5.90E-09	2.58E-09	1.41E-09	5.84E-10	3.00E-10	1.74E-10	1.09E-10	5.08E-11	2.75E-11	8.76E-12	3.83E-12	1.17E-12	5.03E-13	2.60E-13	1.52E-13
L = 0.3; D = 1.5; C = 0.3	5.92E-09	2.58E-09	1.42E-09	5.86E-10	3.01E-10	1.75E-10	1.10E-10	5.14E-11	2.79E-11	8.93E-12	3.91E-12	1.20E-12	5.14E-13	2.66E-13	1.55E-13
L = 0.3; D = 1.5; C = 0.6	5.88E-09	2.58E-09	1.41E-09	5.82E-10	3.00E-10	1.74E-10	1.09E-10	5.09E-11	2.76E-11	8.84E-12	3.87E-12	1.19E-12	5.12E-13	2.65E-13	1.55E-13
L = 0.3; D = 1.5; C = 1	5.92E-09	2.58E-09	1.41E-09	5.86E-10	3.02E-10	1.75E-10	1.10E-10	5.13E-11	2.79E-11	8.90E-12	3.90E-12	1.20E-12	5.14E-13	2.66E-13	1.55E-13
L = 0.3; D = 4; C = 0.3	5.89E-09	2.58E-09	1.41E-09	5.85E-10	3.01E-10	1.75E-10	1.10E-10	5.13E-11	2.78E-11	8.86E-12	3.88E-12	1.19E-12	5.11E-13	2.65E-13	1.54E-13
L = 0.3; D = 4; C = 0.6	5.84E-09	2.55E-09	1.40E-09	5.77E-10	2.97E-10	1.72E-10	1.08E-10	5.03E-11	2.73E-11	8.73E-12	3.81E-12	1.17E-12	5.06E-13	2.62E-13	1.53E-13
L = 0.3; D = 4; C = 1	5.87E-09	2.56E-09	1.41E-09	5.83E-10	2.99E-10	1.74E-10	1.09E-10	5.09E-11	2.76E-11	8.81E-12	3.86E-12	1.19E-12	5.10E-13	2.64E-13	1.54E-13
L = 1; D = 12; C = 0.3	5.76E-09	2.53E-09	1.38E-09	5.69E-10	2.92E-10	1.69E-10	1.06E-10	4.92E-11	2.66E-11	8.48E-12	3.70E-12	1.14E-12	4.88E-13	2.53E-13	1.48E-13
L = 1; D = 12; C = 0.6	5.22E-09	2.27E-09	1.25E-09	5.09E-10	2.60E-10	1.50E-10	9.36E-11	4.31E-11	2.33E-11	7.34E-12	3.19E-12	9.85E-13	4.28E-13	2.24E-13	1.32E-13
L = 1; D = 12; C = 1	5.62E-09	2.45E-09	1.34E-09	5.53E-10	2.83E-10	1.63E-10	1.02E-10	4.75E-11	2.56E-11	8.11E-12	3.53E-12	1.08E-12	4.66E-13	2.42E-13	1.42E-13
L = 1; D = 1.5; C = 0.3	5.78E-09	2.52E-09	1.38E-09	5.72E-10	2.94E-10	1.70E-10	1.07E-10	4.98E-11	2.71E-11	8.68E-12	3.82E-12	1.18E-12	5.08E-13	2.63E-13	1.54E-13
L = 1; D = 1.5; C = 0.6	5.47E-09	2.39E-09	1.30E-09	5.40E-10	2.77E-10	1.61E-10	1.01E-10	4.74E-11	2.59E-11	8.41E-12	3.72E-12	1.16E-12	5.02E-13	2.61E-13	1.53E-13
L = 1; D = 1.5; C = 1	5.77E-09	2.52E-09	1.38E-09	5.69E-10	2.92E-10	1.69E-10	1.07E-10	4.98E-11	2.71E-11	8.72E-12	3.84E-12	1.19E-12	5.10E-13	2.64E-13	1.54E-13
L = 1; D = 4; C = 0.3	5.68E-09	2.49E-09	1.36E-09	5.62E-10	2.89E-10	1.67E-10	1.05E-10	4.88E-11	2.64E-11	8.43E-12	3.69E-12	1.14E-12	4.92E-13	2.56E-13	1.50E-13
L = 1; D = 4; C = 0.6	5.27E-09	2.30E-09	1.26E-09	5.15E-10	2.63E-10	1.52E-10	9.52E-11	4.42E-11	2.39E-11	7.68E-12	3.40E-12	1.07E-12	4.69E-13	2.46E-13	1.45E-13
L = 1; D = 4; C = 1	5.63E-09	2.47E-09	1.35E-09	5.59E-10	2.86E-10	1.65E-10	1.04E-10	4.82E-11	2.61E-11	8.35E-12	3.67E-12	1.14E-12	4.91E-13	2.56E-13	1.50E-13
L = 3; D = 12; C = 0.3	4.81E-09	2.10E-09	1.14E-09	4.65E-10	2.38E-10	1.37E-10	8.59E-11	4.00E-11	2.17E-11	6.93E-12	3.05E-12	9.48E-13	4.12E-13	2.16E-13	1.28E-13
L = 3; D = 12; C = 0.6	3.83E-09	1.66E-09	8.95E-10	3.60E-10	1.81E-10	1.02E-10	6.35E-11	2.90E-11	1.57E-11	4.99E-12	2.22E-12	7.11E-13	3.20E-13	1.73E-13	1.05E-13
L = 3; D = 12; C = 1	5.14E-09	2.23E-09	1.21E-09	4.96E-10	2.52E-10	1.45E-10	9.05E-11	4.16E-11	2.24E-11	7.07E-12	3.07E-12	9.53E-13	4.14E-13	2.18E-13	1.29E-13
L = 3; D = 1.5; C = 0.3	4.80E-09	2.08E-09	1.14E-09	4.70E-10	2.42E-10	1.41E-10	8.96E-11	4.27E-11	2.36E-11	7.85E-12	3.53E-12	1.12E-12	4.88E-13	2.55E-13	1.50E-13
L = 3; D = 1.5; C = 0.6	4.52E-09	1.97E-09	1.07E-09	4.39E-10	2.25E-10	1.31E-10	8.29E-11	3.98E-11	2.22E-11	7.51E-12	3.41E-12	1.09E-12	4.81E-13	2.52E-13	1.48E-13
L = 3; D = 1.5; C = 1	5.41E-09	2.36E-09	1.30E-09	5.35E-10	2.74E-10	1.59E-10	1.00E-10	4.69E-11	2.56E-11	8.34E-12	3.70E-12	1.15E-12	4.99E-13	2.59E-13	1.52E-13
L = 3; D = 4; C = 0.3	4.23E-09	1.83E-09	9.99E-10	4.08E-10	2.10E-10	1.22E-10	7.69E-11	3.64E-11	2.00E-11	6.61E-12	2.99E-12	9.66E-13	4.32E-13	2.30E-13	1.37E-13
L = 3; D = 4; C = 0.6	3.96E-09	1.72E-09	9.33E-10	3.77E-10	1.90E-10	1.09E-10	6.83E-11	3.19E-11	1.76E-11	5.88E-12	2.70E-12	9.01E-13	4.11E-13	2.22E-13	1.33E-13
L = 3; D = 4; C = 1	5.18E-09	2.26E-09	1.24E-09	5.08E-10	2.59E-10	1.49E-10	9.34E-11	4.34E-11	2.35E-11	7.55E-12	3.35E-12	1.06E-12	4.64E-13	2.44E-13	1.44E-13
T = 0.8	5.87E-09	2.57E-09	1.41E-09	5.85E-10	3.00E-10	1.74E-10	1.09E-10	5.10E-11	2.77E-11	8.88E-12	3.89E-12	1.20E-12	5.14E-13	2.66E-13	1.55E-13
T = 0.6	5.57E-09	2.44E-09	1.34E-09	5.51E-10	2.83E-10	1.64E-10	1.03E-10	4.87E-11	2.67E-11	8.67E-12	3.83E-12	1.18E-12	5.10E-13	2.64E-13	1.54E-13
T = 0.4	4.91E-09	2.14E-09	1.17E-09	4.81E-10	2.46E-10	1.43E-10	9.06E-11	4.36E-11	2.44E-11	8.17E-12	3.66E-12	1.15E-12	4.99E-13	2.59E-13	1.52E-13
T = 0.2	3.68E-09	1.60E-09	8.65E-10	3.51E-10	1.80E-10	1.06E-10	6.84E-11	3.39E-11	1.95E-11	6.92E-12	3.23E-12	1.07E-12	4.72E-13	2.49E-13	1.47E-13

SECTION 2: SYSTEMATIC ERROR IN S-VALUES DERIVED FROM EQUIVALENT SPHERE APPROXIMATION RELATIVE TO GROUND TRUTH (SHAPE-SPECIFIC CALCULATION)

Table 20: Error in sphere approximation for ^{211}At

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	1.1 %	0.7 %	0.5 %	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.2 %	0.2 %	0.1 %
L = 0; Z = 0.5	0.0 %	0.0 %	-0.1 %	-0.1 %	-0.1 %	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.1 %	0.0 %	0.0 %
L = 0; Z = 2	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 4	0.6 %	0.4 %	0.3 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.1 %	0.1 %	0.1 %	0.2 %	0.0 %	0.1 %
L = 0.3; D = 12; C = 0.3	1.0 %	0.8 %	0.7 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 0.6	3.4 %	2.5 %	1.9 %	1.4 %	1.0 %	0.8 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.2 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 1	1.8 %	1.3 %	1.1 %	0.8 %	0.6 %	0.4 %	0.4 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.1 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.3	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.6	0.2 %	0.1 %	0.0 %	0.0 %	-0.1 %	-0.1 %	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 1	0.1 %	0.0 %	0.0 %	0.0 %	-0.1 %	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.3	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.6	1.1 %	0.7 %	0.5 %	0.4 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 1	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 12; C = 0.3	4.9 %	3.6 %	2.8 %	1.9 %	1.5 %	1.2 %	1.0 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.3 %	0.1 %	0.1 %
L = 1; D = 12; C = 0.6	14.0 %	9.9 %	7.6 %	4.9 %	3.6 %	2.9 %	2.4 %	1.8 %	1.5 %	1.0 %	0.7 %	0.5 %	0.5 %	0.4 %	0.4 %
L = 1; D = 12; C = 1	8.0 %	5.6 %	4.4 %	3.0 %	2.2 %	1.8 %	1.5 %	1.1 %	0.9 %	0.6 %	0.4 %	0.3 %	0.3 %	0.3 %	0.2 %
L = 1; D = 1.5; C = 0.3	0.7 %	0.4 %	0.3 %	0.2 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.1 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 0.6	1.0 %	0.7 %	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.1 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 1	0.4 %	0.3 %	0.2 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.3	2.3 %	1.5 %	1.1 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.1 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.6	4.5 %	3.1 %	2.4 %	1.6 %	1.2 %	0.9 %	0.8 %	0.6 %	0.5 %	0.3 %	0.2 %	0.2 %	0.3 %	0.2 %	0.1 %
L = 1; D = 4; C = 1	2.3 %	1.6 %	1.2 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.2 %	0.0 %	0.0 %
L = 3; D = 12; C = 0.3	19.0 %	13.5 %	10.2 %	6.7 %	4.9 %	3.9 %	3.2 %	2.5 %	2.0 %	1.5 %	1.2 %	0.8 %	0.8 %	0.6 %	0.6 %
L = 3; D = 12; C = 0.6	35.0 %	22.3 %	16.1 %	10.4 %	7.7 %	6.0 %	5.0 %	3.7 %	3.0 %	2.0 %	1.5 %	1.0 %	0.8 %	0.6 %	0.6 %
L = 3; D = 12; C = 1	16.4 %	11.4 %	8.5 %	5.6 %	4.0 %	3.1 %	2.6 %	2.0 %	1.6 %	1.1 %	0.9 %	0.6 %	0.5 %	0.4 %	0.4 %
L = 3; D = 1.5; C = 0.3	1.9 %	1.2 %	0.9 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.2 %	0.0 %	0.0 %
L = 3; D = 1.5; C = 0.6	2.7 %	1.8 %	1.4 %	0.9 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %	0.2 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 1	1.1 %	0.7 %	0.5 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 3; D = 4; C = 0.3	8.5 %	5.4 %	4.0 %	2.6 %	1.9 %	1.5 %	1.3 %	0.9 %	0.7 %	0.5 %	0.4 %	0.2 %	0.3 %	0.3 %	0.2 %
L = 3; D = 4; C = 0.6	10.9 %	7.1 %	5.0 %	3.2 %	2.3 %	1.9 %	1.6 %	1.2 %	1.0 %	0.7 %	0.5 %	0.4 %	0.4 %	0.4 %	0.4 %
L = 3; D = 4; C = 1	4.9 %	3.2 %	2.3 %	1.4 %	1.1 %	0.8 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.2 %	0.1 %	0.1 %
T = 0.8	-0.1 %	-0.2 %	-0.2 %	-0.2 %	-0.2 %	-0.1 %	-0.1 %	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.6	0.4 %	0.2 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.1 %	0.0 %	0.0 %
T = 0.4	1.1 %	0.7 %	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.2 %	0.1 %	0.1 %
T = 0.2	3.4 %	2.3 %	1.7 %	1.1 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.2 %	0.2 %	0.3 %

Table 21: Error in sphere approximation for ^{211}Po

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	1.2 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.5	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 2	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 4	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 0.3	1.0 %	1.0 %	0.8 %	0.7 %	0.5 %	0.4 %	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %
L = 0.3; D = 12; C = 0.6	4.2 %	3.4 %	2.7 %	1.8 %	1.4 %	1.2 %	1.0 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 1	2.4 %	2.0 %	1.6 %	1.1 %	0.9 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %
L = 0.3; D = 1.5; C = 0.3	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.6	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 1	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.3	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.6	1.3 %	0.9 %	0.7 %	0.5 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 1	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 12; C = 0.3	5.5 %	4.6 %	3.7 %	2.7 %	2.1 %	1.7 %	1.4 %	1.1 %	0.8 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %
L = 1; D = 12; C = 0.6	18.6 %	13.6 %	10.4 %	7.0 %	5.3 %	4.2 %	3.5 %	2.6 %	2.1 %	1.4 %	1.1 %	0.7 %	0.6 %	0.5 %	0.4 %
L = 1; D = 12; C = 1	10.0 %	7.7 %	6.1 %	4.2 %	3.2 %	2.6 %	2.2 %	1.6 %	1.3 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.3 %
L = 1; D = 1.5; C = 0.3	0.9 %	0.6 %	0.5 %	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 0.6	1.4 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 1	0.7 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.3	3.2 %	2.2 %	1.7 %	1.1 %	0.9 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.6	6.5 %	4.5 %	3.4 %	2.3 %	1.7 %	1.3 %	1.1 %	0.8 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %
L = 1; D = 4; C = 1	3.3 %	2.3 %	1.8 %	1.2 %	0.9 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 12; C = 0.3	23.3 %	17.9 %	14.0 %	9.5 %	7.1 %	5.7 %	4.7 %	3.5 %	2.8 %	1.9 %	1.5 %	1.0 %	0.8 %	0.6 %	0.6 %
L = 3; D = 12; C = 0.6	51.8 %	34.6 %	25.4 %	16.4 %	12.0 %	9.5 %	7.8 %	5.8 %	4.7 %	3.1 %	2.3 %	1.5 %	1.1 %	0.9 %	0.8 %
L = 3; D = 12; C = 1	21.8 %	16.0 %	12.3 %	8.4 %	6.4 %	5.1 %	4.2 %	3.1 %	2.5 %	1.6 %	1.2 %	0.8 %	0.6 %	0.5 %	0.4 %
L = 3; D = 1.5; C = 0.3	3.2 %	2.1 %	1.6 %	1.0 %	0.8 %	0.6 %	0.5 %	0.3 %	0.3 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 0.6	4.3 %	2.9 %	2.2 %	1.4 %	1.1 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 1	1.9 %	1.3 %	1.0 %	0.7 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 4; C = 0.3	12.8 %	8.3 %	6.2 %	4.0 %	3.0 %	2.4 %	2.0 %	1.5 %	1.2 %	0.8 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %
L = 3; D = 4; C = 0.6	16.1 %	10.4 %	7.7 %	5.0 %	3.7 %	2.9 %	2.4 %	1.8 %	1.4 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %
L = 3; D = 4; C = 1	7.4 %	5.0 %	3.8 %	2.6 %	1.9 %	1.6 %	1.3 %	1.0 %	0.8 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %
T = 0.8	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.6	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.4	1.8 %	1.3 %	1.0 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.2	5.0 %	3.3 %	2.5 %	1.7 %	1.3 %	1.0 %	0.8 %	0.6 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %

Table 22: Error in sphere approximation for ^{225}Ac

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	0.9 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.5	0.0 %	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 2	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 4	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 0.3	0.9 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 0.6	3.2 %	2.3 %	1.8 %	1.3 %	1.0 %	0.8 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 1	1.7 %	1.2 %	1.0 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.3	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.6	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 1	-0.2 %	-0.2 %	-0.2 %	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.3	0.4 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.6	0.7 %	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 1	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 12; C = 0.3	4.5 %	3.3 %	2.6 %	1.8 %	1.4 %	1.1 %	0.9 %	0.7 %	0.6 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %
L = 1; D = 12; C = 0.6	13.0 %	8.8 %	6.8 %	4.6 %	3.5 %	2.8 %	2.3 %	1.8 %	1.4 %	1.0 %	0.8 %	0.5 %	0.4 %	0.3 %	0.3 %
L = 1; D = 12; C = 1	7.4 %	5.3 %	4.1 %	2.8 %	2.0 %	1.6 %	1.3 %	1.0 %	0.8 %	0.5 %	0.4 %	0.2 %	0.2 %	0.2 %	0.2 %
L = 1; D = 1.5; C = 0.3	0.5 %	0.3 %	0.2 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 0.6	0.8 %	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 1	0.4 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.3	2.0 %	1.2 %	0.9 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.6	4.4 %	3.1 %	2.4 %	1.6 %	1.3 %	1.0 %	0.9 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %
L = 1; D = 4; C = 1	1.9 %	1.3 %	1.0 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 3; D = 12; C = 0.3	18.0 %	12.5 %	9.5 %	6.6 %	4.9 %	3.9 %	3.3 %	2.5 %	2.0 %	1.4 %	1.1 %	0.8 %	0.6 %	0.5 %	0.4 %
L = 3; D = 12; C = 0.6	33.8 %	21.6 %	15.6 %	9.9 %	7.5 %	5.9 %	4.8 %	3.5 %	2.8 %	1.8 %	1.4 %	1.0 %	0.7 %	0.6 %	0.5 %
L = 3; D = 12; C = 1	15.8 %	10.9 %	8.2 %	5.6 %	4.1 %	3.2 %	2.7 %	2.1 %	1.7 %	1.1 %	0.9 %	0.6 %	0.5 %	0.4 %	0.3 %
L = 3; D = 1.5; C = 0.3	2.1 %	1.5 %	1.1 %	0.8 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %
L = 3; D = 1.5; C = 0.6	2.8 %	1.9 %	1.4 %	0.9 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 3; D = 1.5; C = 1	1.2 %	0.8 %	0.6 %	0.4 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 3; D = 4; C = 0.3	7.8 %	5.0 %	3.7 %	2.4 %	1.8 %	1.4 %	1.2 %	0.8 %	0.7 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %
L = 3; D = 4; C = 0.6	10.0 %	6.7 %	4.9 %	3.4 %	2.6 %	2.2 %	1.9 %	1.5 %	1.2 %	0.8 %	0.6 %	0.4 %	0.3 %	0.3 %	0.3 %
L = 3; D = 4; C = 1	4.4 %	2.9 %	2.2 %	1.5 %	1.1 %	0.9 %	0.7 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %
T = 0.8	0.0 %	-0.1 %	-0.1 %	-0.1 %	-0.1 %	-0.1 %	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.6	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.1 %	0.1 %	0.1 %	0.1 %
T = 0.4	1.0 %	0.7 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %
T = 0.2	3.3 %	2.2 %	1.7 %	1.1 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %

Table 23: Error in sphere approximation for ^{221}Fr

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	0.8 %	0.6 %	0.5 %	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.1 %	0.1 %	0.0 %	0.1 %
L = 0; Z = 0.5	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 2	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 4	0.5 %	0.3 %	0.2 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 0.3	0.9 %	0.8 %	0.7 %	0.5 %	0.4 %	0.4 %	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 0.6	3.6 %	2.7 %	2.1 %	1.4 %	1.1 %	0.8 %	0.7 %	0.5 %	0.4 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 1	2.0 %	1.5 %	1.1 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.3	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.6	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 1	0.0 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	-0.1 %	-0.1 %	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.3	0.5 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.6	0.9 %	0.7 %	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 1	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.1 %	0.0 %	0.0 %
L = 1; D = 12; C = 0.3	4.8 %	3.9 %	3.1 %	2.2 %	1.6 %	1.3 %	1.1 %	0.8 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.2 %
L = 1; D = 12; C = 0.6	15.1 %	10.5 %	7.9 %	5.3 %	3.9 %	3.2 %	2.6 %	2.0 %	1.6 %	1.1 %	0.9 %	0.6 %	0.5 %	0.4 %	0.3 %
L = 1; D = 12; C = 1	8.6 %	6.3 %	4.9 %	3.4 %	2.5 %	2.0 %	1.7 %	1.2 %	1.0 %	0.7 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %
L = 1; D = 1.5; C = 0.3	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 0.6	1.0 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.1 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 1	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.3	2.6 %	1.9 %	1.4 %	0.9 %	0.7 %	0.6 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 1; D = 4; C = 0.6	5.3 %	3.7 %	2.8 %	1.9 %	1.5 %	1.1 %	0.9 %	0.7 %	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 1; D = 4; C = 1	2.5 %	1.8 %	1.3 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 12; C = 0.3	19.6 %	14.0 %	10.6 %	7.1 %	5.3 %	4.2 %	3.5 %	2.6 %	2.1 %	1.4 %	1.1 %	0.8 %	0.7 %	0.5 %	0.5 %
L = 3; D = 12; C = 0.6	38.9 %	25.2 %	18.3 %	11.9 %	8.7 %	6.9 %	5.8 %	4.4 %	3.5 %	2.3 %	1.7 %	1.2 %	0.9 %	0.7 %	0.6 %
L = 3; D = 12; C = 1	18.3 %	12.8 %	9.7 %	6.5 %	4.8 %	3.9 %	3.2 %	2.4 %	1.9 %	1.2 %	0.9 %	0.7 %	0.5 %	0.4 %	0.4 %
L = 3; D = 1.5; C = 0.3	2.4 %	1.6 %	1.2 %	0.8 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 0.6	3.4 %	2.3 %	1.7 %	1.1 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %
L = 3; D = 1.5; C = 1	1.4 %	1.0 %	0.8 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 4; C = 0.3	9.7 %	6.6 %	5.0 %	3.3 %	2.4 %	1.9 %	1.6 %	1.2 %	1.0 %	0.6 %	0.5 %	0.3 %	0.3 %	0.2 %	0.2 %
L = 3; D = 4; C = 0.6	12.5 %	8.2 %	6.1 %	4.0 %	2.9 %	2.3 %	2.0 %	1.4 %	1.1 %	0.8 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %
L = 3; D = 4; C = 1	5.5 %	3.7 %	2.7 %	1.8 %	1.4 %	1.1 %	0.9 %	0.7 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %
T = 0.8	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.6	0.4 %	0.4 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.4	1.3 %	0.9 %	0.7 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.2	3.7 %	2.6 %	1.9 %	1.2 %	0.9 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %

Table 24: Error in sphere approximation for ^{217}At

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	1.1 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.5	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 2	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 4	0.6 %	0.4 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 0.3	1.0 %	0.9 %	0.8 %	0.6 %	0.5 %	0.4 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 0.6	4.1 %	3.2 %	2.5 %	1.7 %	1.3 %	1.1 %	0.9 %	0.7 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 1	2.4 %	1.9 %	1.5 %	1.0 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.3	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.6	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 1	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.3	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.6	1.2 %	0.9 %	0.7 %	0.5 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 1	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 12; C = 0.3	5.3 %	4.3 %	3.5 %	2.5 %	1.9 %	1.5 %	1.3 %	1.0 %	0.8 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.2 %
L = 1; D = 12; C = 0.6	17.5 %	12.6 %	9.6 %	6.4 %	4.8 %	3.9 %	3.2 %	2.4 %	1.9 %	1.3 %	1.0 %	0.7 %	0.5 %	0.4 %	0.4 %
L = 1; D = 12; C = 1	9.5 %	7.2 %	5.6 %	3.9 %	3.0 %	2.4 %	2.0 %	1.5 %	1.2 %	0.8 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %
L = 1; D = 1.5; C = 0.3	0.8 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 0.6	1.3 %	0.8 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 1	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.3	3.0 %	2.1 %	1.6 %	1.0 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.6	6.0 %	4.1 %	3.1 %	2.1 %	1.5 %	1.2 %	1.0 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %
L = 1; D = 4; C = 1	3.0 %	2.1 %	1.6 %	1.1 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %
L = 3; D = 12; C = 0.3	22.3 %	16.7 %	12.9 %	8.7 %	6.5 %	5.2 %	4.3 %	3.2 %	2.6 %	1.7 %	1.3 %	0.9 %	0.7 %	0.6 %	0.5 %
L = 3; D = 12; C = 0.6	47.9 %	31.6 %	23.2 %	14.9 %	11.0 %	8.7 %	7.2 %	5.4 %	4.3 %	2.9 %	2.1 %	1.4 %	1.1 %	0.9 %	0.7 %
L = 3; D = 12; C = 1	20.6 %	14.9 %	11.4 %	7.7 %	5.8 %	4.6 %	3.9 %	2.8 %	2.3 %	1.5 %	1.1 %	0.8 %	0.6 %	0.5 %	0.4 %
L = 3; D = 1.5; C = 0.3	2.9 %	2.0 %	1.5 %	0.9 %	0.7 %	0.5 %	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %
L = 3; D = 1.5; C = 0.6	3.9 %	2.7 %	2.0 %	1.3 %	1.0 %	0.8 %	0.7 %	0.5 %	0.4 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 1	1.7 %	1.2 %	0.9 %	0.7 %	0.5 %	0.4 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %
L = 3; D = 4; C = 0.3	11.6 %	7.6 %	5.6 %	3.7 %	2.8 %	2.2 %	1.9 %	1.4 %	1.1 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %
L = 3; D = 4; C = 0.6	14.6 %	9.5 %	7.0 %	4.6 %	3.4 %	2.6 %	2.2 %	1.6 %	1.3 %	0.9 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %
L = 3; D = 4; C = 1	6.8 %	4.6 %	3.5 %	2.4 %	1.8 %	1.4 %	1.2 %	0.9 %	0.7 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %
T = 0.8	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.6	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.4	1.7 %	1.2 %	0.9 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.2	4.6 %	3.0 %	2.3 %	1.5 %	1.2 %	0.9 %	0.8 %	0.6 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %

Table 25: Error in sphere approximation for ^{213}Bi

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	11.8 %	12.5 %	11.3 %	10.3 %	8.5 %	6.5 %	5.3 %	3.3 %	2.6 %	2.1 %	1.6 %	1.1 %	1.0 %	1.0 %	1.1 %
L = 0; Z = 0.5	2.2 %	2.9 %	2.7 %	2.2 %	2.1 %	1.7 %	1.4 %	0.5 %	0.9 %	0.6 %	0.4 %	0.2 %	0.3 %	0.3 %	0.3 %
L = 0; Z = 2	2.5 %	2.3 %	2.1 %	1.6 %	1.3 %	1.0 %	0.6 %	-0.1 %	0.5 %	0.2 %	0.1 %	-0.1 %	0.0 %	0.0 %	0.1 %
L = 0; Z = 4	9.3 %	10.1 %	8.4 %	6.7 %	6.0 %	4.3 %	3.4 %	2.0 %	2.2 %	1.5 %	1.1 %	0.7 %	0.7 %	0.7 %	0.7 %
L = 0.3; D = 12; C = 0.3	0.8 %	0.5 %	0.4 %	0.5 %	0.9 %	0.9 %	0.7 %	0.2 %	0.8 %	0.8 %	0.8 %	0.6 %	0.7 %	0.7 %	0.6 %
L = 0.3; D = 12; C = 0.6	2.8 %	2.7 %	2.6 %	2.4 %	2.8 %	2.9 %	2.8 %	2.2 %	2.3 %	3.0 %	2.9 %	2.5 %	2.3 %	2.0 %	1.8 %
L = 0.3; D = 12; C = 1	1.4 %	1.5 %	1.6 %	1.4 %	1.6 %	1.6 %	1.6 %	1.0 %	2.0 %	2.0 %	1.9 %	1.5 %	1.4 %	1.2 %	1.0 %
L = 0.3; D = 1.5; C = 0.3	0.4 %	0.7 %	0.6 %	0.3 %	0.4 %	0.3 %	0.1 %	0.1 %	0.2 %	0.2 %	0.2 %	0.0 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 1.5; C = 0.6	0.7 %	0.9 %	0.7 %	0.8 %	1.0 %	1.0 %	0.7 %	0.0 %	0.6 %	0.5 %	0.4 %	0.2 %	0.2 %	0.2 %	0.1 %
L = 0.3; D = 1.5; C = 1	0.1 %	0.4 %	0.7 %	0.6 %	0.7 %	0.7 %	0.5 %	0.5 %	0.5 %	0.3 %	0.3 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 4; C = 0.3	0.4 %	0.4 %	0.4 %	0.3 %	0.6 %	0.5 %	0.4 %	-0.3 %	0.5 %	0.5 %	0.5 %	0.2 %	0.2 %	0.2 %	0.1 %
L = 0.3; D = 4; C = 0.6	1.6 %	1.9 %	2.0 %	2.0 %	2.4 %	2.3 %	2.2 %	1.5 %	2.0 %	1.8 %	1.6 %	1.1 %	0.9 %	0.7 %	0.6 %
L = 0.3; D = 4; C = 1	0.9 %	1.2 %	1.2 %	1.1 %	1.4 %	1.3 %	1.2 %	0.5 %	1.1 %	0.9 %	0.8 %	0.4 %	0.4 %	0.3 %	0.3 %
L = 1; D = 12; C = 0.3	4.3 %	4.2 %	4.1 %	4.0 %	4.5 %	4.6 %	4.4 %	3.8 %	3.9 %	4.5 %	4.4 %	3.7 %	3.4 %	2.9 %	2.7 %
L = 1; D = 12; C = 0.6	14.2 %	14.2 %	14.4 %	15.8 %	16.0 %	16.6 %	16.5 %	15.9 %	15.4 %	14.3 %	13.0 %	10.7 %	9.8 %	8.5 %	7.3 %
L = 1; D = 12; C = 1	7.3 %	6.8 %	7.0 %	7.1 %	8.2 %	7.5 %	7.6 %	7.1 %	7.3 %	7.0 %	6.5 %	6.2 %	5.4 %	4.6 %	4.1 %
L = 1; D = 1.5; C = 0.3	2.3 %	2.5 %	2.4 %	2.3 %	2.3 %	2.0 %	1.7 %	1.0 %	1.4 %	1.1 %	0.8 %	0.5 %	0.5 %	0.4 %	0.4 %
L = 1; D = 1.5; C = 0.6	5.0 %	6.1 %	6.1 %	6.1 %	6.3 %	5.4 %	4.8 %	3.4 %	2.8 %	2.5 %	2.0 %	1.2 %	1.0 %	0.9 %	0.8 %
L = 1; D = 1.5; C = 1	1.9 %	2.4 %	2.6 %	2.6 %	2.5 %	2.3 %	2.0 %	1.1 %	1.5 %	1.0 %	0.8 %	0.5 %	0.4 %	0.3 %	0.3 %
L = 1; D = 4; C = 0.3	3.4 %	4.1 %	4.3 %	4.3 %	5.1 %	4.6 %	4.4 %	3.6 %	3.5 %	3.5 %	2.9 %	2.1 %	1.7 %	1.4 %	1.2 %
L = 1; D = 4; C = 0.6	9.2 %	10.7 %	11.1 %	12.9 %	12.8 %	12.7 %	12.2 %	10.2 %	9.4 %	7.3 %	6.8 %	4.8 %	3.7 %	3.1 %	2.7 %
L = 1; D = 4; C = 1	3.1 %	4.2 %	4.6 %	5.0 %	5.8 %	5.1 %	5.1 %	4.1 %	3.9 %	3.7 %	3.0 %	2.1 %	1.8 %	1.5 %	1.3 %
L = 3; D = 12; C = 0.3	23.4 %	23.4 %	22.0 %	23.1 %	23.8 %	23.5 %	22.3 %	20.9 %	20.3 %	18.3 %	16.8 %	14.2 %	12.2 %	11.2 %	9.9 %
L = 3; D = 12; C = 0.6	49.7 %	48.2 %	48.3 %	53.2 %	55.2 %	54.1 %	53.5 %	50.9 %	49.2 %	43.9 %	38.5 %	29.8 %	24.0 %	20.0 %	17.1 %
L = 3; D = 12; C = 1	17.1 %	17.3 %	17.4 %	18.8 %	19.0 %	19.4 %	19.6 %	19.0 %	18.8 %	17.1 %	15.5 %	12.9 %	10.8 %	9.8 %	8.6 %
L = 3; D = 1.5; C = 0.3	14.5 %	16.0 %	15.1 %	15.5 %	13.8 %	12.4 %	11.1 %	8.0 %	6.7 %	5.1 %	4.0 %	2.6 %	2.2 %	1.9 %	1.8 %
L = 3; D = 1.5; C = 0.6	19.2 %	20.7 %	20.7 %	20.8 %	20.0 %	17.0 %	14.9 %	10.9 %	8.8 %	5.8 %	5.0 %	3.5 %	2.7 %	2.4 %	2.3 %
L = 3; D = 1.5; C = 1	5.6 %	6.8 %	6.7 %	6.7 %	6.7 %	5.7 %	5.0 %	3.5 %	2.8 %	2.6 %	1.9 %	1.2 %	1.1 %	1.0 %	0.9 %
L = 3; D = 4; C = 0.3	26.1 %	26.6 %	28.3 %	28.8 %	29.0 %	27.6 %	26.4 %	21.9 %	19.7 %	15.0 %	12.1 %	8.2 %	7.2 %	5.9 %	5.1 %
L = 3; D = 4; C = 0.6	33.2 %	35.1 %	37.0 %	39.6 %	40.0 %	38.4 %	37.0 %	32.4 %	28.2 %	21.0 %	15.8 %	10.7 %	8.8 %	7.2 %	6.3 %
L = 3; D = 4; C = 1	10.6 %	12.0 %	12.0 %	13.7 %	13.8 %	13.7 %	13.3 %	11.2 %	10.2 %	8.0 %	6.5 %	5.2 %	4.2 %	3.5 %	3.1 %
T = 0.8	1.1 %	1.0 %	1.0 %	0.7 %	0.8 %	0.7 %	0.5 %	0.5 %	0.5 %	0.2 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.6	4.0 %	4.9 %	5.2 %	4.5 %	4.1 %	3.3 %	2.5 %	1.3 %	1.8 %	1.3 %	1.0 %	0.6 %	0.5 %	0.5 %	0.5 %
T = 0.4	13.4 %	14.8 %	14.0 %	13.8 %	11.6 %	9.8 %	7.6 %	4.9 %	3.8 %	3.0 %	2.3 %	1.5 %	1.3 %	1.2 %	1.2 %
T = 0.2	33.5 %	36.3 %	36.2 %	33.9 %	30.4 %	26.4 %	21.6 %	16.2 %	12.3 %	7.9 %	6.5 %	4.5 %	3.8 %	3.4 %	3.2 %

Table 26: Error in sphere approximation for ^{213}Po

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	1.5 %	1.0 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.5	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 2	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 4	0.8 %	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 0.3	1.0 %	1.0 %	0.9 %	0.8 %	0.6 %	0.5 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %
L = 0.3; D = 12; C = 0.6	4.5 %	3.8 %	3.2 %	2.2 %	1.7 %	1.4 %	1.2 %	0.9 %	0.7 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 1	2.6 %	2.3 %	1.9 %	1.3 %	1.0 %	0.8 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 1.5; C = 0.3	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.6	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 1	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.3	0.8 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.6	1.5 %	1.1 %	0.9 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 1	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 12; C = 0.3	5.8 %	5.1 %	4.3 %	3.2 %	2.5 %	2.0 %	1.7 %	1.3 %	1.0 %	0.7 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %
L = 1; D = 12; C = 0.6	21.0 %	16.1 %	12.6 %	8.5 %	6.4 %	5.1 %	4.3 %	3.2 %	2.5 %	1.7 %	1.3 %	0.9 %	0.7 %	0.5 %	0.5 %
L = 1; D = 12; C = 1	10.9 %	8.8 %	7.1 %	5.0 %	3.8 %	3.1 %	2.6 %	2.0 %	1.6 %	1.1 %	0.8 %	0.5 %	0.4 %	0.3 %	0.3 %
L = 1; D = 1.5; C = 0.3	1.1 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 0.6	1.8 %	1.1 %	0.8 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 1	0.9 %	0.5 %	0.4 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.3	3.8 %	2.7 %	2.1 %	1.4 %	1.0 %	0.8 %	0.7 %	0.5 %	0.4 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.6	8.0 %	5.4 %	4.1 %	2.8 %	2.1 %	1.6 %	1.4 %	1.0 %	0.8 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %
L = 1; D = 4; C = 1	3.9 %	2.7 %	2.1 %	1.4 %	1.1 %	0.9 %	0.7 %	0.5 %	0.4 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 12; C = 0.3	25.4 %	20.8 %	16.7 %	11.5 %	8.7 %	6.9 %	5.8 %	4.3 %	3.4 %	2.3 %	1.8 %	1.2 %	0.9 %	0.8 %	0.7 %
L = 3; D = 12; C = 0.6	60.9 %	42.5 %	31.5 %	20.4 %	14.9 %	11.8 %	9.7 %	7.2 %	5.7 %	3.8 %	2.9 %	1.8 %	1.4 %	1.1 %	0.9 %
L = 3; D = 12; C = 1	24.6 %	18.8 %	14.8 %	10.1 %	7.7 %	6.2 %	5.2 %	3.8 %	3.0 %	2.0 %	1.5 %	1.0 %	0.8 %	0.6 %	0.5 %
L = 3; D = 1.5; C = 0.3	4.0 %	2.6 %	2.0 %	1.3 %	0.9 %	0.7 %	0.6 %	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 0.6	5.3 %	3.5 %	2.7 %	1.7 %	1.3 %	1.1 %	0.9 %	0.7 %	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 1	2.3 %	1.6 %	1.2 %	0.9 %	0.7 %	0.5 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 4; C = 0.3	15.7 %	10.2 %	7.6 %	5.0 %	3.7 %	2.9 %	2.4 %	1.8 %	1.5 %	1.0 %	0.7 %	0.5 %	0.4 %	0.3 %	0.3 %
L = 3; D = 4; C = 0.6	20.1 %	12.8 %	9.4 %	6.1 %	4.5 %	3.6 %	2.9 %	2.2 %	1.7 %	1.1 %	0.8 %	0.5 %	0.4 %	0.3 %	0.3 %
L = 3; D = 4; C = 1	9.0 %	6.1 %	4.6 %	3.1 %	2.4 %	1.9 %	1.6 %	1.2 %	1.0 %	0.6 %	0.5 %	0.3 %	0.2 %	0.2 %	0.2 %
T = 0.8	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.6	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.4	2.2 %	1.5 %	1.2 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %
T = 0.2	6.3 %	4.0 %	3.0 %	2.0 %	1.5 %	1.2 %	1.0 %	0.8 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %

Table 27: Error in sphere approximation for ^{209}Tl

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	20.8 %	21.0 %	20.7 %	17.5 %	14.3 %	12.4 %	11.0 %	8.5 %	7.2 %	5.6 %	5.2 %	4.7 %	4.3 %	5.5 %	5.9 %
L = 0; Z = 0.5	6.5 %	6.4 %	6.5 %	4.9 %	3.5 %	3.4 %	2.8 %	2.0 %	1.7 %	1.9 %	1.7 %	1.2 %	0.7 %	0.9 %	1.3 %
L = 0; Z = 2	5.9 %	5.7 %	5.3 %	4.1 %	2.8 %	2.4 %	2.0 %	1.3 %	1.6 %	1.7 %	1.9 %	1.3 %	0.5 %	1.3 %	1.6 %
L = 0; Z = 4	18.0 %	18.3 %	17.2 %	14.3 %	11.5 %	9.9 %	8.2 %	6.0 %	5.0 %	4.1 %	4.2 %	3.8 %	3.3 %	4.2 %	4.7 %
L = 0.3; D = 12; C = 0.3	1.8 %	2.2 %	2.3 %	1.3 %	0.4 %	0.5 %	0.8 %	0.8 %	1.0 %	0.7 %	1.0 %	0.9 %	0.7 %	0.5 %	0.4 %
L = 0.3; D = 12; C = 0.6	3.0 %	3.6 %	3.8 %	2.6 %	2.1 %	2.7 %	2.9 %	3.2 %	3.5 %	3.7 %	3.5 %	3.3 %	2.4 %	3.1 %	3.0 %
L = 0.3; D = 12; C = 1	3.1 %	3.0 %	3.1 %	2.4 %	1.6 %	1.7 %	2.0 %	1.8 %	2.1 %	2.8 %	3.0 %	2.5 %	2.0 %	2.1 %	1.9 %
L = 0.3; D = 1.5; C = 0.3	1.7 %	1.9 %	1.8 %	0.9 %	0.2 %	0.2 %	0.6 %	0.4 %	0.8 %	0.3 %	0.7 %	0.5 %	-0.1 %	0.2 %	0.3 %
L = 0.3; D = 1.5; C = 0.6	2.2 %	2.4 %	2.8 %	1.7 %	1.0 %	1.2 %	1.2 %	0.8 %	0.9 %	0.4 %	0.8 %	0.6 %	0.2 %	0.0 %	0.1 %
L = 0.3; D = 1.5; C = 1	1.0 %	1.4 %	1.5 %	0.3 %	0.0 %	0.0 %	0.1 %	-0.1 %	0.1 %	0.1 %	0.4 %	0.4 %	0.0 %	0.6 %	0.7 %
L = 0.3; D = 4; C = 0.3	2.6 %	2.3 %	2.5 %	1.7 %	0.6 %	0.7 %	0.9 %	0.8 %	1.0 %	0.9 %	1.2 %	0.8 %	0.4 %	0.5 %	0.5 %
L = 0.3; D = 4; C = 0.6	2.8 %	2.8 %	2.6 %	2.3 %	2.1 %	2.4 %	2.7 %	2.1 %	2.4 %	2.4 %	2.3 %	1.7 %	1.3 %	2.1 %	2.2 %
L = 0.3; D = 4; C = 1	2.0 %	2.0 %	2.3 %	1.7 %	1.3 %	1.4 %	1.5 %	1.3 %	1.6 %	1.9 %	1.6 %	1.1 %	0.6 %	0.7 %	0.8 %
L = 1; D = 12; C = 0.3	3.9 %	4.9 %	5.3 %	4.9 %	4.5 %	4.6 %	5.2 %	5.3 %	5.8 %	5.7 %	5.7 %	5.4 %	4.3 %	4.5 %	4.1 %
L = 1; D = 12; C = 0.6	16.1 %	16.3 %	17.6 %	17.8 %	18.0 %	19.0 %	19.9 %	20.0 %	21.1 %	21.3 %	21.4 %	18.6 %	15.8 %	14.1 %	13.3 %
L = 1; D = 12; C = 1	7.3 %	7.0 %	7.6 %	8.6 %	8.4 %	8.8 %	9.7 %	9.4 %	10.0 %	10.6 %	10.2 %	9.8 %	8.0 %	7.8 %	7.1 %
L = 1; D = 1.5; C = 0.3	4.7 %	5.3 %	5.8 %	5.0 %	4.0 %	4.2 %	3.9 %	3.6 %	3.4 %	2.9 %	2.4 %	1.6 %	0.9 %	0.9 %	1.2 %
L = 1; D = 1.5; C = 0.6	9.7 %	10.1 %	10.6 %	10.4 %	9.3 %	8.6 %	8.7 %	7.1 %	6.5 %	5.5 %	4.8 %	3.8 %	2.8 %	3.2 %	2.9 %
L = 1; D = 1.5; C = 1	4.2 %	4.1 %	4.5 %	4.0 %	3.1 %	3.0 %	3.1 %	2.7 %	2.7 %	2.6 %	2.2 %	1.4 %	0.9 %	1.2 %	1.1 %
L = 1; D = 4; C = 0.3	6.7 %	6.4 %	6.8 %	6.5 %	6.2 %	6.1 %	6.4 %	6.0 %	6.1 %	6.1 %	5.4 %	4.1 %	3.1 %	2.8 %	2.3 %
L = 1; D = 4; C = 0.6	14.7 %	15.1 %	16.5 %	16.2 %	15.6 %	15.9 %	16.1 %	16.4 %	15.5 %	14.1 %	12.2 %	9.7 %	7.6 %	7.1 %	7.3 %
L = 1; D = 4; C = 1	5.8 %	7.2 %	7.1 %	6.7 %	6.1 %	7.0 %	7.1 %	6.5 %	6.7 %	6.2 %	5.9 %	4.8 %	2.9 %	3.0 %	3.0 %
L = 3; D = 12; C = 0.3	26.3 %	27.9 %	28.9 %	29.1 %	28.1 %	27.9 %	28.1 %	28.0 %	28.3 %	26.9 %	26.5 %	23.9 %	20.3 %	19.3 %	18.7 %
L = 3; D = 12; C = 0.6	56.4 %	60.9 %	64.6 %	69.2 %	70.7 %	73.7 %	74.7 %	74.7 %	74.3 %	70.9 %	67.7 %	56.7 %	47.7 %	43.2 %	39.6 %
L = 3; D = 12; C = 1	16.2 %	16.9 %	18.4 %	19.5 %	20.5 %	21.8 %	22.5 %	23.8 %	24.4 %	24.5 %	24.1 %	21.1 %	17.7 %	16.8 %	15.5 %
L = 3; D = 1.5; C = 0.3	24.9 %	25.9 %	27.5 %	25.1 %	22.5 %	20.6 %	19.0 %	16.6 %	14.7 %	11.7 %	9.9 %	8.2 %	7.2 %	7.6 %	7.9 %
L = 3; D = 1.5; C = 0.6	30.6 %	31.8 %	33.3 %	31.8 %	30.4 %	28.8 %	26.4 %	21.7 %	18.9 %	14.5 %	13.0 %	10.4 %	9.3 %	9.4 %	10.3 %
L = 3; D = 1.5; C = 1	10.5 %	11.0 %	11.9 %	11.1 %	10.1 %	9.5 %	9.3 %	7.8 %	7.3 %	5.6 %	4.8 %	3.6 %	2.9 %	3.6 %	3.3 %
L = 3; D = 4; C = 0.3	41.0 %	42.2 %	43.6 %	43.9 %	42.0 %	40.3 %	39.0 %	35.5 %	33.7 %	29.3 %	26.2 %	20.9 %	17.0 %	15.7 %	15.5 %
L = 3; D = 4; C = 0.6	48.2 %	52.5 %	55.8 %	57.6 %	57.8 %	56.9 %	56.0 %	52.9 %	49.7 %	42.4 %	36.7 %	27.7 %	22.5 %	20.9 %	19.8 %
L = 3; D = 4; C = 1	14.8 %	16.6 %	17.6 %	17.5 %	16.9 %	17.2 %	18.0 %	17.3 %	17.5 %	15.9 %	13.4 %	10.8 %	8.4 %	8.6 %	8.3 %
T = 0.8	1.6 %	2.6 %	2.6 %	1.4 %	0.9 %	1.0 %	0.9 %	0.4 %	0.6 %	0.1 %	0.4 %	0.3 %	0.1 %	0.3 %	0.5 %
T = 0.6	7.6 %	6.9 %	7.1 %	6.1 %	5.1 %	4.8 %	4.3 %	3.3 %	2.7 %	1.7 %	2.1 %	2.0 %	1.1 %	2.1 %	2.3 %
T = 0.4	21.3 %	22.2 %	24.0 %	22.4 %	19.8 %	17.6 %	15.4 %	11.7 %	9.7 %	7.3 %	6.2 %	5.9 %	4.7 %	6.1 %	6.4 %
T = 0.2	61.1 %	63.0 %	64.4 %	61.6 %	55.8 %	49.7 %	44.2 %	35.1 %	29.3 %	21.7 %	18.5 %	15.0 %	14.0 %	14.6 %	15.3 %

Table 28: Error in sphere approximation for ^{209}Pb

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	13.5 %	10.0 %	7.7 %	4.8 %	3.5 %	2.8 %	2.3 %	1.7 %	1.3 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %
L = 0; Z = 0.5	3.1 %	2.2 %	1.6 %	0.9 %	0.7 %	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 2	2.5 %	1.8 %	1.2 %	0.5 %	0.3 %	0.1 %	0.0 %	-0.1 %	0.0 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 4	9.9 %	6.5 %	4.8 %	2.5 %	1.8 %	1.4 %	1.1 %	0.8 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 0.3	0.2 %	0.4 %	0.8 %	0.7 %	0.8 %	0.8 %	0.9 %	0.9 %	0.8 %	0.8 %	0.7 %	0.6 %	0.5 %	0.4 %	0.4 %
L = 0.3; D = 12; C = 0.6	2.2 %	2.6 %	3.1 %	3.3 %	3.5 %	3.5 %	3.5 %	3.5 %	3.3 %	2.8 %	2.4 %	1.7 %	1.4 %	1.1 %	1.0 %
L = 0.3; D = 12; C = 1	1.4 %	1.4 %	1.8 %	1.7 %	2.0 %	2.1 %	2.1 %	2.1 %	2.1 %	1.7 %	1.5 %	1.2 %	1.0 %	0.8 %	0.7 %
L = 0.3; D = 1.5; C = 0.3	0.0 %	-0.2 %	-0.1 %	-0.3 %	-0.1 %	0.0 %	-0.2 %	-0.2 %	-0.2 %	-0.2 %	-0.2 %	-0.1 %	-0.1 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.6	0.6 %	0.2 %	0.3 %	0.1 %	0.2 %	0.2 %	0.1 %	0.0 %	-0.1 %	0.0 %	0.0 %	0.0 %	-0.1 %	-0.1 %	0.0 %
L = 0.3; D = 1.5; C = 1	0.1 %	-0.2 %	-0.1 %	-0.2 %	-0.1 %	-0.1 %	-0.2 %	-0.2 %	-0.1 %	-0.2 %	-0.2 %	-0.1 %	-0.1 %	-0.1 %	-0.1 %
L = 0.3; D = 4; C = 0.3	0.6 %	0.7 %	0.7 %	0.6 %	0.6 %	0.5 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 4; C = 0.6	2.0 %	1.9 %	2.1 %	2.0 %	2.1 %	1.9 %	1.7 %	1.5 %	1.2 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.3 %
L = 0.3; D = 4; C = 1	0.1 %	0.4 %	0.8 %	0.5 %	0.5 %	0.5 %	0.3 %	0.2 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 12; C = 0.3	4.7 %	4.8 %	5.1 %	4.9 %	5.1 %	5.2 %	5.1 %	4.9 %	4.6 %	4.0 %	3.4 %	2.6 %	2.0 %	1.7 %	1.4 %
L = 1; D = 12; C = 0.6	17.8 %	19.0 %	19.7 %	20.3 %	20.2 %	19.5 %	18.8 %	17.1 %	15.4 %	12.2 %	9.8 %	7.0 %	5.3 %	4.2 %	3.6 %
L = 1; D = 12; C = 1	7.3 %	8.2 %	9.2 %	9.5 %	9.9 %	9.8 %	9.5 %	8.9 %	8.2 %	6.6 %	5.4 %	3.9 %	3.1 %	2.5 %	2.1 %
L = 1; D = 1.5; C = 0.3	3.2 %	3.1 %	3.0 %	2.3 %	1.9 %	1.5 %	1.3 %	1.0 %	0.8 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.2 %
L = 1; D = 1.5; C = 0.6	8.4 %	7.5 %	6.9 %	4.8 %	3.9 %	3.2 %	2.6 %	1.9 %	1.6 %	1.1 %	0.7 %	0.5 %	0.3 %	0.3 %	0.2 %
L = 1; D = 1.5; C = 1	3.1 %	2.9 %	2.8 %	2.1 %	1.8 %	1.5 %	1.2 %	0.8 %	0.7 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.2 %
L = 1; D = 4; C = 0.3	5.6 %	5.5 %	5.5 %	5.2 %	4.8 %	4.4 %	4.0 %	3.4 %	2.9 %	2.0 %	1.5 %	1.1 %	0.8 %	0.7 %	0.6 %
L = 1; D = 4; C = 0.6	14.9 %	15.2 %	15.1 %	13.8 %	12.5 %	10.9 %	9.8 %	7.8 %	6.4 %	4.3 %	3.2 %	2.3 %	1.7 %	1.4 %	1.2 %
L = 1; D = 4; C = 1	5.9 %	6.3 %	6.2 %	6.0 %	5.5 %	5.2 %	4.6 %	3.8 %	3.3 %	2.4 %	1.9 %	1.4 %	1.1 %	0.9 %	0.7 %
L = 3; D = 12; C = 0.3	27.7 %	27.7 %	27.7 %	26.4 %	25.4 %	24.5 %	23.2 %	21.2 %	19.2 %	15.5 %	12.8 %	9.3 %	7.3 %	5.9 %	5.0 %
L = 3; D = 12; C = 0.6	74.0 %	76.3 %	76.0 %	72.0 %	67.9 %	62.4 %	58.4 %	49.7 %	43.7 %	32.2 %	25.1 %	16.9 %	12.7 %	9.9 %	8.4 %
L = 3; D = 12; C = 1	21.7 %	23.4 %	24.6 %	24.8 %	24.3 %	23.6 %	22.6 %	20.6 %	18.6 %	14.6 %	11.6 %	8.3 %	6.3 %	5.1 %	4.2 %
L = 3; D = 1.5; C = 0.3	20.6 %	17.3 %	14.8 %	10.8 %	8.6 %	7.0 %	5.7 %	4.2 %	3.4 %	2.2 %	1.7 %	1.2 %	0.9 %	0.7 %	0.5 %
L = 3; D = 1.5; C = 0.6	28.6 %	24.0 %	19.9 %	14.3 %	10.8 %	8.6 %	7.1 %	5.4 %	4.3 %	2.7 %	2.1 %	1.4 %	1.0 %	0.8 %	0.6 %
L = 3; D = 1.5; C = 1	9.1 %	7.9 %	7.0 %	5.1 %	4.0 %	3.2 %	2.7 %	2.2 %	1.7 %	1.1 %	0.8 %	0.7 %	0.5 %	0.4 %	0.4 %
L = 3; D = 4; C = 0.3	39.7 %	36.2 %	33.7 %	28.4 %	24.3 %	21.1 %	18.4 %	14.8 %	12.0 %	8.2 %	6.2 %	4.1 %	3.1 %	2.5 %	2.1 %
L = 3; D = 4; C = 0.6	54.7 %	53.0 %	49.5 %	41.2 %	34.5 %	29.5 %	25.2 %	19.3 %	15.5 %	10.2 %	7.6 %	5.2 %	3.8 %	3.1 %	2.5 %
L = 3; D = 4; C = 1	16.6 %	16.8 %	16.5 %	14.7 %	13.2 %	11.7 %	10.4 %	8.6 %	7.1 %	4.9 %	3.7 %	2.6 %	2.0 %	1.6 %	1.4 %
T = 0.8	0.7 %	0.3 %	0.3 %	0.1 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.6	6.2 %	5.0 %	4.0 %	2.4 %	1.9 %	1.5 %	1.1 %	0.8 %	0.6 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %
T = 0.4	18.3 %	14.6 %	11.4 %	7.3 %	5.3 %	4.4 %	3.6 %	2.7 %	2.2 %	1.5 %	1.1 %	0.7 %	0.5 %	0.3 %	0.3 %
T = 0.2	50.9 %	40.0 %	32.0 %	21.2 %	15.5 %	12.1 %	9.7 %	7.1 %	5.6 %	3.5 %	2.5 %	1.8 %	1.4 %	1.1 %	0.9 %

Table 29: Error in sphere approximation for ^{223}Ra

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	1.1 %	0.7 %	0.5 %	0.3 %	0.6 %	0.5 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 0; Z = 0.5	0.0 %	0.0 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.1 %
L = 0; Z = 2	0.4 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 4	0.8 %	0.5 %	0.3 %	0.2 %	0.4 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 0.3	1.1 %	0.9 %	0.7 %	0.5 %	0.7 %	0.6 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 0.6	3.4 %	2.4 %	1.9 %	1.4 %	1.3 %	1.1 %	1.0 %	0.8 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 1	1.8 %	1.3 %	1.1 %	0.7 %	0.9 %	0.7 %	0.7 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.3	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.6	0.3 %	0.2 %	0.1 %	0.0 %	0.0 %	-0.1 %	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 1	0.2 %	0.1 %	0.0 %	0.0 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.3	0.7 %	0.4 %	0.4 %	0.3 %	0.5 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.6	1.0 %	0.7 %	0.5 %	0.4 %	0.6 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 1	0.5 %	0.3 %	0.2 %	0.1 %	0.4 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 12; C = 0.3	4.8 %	3.5 %	2.8 %	1.9 %	1.8 %	1.6 %	1.4 %	1.1 %	1.0 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %
L = 1; D = 12; C = 0.6	13.1 %	9.0 %	7.0 %	4.8 %	3.9 %	3.2 %	2.7 %	2.2 %	1.8 %	1.3 %	0.7 %	0.5 %	0.4 %	0.3 %	0.3 %
L = 1; D = 12; C = 1	7.4 %	5.5 %	4.3 %	3.0 %	2.6 %	2.1 %	1.8 %	1.4 %	1.2 %	0.6 %	0.5 %	0.3 %	0.3 %	0.2 %	0.2 %
L = 1; D = 1.5; C = 0.3	0.8 %	0.5 %	0.4 %	0.2 %	0.5 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 0.6	1.1 %	0.7 %	0.6 %	0.3 %	0.5 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.1 %
L = 1; D = 1.5; C = 1	0.5 %	0.3 %	0.2 %	0.1 %	0.4 %	0.1 %	0.0 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.3	2.2 %	1.4 %	1.0 %	0.6 %	0.7 %	0.6 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.6	4.4 %	3.0 %	2.3 %	1.6 %	1.5 %	1.3 %	1.1 %	0.9 %	0.8 %	0.4 %	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %
L = 1; D = 4; C = 1	2.1 %	1.5 %	1.1 %	0.8 %	0.9 %	0.8 %	0.7 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 12; C = 0.3	18.1 %	12.7 %	9.6 %	6.6 %	5.2 %	4.2 %	3.6 %	2.8 %	2.4 %	1.8 %	1.5 %	0.8 %	0.7 %	0.5 %	0.5 %
L = 3; D = 12; C = 0.6	32.9 %	20.9 %	15.0 %	9.7 %	7.6 %	6.1 %	5.1 %	3.9 %	3.2 %	2.2 %	1.8 %	1.3 %	0.7 %	0.6 %	0.5 %
L = 3; D = 12; C = 1	15.1 %	10.4 %	8.0 %	5.3 %	4.2 %	3.3 %	2.8 %	2.2 %	1.9 %	1.4 %	1.2 %	0.6 %	0.4 %	0.4 %	0.3 %
L = 3; D = 1.5; C = 0.3	2.0 %	1.3 %	1.0 %	0.6 %	0.7 %	0.6 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 0.6	2.7 %	1.8 %	1.3 %	0.9 %	0.9 %	0.7 %	0.7 %	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 1	1.2 %	0.8 %	0.6 %	0.4 %	0.6 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 3; D = 4; C = 0.3	8.0 %	5.3 %	3.9 %	2.6 %	2.2 %	1.8 %	1.6 %	1.3 %	1.1 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.2 %
L = 3; D = 4; C = 0.6	10.0 %	6.7 %	4.9 %	3.1 %	2.6 %	2.2 %	1.9 %	1.5 %	1.3 %	1.0 %	0.5 %	0.4 %	0.3 %	0.3 %	0.3 %
L = 3; D = 4; C = 1	4.9 %	3.2 %	2.3 %	1.5 %	1.5 %	1.2 %	1.1 %	0.9 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %
T = 0.8	0.0 %	-0.2 %	-0.2 %	-0.5 %	-0.2 %	-0.1 %	-0.1 %	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.6	0.5 %	0.3 %	0.2 %	0.1 %	0.3 %	0.0 %	0.0 %	0.0 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
T = 0.4	1.1 %	0.7 %	0.5 %	0.3 %	0.5 %	0.5 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
T = 0.2	3.3 %	2.3 %	1.7 %	1.2 %	1.2 %	1.0 %	0.9 %	0.7 %	0.3 %	0.2 %	0.2 %	0.2 %	0.2 %	0.2 %	0.2 %

Table 30: Error in sphere approximation for ^{219}Rn

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	1.0 %	0.7 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 0; Z = 0.5	0.1 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 2	0.0 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 4	0.5 %	0.3 %	0.3 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 0.3	0.9 %	0.8 %	0.7 %	0.6 %	0.5 %	0.4 %	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 0.6	3.8 %	3.0 %	2.3 %	1.6 %	1.2 %	1.0 %	0.8 %	0.6 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 1	2.2 %	1.8 %	1.4 %	1.0 %	0.7 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %
L = 0.3; D = 1.5; C = 0.3	0.0 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.6	0.3 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 1	0.0 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.3	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.6	1.0 %	0.8 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 1	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.1 %	0.0 %	0.0 %
L = 1; D = 12; C = 0.3	5.2 %	4.2 %	3.5 %	2.5 %	1.9 %	1.5 %	1.3 %	1.0 %	0.8 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %
L = 1; D = 12; C = 0.6	16.6 %	11.8 %	9.0 %	6.1 %	4.6 %	3.7 %	3.1 %	2.3 %	1.9 %	1.3 %	1.0 %	0.7 %	0.6 %	0.5 %	0.4 %
L = 1; D = 12; C = 1	9.1 %	6.8 %	5.3 %	3.7 %	2.8 %	2.2 %	1.9 %	1.4 %	1.1 %	0.8 %	0.6 %	0.4 %	0.3 %	0.3 %	0.3 %
L = 1; D = 1.5; C = 0.3	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 0.6	1.2 %	0.8 %	0.7 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 1; D = 1.5; C = 1	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.3	2.9 %	2.1 %	1.6 %	1.1 %	0.8 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 1; D = 4; C = 0.6	6.0 %	4.1 %	3.2 %	2.2 %	1.6 %	1.3 %	1.1 %	0.8 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %
L = 1; D = 4; C = 1	2.8 %	2.0 %	1.5 %	1.0 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 12; C = 0.3	21.5 %	15.9 %	12.2 %	8.3 %	6.2 %	5.0 %	4.2 %	3.1 %	2.5 %	1.7 %	1.3 %	0.9 %	0.7 %	0.6 %	0.5 %
L = 3; D = 12; C = 0.6	44.3 %	28.9 %	21.1 %	13.6 %	10.0 %	7.9 %	6.6 %	4.9 %	3.9 %	2.6 %	1.9 %	1.3 %	1.0 %	0.8 %	0.7 %
L = 3; D = 12; C = 1	20.0 %	14.3 %	11.0 %	7.5 %	5.6 %	4.5 %	3.7 %	2.8 %	2.2 %	1.5 %	1.1 %	0.8 %	0.6 %	0.5 %	0.4 %
L = 3; D = 1.5; C = 0.3	2.9 %	2.1 %	1.6 %	1.0 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 0.6	3.7 %	2.6 %	1.9 %	1.3 %	1.0 %	0.8 %	0.6 %	0.4 %	0.4 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 1	1.6 %	1.1 %	0.9 %	0.6 %	0.5 %	0.4 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 4; C = 0.3	10.9 %	7.3 %	5.5 %	3.7 %	2.8 %	2.2 %	1.8 %	1.3 %	1.1 %	0.7 %	0.6 %	0.4 %	0.3 %	0.3 %	0.3 %
L = 3; D = 4; C = 0.6	13.7 %	8.9 %	6.6 %	4.3 %	3.2 %	2.5 %	2.1 %	1.6 %	1.3 %	0.8 %	0.6 %	0.4 %	0.3 %	0.3 %	0.3 %
L = 3; D = 4; C = 1	6.3 %	4.2 %	3.2 %	2.1 %	1.6 %	1.3 %	1.1 %	0.8 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %
T = 0.8	0.0 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.6	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.4	1.6 %	1.1 %	0.8 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.1 %
T = 0.2	4.4 %	3.0 %	2.3 %	1.5 %	1.1 %	0.9 %	0.8 %	0.6 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %

Table 31: Error in sphere approximation for ^{215}Po

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	1.2 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.5	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 2	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 4	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 0.3	1.0 %	1.0 %	0.9 %	0.7 %	0.5 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 0.6	4.2 %	3.4 %	2.7 %	1.8 %	1.4 %	1.1 %	1.0 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 1	2.4 %	2.0 %	1.6 %	1.1 %	0.8 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.3	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.6	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 1	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.3	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.6	1.3 %	0.9 %	0.7 %	0.5 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 1	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 12; C = 0.3	5.5 %	4.5 %	3.7 %	2.7 %	2.0 %	1.6 %	1.4 %	1.0 %	0.8 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %
L = 1; D = 12; C = 0.6	18.5 %	13.5 %	10.3 %	7.0 %	5.2 %	4.2 %	3.5 %	2.6 %	2.0 %	1.4 %	1.1 %	0.7 %	0.6 %	0.5 %	0.4 %
L = 1; D = 12; C = 1	9.9 %	7.6 %	6.0 %	4.1 %	3.2 %	2.6 %	2.1 %	1.6 %	1.3 %	0.8 %	0.6 %	0.4 %	0.3 %	0.3 %	0.3 %
L = 1; D = 1.5; C = 0.3	0.9 %	0.6 %	0.5 %	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 0.6	1.4 %	0.9 %	0.7 %	0.5 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 1	0.7 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.3	3.2 %	2.2 %	1.7 %	1.1 %	0.8 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.6	6.5 %	4.4 %	3.3 %	2.2 %	1.7 %	1.3 %	1.1 %	0.8 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %
L = 1; D = 4; C = 1	3.3 %	2.3 %	1.8 %	1.2 %	0.9 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %
L = 3; D = 12; C = 0.3	23.2 %	17.8 %	13.8 %	9.4 %	7.0 %	5.6 %	4.6 %	3.5 %	2.8 %	1.9 %	1.4 %	1.0 %	0.8 %	0.6 %	0.5 %
L = 3; D = 12; C = 0.6	51.3 %	34.2 %	25.1 %	16.2 %	11.9 %	9.4 %	7.8 %	5.8 %	4.6 %	3.1 %	2.3 %	1.5 %	1.1 %	0.9 %	0.8 %
L = 3; D = 12; C = 1	21.6 %	15.8 %	12.2 %	8.3 %	6.3 %	5.0 %	4.1 %	3.1 %	2.4 %	1.6 %	1.2 %	0.8 %	0.6 %	0.5 %	0.4 %
L = 3; D = 1.5; C = 0.3	3.2 %	2.1 %	1.6 %	1.0 %	0.7 %	0.6 %	0.5 %	0.3 %	0.3 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %
L = 3; D = 1.5; C = 0.6	4.3 %	2.9 %	2.1 %	1.4 %	1.1 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 1	1.9 %	1.3 %	1.0 %	0.7 %	0.5 %	0.4 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 4; C = 0.3	12.6 %	8.2 %	6.1 %	4.0 %	3.0 %	2.4 %	2.0 %	1.5 %	1.2 %	0.8 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %
L = 3; D = 4; C = 0.6	15.9 %	10.2 %	7.5 %	4.9 %	3.6 %	2.9 %	2.4 %	1.8 %	1.4 %	0.9 %	0.7 %	0.4 %	0.3 %	0.3 %	0.2 %
L = 3; D = 4; C = 1	7.4 %	5.0 %	3.8 %	2.5 %	1.9 %	1.5 %	1.3 %	1.0 %	0.8 %	0.5 %	0.4 %	0.2 %	0.2 %	0.1 %	0.1 %
T = 0.8	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.6	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.4	1.8 %	1.2 %	1.0 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.2	5.0 %	3.3 %	2.5 %	1.7 %	1.2 %	1.0 %	0.8 %	0.6 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %

Table 32: Error in sphere approximation for ^{211}Pb

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	19.5 %	19.3 %	17.5 %	13.6 %	10.9 %	8.6 %	7.0 %	5.3 %	4.0 %	2.4 %	1.9 %	1.4 %	1.2 %	1.1 %	1.0 %
L = 0; Z = 0.5	4.9 %	4.8 %	4.2 %	3.1 %	2.4 %	2.1 %	1.6 %	1.4 %	1.0 %	0.4 %	0.2 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 2	4.7 %	4.8 %	3.8 %	2.4 %	2.1 %	1.8 %	1.3 %	1.2 %	0.9 %	0.4 %	0.3 %	0.3 %	0.3 %	0.3 %	0.2 %
L = 0; Z = 4	17.2 %	16.5 %	14.0 %	10.2 %	7.9 %	6.3 %	5.0 %	3.8 %	3.0 %	1.7 %	1.3 %	0.8 %	0.7 %	0.7 %	0.6 %
L = 0.3; D = 12; C = 0.3	-0.1 %	0.6 %	0.4 %	0.1 %	0.4 %	0.7 %	0.7 %	1.0 %	1.1 %	1.0 %	1.0 %	1.0 %	1.0 %	0.9 %	0.8 %
L = 0.3; D = 12; C = 0.6	2.6 %	2.7 %	2.3 %	2.4 %	2.8 %	3.0 %	3.3 %	3.8 %	3.9 %	4.1 %	4.1 %	3.8 %	3.3 %	2.9 %	2.5 %
L = 0.3; D = 12; C = 1	1.8 %	1.9 %	1.5 %	1.4 %	1.5 %	1.8 %	1.9 %	2.4 %	2.3 %	2.5 %	2.4 %	2.2 %	2.0 %	1.8 %	1.6 %
L = 0.3; D = 1.5; C = 0.3	0.8 %	1.2 %	0.7 %	0.1 %	0.2 %	0.3 %	0.2 %	0.1 %	0.0 %	-0.2 %	0.0 %	0.0 %	0.1 %	0.0 %	-0.1 %
L = 0.3; D = 1.5; C = 0.6	1.3 %	1.7 %	1.4 %	1.1 %	1.4 %	1.5 %	1.3 %	1.4 %	1.2 %	0.7 %	0.6 %	0.4 %	0.5 %	0.4 %	0.3 %
L = 0.3; D = 1.5; C = 1	1.0 %	1.6 %	0.6 %	0.4 %	0.5 %	0.6 %	0.4 %	0.4 %	0.3 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.3	0.8 %	1.2 %	0.7 %	0.5 %	0.9 %	1.0 %	0.9 %	1.0 %	0.9 %	0.8 %	0.8 %	0.7 %	0.6 %	0.5 %	0.4 %
L = 0.3; D = 4; C = 0.6	2.1 %	3.0 %	2.6 %	2.4 %	2.5 %	2.7 %	2.6 %	2.7 %	2.5 %	2.2 %	1.9 %	1.5 %	1.2 %	0.9 %	0.9 %
L = 0.3; D = 4; C = 1	1.1 %	1.2 %	0.8 %	1.0 %	1.3 %	1.2 %	1.1 %	1.5 %	1.3 %	0.9 %	0.9 %	0.7 %	0.6 %	0.5 %	0.4 %
L = 1; D = 12; C = 0.3	3.2 %	3.8 %	3.7 %	3.8 %	4.2 %	4.7 %	4.6 %	5.4 %	5.3 %	5.1 %	5.0 %	4.6 %	4.3 %	3.8 %	3.3 %
L = 1; D = 12; C = 0.6	15.1 %	16.7 %	17.1 %	18.2 %	19.6 %	20.4 %	20.7 %	21.6 %	21.6 %	20.5 %	18.8 %	16.2 %	13.4 %	11.5 %	9.8 %
L = 1; D = 12; C = 1	6.3 %	7.7 %	7.9 %	8.4 %	9.5 %	9.6 %	10.2 %	10.6 %	10.5 %	10.3 %	9.9 %	8.6 %	7.4 %	6.6 %	5.7 %
L = 1; D = 1.5; C = 0.3	3.1 %	3.6 %	3.4 %	3.2 %	3.3 %	3.3 %	3.1 %	2.9 %	2.7 %	1.9 %	1.5 %	0.9 %	0.7 %	0.5 %	0.4 %
L = 1; D = 1.5; C = 0.6	8.7 %	9.3 %	8.7 %	8.2 %	7.6 %	7.2 %	6.4 %	5.3 %	4.3 %	2.9 %	2.2 %	1.5 %	1.2 %	1.1 %	1.0 %
L = 1; D = 1.5; C = 1	3.5 %	4.1 %	3.3 %	2.9 %	3.1 %	2.8 %	2.7 %	2.2 %	1.8 %	1.2 %	0.8 %	0.4 %	0.4 %	0.3 %	0.2 %
L = 1; D = 4; C = 0.3	4.4 %	5.5 %	5.1 %	5.4 %	5.7 %	6.1 %	5.8 %	6.1 %	5.8 %	4.9 %	4.4 %	3.3 %	2.7 %	2.2 %	1.8 %
L = 1; D = 4; C = 0.6	12.8 %	14.3 %	15.0 %	15.5 %	15.8 %	15.8 %	15.6 %	14.9 %	13.6 %	10.8 %	8.9 %	6.4 %	5.0 %	4.1 %	3.6 %
L = 1; D = 4; C = 1	5.7 %	6.2 %	5.6 %	5.8 %	6.1 %	6.7 %	6.7 %	6.5 %	5.9 %	5.0 %	4.0 %	2.9 %	2.3 %	2.0 %	1.6 %
L = 3; D = 12; C = 0.3	25.6 %	27.2 %	28.1 %	28.2 %	28.2 %	28.8 %	28.6 %	28.5 %	27.6 %	25.5 %	23.6 %	20.4 %	17.4 %	15.2 %	13.1 %
L = 3; D = 12; C = 0.6	61.5 %	67.1 %	69.2 %	73.9 %	75.9 %	77.0 %	76.3 %	74.1 %	71.4 %	62.9 %	55.7 %	43.3 %	35.0 %	28.9 %	24.3 %
L = 3; D = 12; C = 1	18.3 %	20.2 %	20.7 %	22.7 %	24.5 %	25.4 %	25.5 %	26.4 %	26.2 %	24.5 %	22.5 %	19.2 %	15.9 %	13.4 %	11.8 %
L = 3; D = 1.5; C = 0.3	24.5 %	24.4 %	23.9 %	21.6 %	19.1 %	17.1 %	15.2 %	12.3 %	10.0 %	6.7 %	5.0 %	3.5 %	2.8 %	2.4 %	2.0 %
L = 3; D = 1.5; C = 0.6	31.8 %	33.3 %	33.3 %	29.7 %	26.8 %	23.4 %	20.2 %	15.8 %	13.0 %	8.6 %	6.4 %	4.4 %	3.6 %	2.9 %	2.6 %
L = 3; D = 1.5; C = 1	10.2 %	10.9 %	10.0 %	9.8 %	9.1 %	8.4 %	7.7 %	6.3 %	5.2 %	3.7 %	2.8 %	1.9 %	1.6 %	1.4 %	1.2 %
L = 3; D = 4; C = 0.3	42.9 %	43.8 %	43.1 %	41.7 %	39.3 %	37.5 %	35.7 %	31.6 %	28.4 %	21.9 %	17.4 %	12.1 %	9.0 %	7.3 %	6.2 %
L = 3; D = 4; C = 0.6	54.1 %	57.5 %	58.0 %	58.8 %	57.2 %	55.4 %	51.7 %	45.4 %	40.6 %	29.5 %	23.0 %	15.6 %	11.6 %	9.5 %	8.0 %
L = 3; D = 4; C = 1	15.6 %	16.5 %	17.1 %	17.6 %	18.0 %	18.1 %	17.6 %	16.8 %	15.6 %	12.1 %	9.8 %	7.0 %	5.4 %	4.4 %	3.8 %
T = 0.8	1.1 %	1.3 %	0.7 %	0.5 %	0.8 %	0.8 %	0.5 %	0.6 %	0.4 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
T = 0.6	6.9 %	7.4 %	6.9 %	6.4 %	5.5 %	4.5 %	3.6 %	2.7 %	2.1 %	1.2 %	1.1 %	0.7 %	0.6 %	0.5 %	0.5 %
T = 0.4	21.5 %	21.6 %	21.6 %	18.7 %	16.0 %	13.4 %	11.3 %	8.2 %	6.3 %	3.7 %	2.8 %	2.0 %	1.6 %	1.4 %	1.2 %
T = 0.2	62.6 %	64.1 %	61.1 %	53.1 %	44.9 %	37.8 %	32.0 %	23.8 %	18.6 %	11.4 %	8.2 %	5.3 %	4.1 %	3.5 %	3.2 %

Table 33: Error in sphere approximation for ^{211}Bi

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	0.9 %	0.7 %	0.6 %	0.5 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 0; Z = 0.5	0.2 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 2	0.0 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 4	0.5 %	0.3 %	0.3 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 0.3	0.9 %	0.8 %	0.7 %	0.6 %	0.5 %	0.4 %	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 0.6	3.7 %	2.9 %	2.2 %	1.5 %	1.2 %	0.9 %	0.8 %	0.6 %	0.5 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 1	2.1 %	1.7 %	1.3 %	0.9 %	0.7 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %
L = 0.3; D = 1.5; C = 0.3	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.6	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 1	0.0 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.3	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.6	1.0 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 1	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.1 %	0.1 %	0.0 %
L = 1; D = 12; C = 0.3	5.1 %	4.1 %	3.4 %	2.4 %	1.8 %	1.5 %	1.2 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.2 %
L = 1; D = 12; C = 0.6	16.0 %	11.3 %	8.6 %	5.8 %	4.3 %	3.5 %	2.9 %	2.2 %	1.8 %	1.3 %	1.0 %	0.7 %	0.5 %	0.4 %	0.4 %
L = 1; D = 12; C = 1	8.9 %	6.6 %	5.1 %	3.6 %	2.7 %	2.1 %	1.8 %	1.4 %	1.1 %	0.7 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %
L = 1; D = 1.5; C = 0.3	0.8 %	0.6 %	0.5 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 0.6	1.1 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 1; D = 1.5; C = 1	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.3	2.7 %	2.0 %	1.5 %	1.0 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 1; D = 4; C = 0.6	5.7 %	4.0 %	3.0 %	2.1 %	1.6 %	1.2 %	1.0 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %
L = 1; D = 4; C = 1	2.7 %	1.9 %	1.4 %	1.0 %	0.7 %	0.6 %	0.5 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 12; C = 0.3	20.9 %	15.2 %	11.7 %	7.9 %	6.0 %	4.8 %	4.0 %	3.0 %	2.4 %	1.6 %	1.2 %	0.9 %	0.7 %	0.6 %	0.5 %
L = 3; D = 12; C = 0.6	42.2 %	27.5 %	20.0 %	12.9 %	9.5 %	7.5 %	6.3 %	4.7 %	3.8 %	2.5 %	1.9 %	1.2 %	1.0 %	0.8 %	0.7 %
L = 3; D = 12; C = 1	19.4 %	13.8 %	10.5 %	7.1 %	5.3 %	4.3 %	3.6 %	2.7 %	2.1 %	1.4 %	1.1 %	0.8 %	0.6 %	0.5 %	0.4 %
L = 3; D = 1.5; C = 0.3	2.8 %	2.0 %	1.5 %	1.0 %	0.7 %	0.6 %	0.5 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 0.6	3.5 %	2.5 %	1.8 %	1.2 %	0.9 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 1	1.5 %	1.1 %	0.9 %	0.6 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 4; C = 0.3	10.4 %	7.1 %	5.3 %	3.5 %	2.7 %	2.1 %	1.8 %	1.3 %	1.1 %	0.7 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %
L = 3; D = 4; C = 0.6	13.1 %	8.5 %	6.3 %	4.2 %	3.1 %	2.4 %	2.1 %	1.5 %	1.2 %	0.8 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %
L = 3; D = 4; C = 1	6.0 %	4.0 %	3.1 %	2.0 %	1.5 %	1.2 %	1.0 %	0.8 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %
T = 0.8	0.0 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.6	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.4	1.5 %	1.0 %	0.8 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.2	4.2 %	2.9 %	2.2 %	1.5 %	1.1 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %

Table 34: Error in sphere approximation for ^{211}Po

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	1.2 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.5	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 2	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 4	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 12; C = 0.3	1.0 %	1.0 %	0.8 %	0.7 %	0.5 %	0.4 %	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %
L = 0.3; D = 12; C = 0.6	4.2 %	3.4 %	2.7 %	1.8 %	1.4 %	1.2 %	1.0 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 12; C = 1	2.4 %	2.0 %	1.6 %	1.1 %	0.9 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %
L = 0.3; D = 1.5; C = 0.3	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.6	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 1	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.3	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.6	1.3 %	0.9 %	0.7 %	0.5 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 1	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 12; C = 0.3	5.5 %	4.6 %	3.7 %	2.7 %	2.1 %	1.7 %	1.4 %	1.1 %	0.8 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %
L = 1; D = 12; C = 0.6	18.6 %	13.6 %	10.4 %	7.0 %	5.3 %	4.2 %	3.5 %	2.6 %	2.1 %	1.4 %	1.1 %	0.7 %	0.6 %	0.5 %	0.4 %
L = 1; D = 12; C = 1	10.0 %	7.7 %	6.1 %	4.2 %	3.2 %	2.6 %	2.2 %	1.6 %	1.3 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.3 %
L = 1; D = 1.5; C = 0.3	0.9 %	0.6 %	0.5 %	0.3 %	0.2 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 0.6	1.4 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 1.5; C = 1	0.7 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.3	3.2 %	2.2 %	1.7 %	1.1 %	0.9 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.6	6.5 %	4.5 %	3.4 %	2.3 %	1.7 %	1.3 %	1.1 %	0.8 %	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %
L = 1; D = 4; C = 1	3.3 %	2.3 %	1.8 %	1.2 %	0.9 %	0.7 %	0.6 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 12; C = 0.3	23.3 %	17.9 %	14.0 %	9.5 %	7.1 %	5.7 %	4.7 %	3.5 %	2.8 %	1.9 %	1.5 %	1.0 %	0.8 %	0.6 %	0.6 %
L = 3; D = 12; C = 0.6	51.8 %	34.6 %	25.4 %	16.4 %	12.0 %	9.5 %	7.8 %	5.8 %	4.7 %	3.1 %	2.3 %	1.5 %	1.1 %	0.9 %	0.8 %
L = 3; D = 12; C = 1	21.8 %	16.0 %	12.3 %	8.4 %	6.4 %	5.1 %	4.2 %	3.1 %	2.5 %	1.6 %	1.2 %	0.8 %	0.6 %	0.5 %	0.4 %
L = 3; D = 1.5; C = 0.3	3.2 %	2.1 %	1.6 %	1.0 %	0.8 %	0.6 %	0.5 %	0.3 %	0.3 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 0.6	4.3 %	2.9 %	2.2 %	1.4 %	1.1 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 1.5; C = 1	1.9 %	1.3 %	1.0 %	0.7 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
L = 3; D = 4; C = 0.3	12.8 %	8.3 %	6.2 %	4.0 %	3.0 %	2.4 %	2.0 %	1.5 %	1.2 %	0.8 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %
L = 3; D = 4; C = 0.6	16.1 %	10.4 %	7.7 %	5.0 %	3.7 %	2.9 %	2.4 %	1.8 %	1.4 %	0.9 %	0.7 %	0.5 %	0.4 %	0.3 %	0.2 %
L = 3; D = 4; C = 1	7.4 %	5.0 %	3.8 %	2.6 %	1.9 %	1.6 %	1.3 %	1.0 %	0.8 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %
T = 0.8	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.6	0.6 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.4	1.8 %	1.3 %	1.0 %	0.6 %	0.5 %	0.4 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %
T = 0.2	5.0 %	3.3 %	2.5 %	1.7 %	1.3 %	1.0 %	0.8 %	0.6 %	0.5 %	0.3 %	0.2 %	0.2 %	0.1 %	0.1 %	0.1 %

Table 35: Error in sphere approximation for ^{207}Tl

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	20.5 %	19.8 %	18.1 %	14.4 %	11.3 %	9.2 %	7.4 %	5.6 %	4.4 %	3.1 %	2.3 %	1.5 %	1.2 %	1.0 %	0.9 %
L = 0; Z = 0.5	4.8 %	4.5 %	4.0 %	2.7 %	2.0 %	1.6 %	1.2 %	1.0 %	0.8 %	0.6 %	0.4 %	0.3 %	0.1 %	0.1 %	0.1 %
L = 0; Z = 2	4.5 %	4.4 %	4.1 %	2.6 %	1.7 %	1.3 %	1.0 %	0.9 %	0.7 %	0.6 %	0.4 %	0.4 %	0.2 %	0.2 %	0.2 %
L = 0; Z = 4	17.7 %	16.8 %	15.1 %	11.2 %	8.2 %	6.3 %	5.0 %	3.8 %	3.0 %	1.9 %	1.3 %	0.8 %	0.5 %	0.4 %	0.4 %
L = 0.3; D = 12; C = 0.3	0.4 %	0.5 %	0.3 %	0.5 %	0.6 %	0.6 %	0.6 %	0.8 %	0.9 %	1.1 %	1.0 %	1.1 %	1.0 %	0.9 %	0.8 %
L = 0.3; D = 12; C = 0.6	2.4 %	2.4 %	2.3 %	2.3 %	2.7 %	2.9 %	3.0 %	3.6 %	3.8 %	4.1 %	4.2 %	3.9 %	3.4 %	3.0 %	2.8 %
L = 0.3; D = 12; C = 1	1.3 %	1.6 %	1.2 %	1.1 %	1.1 %	1.5 %	1.5 %	1.9 %	2.0 %	2.4 %	2.2 %	2.1 %	1.8 %	1.6 %	1.4 %
L = 0.3; D = 1.5; C = 0.3	0.7 %	0.9 %	0.5 %	0.2 %	0.1 %	-0.1 %	-0.2 %	0.2 %	0.0 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.6	1.3 %	1.6 %	1.4 %	1.2 %	1.1 %	1.3 %	1.1 %	1.2 %	1.1 %	0.8 %	0.6 %	0.5 %	0.4 %	0.3 %	0.3 %
L = 0.3; D = 1.5; C = 1	0.7 %	0.9 %	0.7 %	0.4 %	0.4 %	0.6 %	0.4 %	0.5 %	0.4 %	0.3 %	0.3 %	0.2 %	0.1 %	0.1 %	0.1 %
L = 0.3; D = 4; C = 0.3	0.8 %	1.1 %	0.9 %	0.6 %	0.7 %	0.6 %	0.7 %	0.9 %	0.9 %	0.8 %	0.7 %	0.6 %	0.4 %	0.3 %	0.3 %
L = 0.3; D = 4; C = 0.6	1.9 %	2.2 %	1.7 %	2.2 %	2.4 %	2.5 %	2.5 %	2.7 %	2.6 %	2.4 %	2.0 %	1.6 %	1.1 %	1.0 %	0.8 %
L = 0.3; D = 4; C = 1	0.9 %	1.0 %	0.9 %	0.9 %	0.8 %	0.8 %	0.9 %	1.2 %	1.2 %	1.2 %	1.1 %	0.8 %	0.5 %	0.5 %	0.4 %
L = 1; D = 12; C = 0.3	3.1 %	4.0 %	4.3 %	4.5 %	4.9 %	4.9 %	5.1 %	5.6 %	5.7 %	5.5 %	5.2 %	4.9 %	4.4 %	4.0 %	3.6 %
L = 1; D = 12; C = 0.6	15.0 %	16.4 %	16.8 %	18.0 %	18.9 %	19.6 %	20.5 %	21.6 %	21.9 %	21.1 %	19.5 %	16.6 %	14.3 %	12.2 %	10.5 %
L = 1; D = 12; C = 1	6.3 %	7.5 %	7.8 %	7.7 %	8.4 %	9.0 %	9.4 %	10.0 %	10.3 %	10.7 %	10.3 %	9.1 %	7.9 %	6.9 %	6.0 %
L = 1; D = 1.5; C = 0.3	2.9 %	3.4 %	3.4 %	3.6 %	3.3 %	3.1 %	2.9 %	2.8 %	2.5 %	1.9 %	1.4 %	1.0 %	0.7 %	0.5 %	0.5 %
L = 1; D = 1.5; C = 0.6	8.5 %	9.4 %	9.5 %	8.9 %	8.3 %	7.6 %	6.9 %	5.9 %	4.9 %	3.3 %	2.5 %	1.6 %	1.1 %	0.9 %	0.8 %
L = 1; D = 1.5; C = 1	3.1 %	3.7 %	3.6 %	2.9 %	2.9 %	2.6 %	2.4 %	2.1 %	1.7 %	1.3 %	0.9 %	0.5 %	0.3 %	0.2 %	0.2 %
L = 1; D = 4; C = 0.3	4.9 %	5.3 %	5.6 %	5.5 %	5.7 %	5.8 %	5.7 %	5.9 %	5.8 %	5.2 %	4.5 %	3.5 %	2.7 %	2.2 %	1.8 %
L = 1; D = 4; C = 0.6	13.6 %	14.4 %	14.9 %	15.9 %	16.2 %	16.1 %	15.9 %	15.6 %	14.5 %	11.9 %	9.6 %	6.9 %	5.3 %	4.3 %	3.5 %
L = 1; D = 4; C = 1	5.8 %	5.7 %	5.7 %	5.8 %	6.4 %	6.6 %	6.6 %	6.6 %	6.4 %	5.6 %	4.7 %	3.5 %	2.8 %	2.3 %	1.9 %
L = 3; D = 12; C = 0.3	25.5 %	27.2 %	27.9 %	28.3 %	28.4 %	28.4 %	28.2 %	28.3 %	27.8 %	26.2 %	24.4 %	21.0 %	18.1 %	15.8 %	13.8 %
L = 3; D = 12; C = 0.6	60.2 %	64.9 %	68.8 %	73.3 %	76.6 %	77.3 %	77.8 %	76.3 %	74.0 %	66.9 %	58.9 %	46.3 %	37.3 %	30.6 %	25.7 %
L = 3; D = 12; C = 1	18.3 %	19.7 %	20.4 %	21.9 %	23.3 %	24.4 %	25.0 %	26.2 %	26.1 %	25.2 %	23.4 %	19.8 %	16.8 %	14.2 %	12.5 %
L = 3; D = 1.5; C = 0.3	24.7 %	24.8 %	24.7 %	22.1 %	19.7 %	17.3 %	15.5 %	12.5 %	10.3 %	7.1 %	5.3 %	3.5 %	2.5 %	2.0 %	1.7 %
L = 3; D = 1.5; C = 0.6	32.5 %	34.0 %	33.6 %	31.7 %	28.2 %	24.7 %	22.0 %	17.5 %	14.4 %	9.7 %	7.2 %	4.8 %	3.6 %	2.8 %	2.4 %
L = 3; D = 1.5; C = 1	9.9 %	10.8 %	10.6 %	10.0 %	9.3 %	8.3 %	7.5 %	6.3 %	5.2 %	3.9 %	3.0 %	2.2 %	1.6 %	1.3 %	1.2 %
L = 3; D = 4; C = 0.3	41.8 %	43.3 %	43.9 %	42.2 %	40.0 %	38.1 %	36.2 %	32.8 %	29.4 %	23.3 %	18.5 %	13.0 %	9.7 %	7.8 %	6.5 %
L = 3; D = 4; C = 0.6	54.2 %	57.0 %	59.2 %	59.9 %	58.5 %	56.7 %	53.9 %	48.3 %	42.6 %	31.7 %	24.6 %	16.8 %	12.5 %	9.9 %	8.2 %
L = 3; D = 4; C = 1	15.2 %	16.6 %	17.0 %	17.9 %	18.2 %	18.3 %	18.1 %	17.3 %	16.2 %	13.3 %	10.6 %	7.5 %	5.8 %	4.7 %	4.0 %
T = 0.8	1.2 %	1.1 %	0.9 %	0.7 %	0.6 %	0.5 %	0.5 %	0.6 %	0.4 %	0.5 %	0.3 %	0.3 %	0.1 %	0.1 %	0.1 %
T = 0.6	6.9 %	7.2 %	7.3 %	6.5 %	5.5 %	4.4 %	3.6 %	2.7 %	2.1 %	1.4 %	1.1 %	0.7 %	0.5 %	0.4 %	0.3 %
T = 0.4	21.6 %	22.4 %	22.3 %	19.8 %	16.8 %	14.0 %	11.7 %	8.6 %	6.6 %	4.2 %	3.1 %	2.0 %	1.5 %	1.2 %	1.0 %
T = 0.2	63.4 %	65.4 %	64.4 %	57.2 %	48.3 %	40.8 %	34.8 %	26.5 %	20.7 %	12.8 %	9.2 %	5.8 %	4.4 %	3.4 %	2.8 %

Table 36: Error in sphere approximation for ^{177}Lu

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	8.4 %	5.6 %	3.8 %	2.5 %	1.7 %	1.4 %	1.2 %	1.0 %	1.0 %	0.7 %	0.6 %	0.7 %	0.7 %	0.5 %	0.5 %
L = 0; Z = 0.5	1.6 %	1.1 %	0.6 %	0.3 %	0.1 %	0.1 %	0.0 %	0.0 %	-0.1 %	-0.1 %	-0.1 %	0.0 %	0.0 %	-0.3 %	0.0 %
L = 0; Z = 2	1.0 %	0.5 %	0.2 %	0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.1 %	0.1 %	0.1 %	0.1 %	-0.1 %	0.2 %
L = 0; Z = 4	5.4 %	3.6 %	2.6 %	1.7 %	1.3 %	1.0 %	0.9 %	0.6 %	0.5 %	0.3 %	0.3 %	0.4 %	0.4 %	0.2 %	0.5 %
L = 0.3; D = 12; C = 0.3	0.4 %	0.3 %	0.5 %	0.5 %	0.6 %	0.6 %	0.6 %	0.6 %	0.5 %	0.5 %	0.3 %	0.2 %	0.1 %	0.0 %	-0.1 %
L = 0.3; D = 12; C = 0.6	2.6 %	3.0 %	2.9 %	3.2 %	3.2 %	3.2 %	3.0 %	2.6 %	2.5 %	1.9 %	1.6 %	1.2 %	0.7 %	0.3 %	0.3 %
L = 0.3; D = 12; C = 1	1.5 %	1.8 %	1.9 %	1.8 %	2.1 %	2.2 %	2.1 %	1.9 %	1.6 %	1.1 %	0.8 %	0.5 %	0.3 %	0.0 %	-0.2 %
L = 0.3; D = 1.5; C = 0.3	0.0 %	-0.2 %	-0.3 %	-0.4 %	-0.2 %	-0.1 %	0.0 %	0.0 %	0.1 %	0.2 %	0.1 %	0.1 %	0.0 %	-0.1 %	-0.2 %
L = 0.3; D = 1.5; C = 0.6	0.2 %	-0.1 %	-0.1 %	-0.2 %	-0.2 %	-0.2 %	0.0 %	-0.1 %	-0.1 %	-0.1 %	-0.1 %	-0.1 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 1	-0.2 %	-0.2 %	-0.2 %	-0.2 %	-0.2 %	0.0 %	-0.1 %	0.1 %	0.1 %	0.1 %	0.1 %	0.0 %	0.0 %	0.1 %	0.0 %
L = 0.3; D = 4; C = 0.3	-0.2 %	-0.3 %	-0.3 %	0.2 %	0.2 %	0.3 %	0.2 %	0.3 %	0.2 %	0.2 %	0.1 %	0.0 %	-0.1 %	-0.1 %	-0.1 %
L = 0.3; D = 4; C = 0.6	1.5 %	1.3 %	1.4 %	1.2 %	1.0 %	0.8 %	0.7 %	0.7 %	0.6 %	0.4 %	0.2 %	0.2 %	0.1 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 1	1.3 %	1.5 %	1.4 %	1.4 %	1.2 %	1.1 %	0.8 %	0.5 %	0.4 %	0.2 %	0.2 %	0.1 %	0.0 %	-0.1 %	-0.1 %
L = 1; D = 12; C = 0.3	4.6 %	4.8 %	4.7 %	4.6 %	4.5 %	4.4 %	4.3 %	3.7 %	3.4 %	2.8 %	2.2 %	1.6 %	1.2 %	0.7 %	0.8 %
L = 1; D = 12; C = 0.6	18.4 %	18.6 %	18.4 %	17.9 %	16.3 %	15.1 %	13.9 %	12.0 %	10.4 %	7.6 %	5.8 %	4.1 %	3.2 %	2.4 %	2.2 %
L = 1; D = 12; C = 1	8.9 %	9.5 %	9.4 %	9.4 %	9.1 %	8.6 %	8.2 %	7.2 %	6.2 %	4.6 %	3.5 %	2.5 %	2.0 %	1.3 %	1.2 %
L = 1; D = 1.5; C = 0.3	2.2 %	1.8 %	1.4 %	0.9 %	0.8 %	0.7 %	0.5 %	0.4 %	0.4 %	0.3 %	0.2 %	0.1 %	0.0 %	0.1 %	0.0 %
L = 1; D = 1.5; C = 0.6	6.8 %	4.9 %	3.8 %	2.7 %	1.9 %	1.8 %	1.4 %	1.1 %	0.9 %	0.6 %	0.4 %	0.3 %	0.3 %	0.0 %	0.3 %
L = 1; D = 1.5; C = 1	2.5 %	1.7 %	1.5 %	1.1 %	0.7 %	0.8 %	0.7 %	0.5 %	0.4 %	0.3 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %
L = 1; D = 4; C = 0.3	5.0 %	4.7 %	4.3 %	3.7 %	3.3 %	2.8 %	2.4 %	2.0 %	1.8 %	1.3 %	0.8 %	0.6 %	0.3 %	0.3 %	0.2 %
L = 1; D = 4; C = 0.6	14.1 %	12.9 %	11.8 %	10.0 %	8.3 %	7.2 %	6.4 %	5.1 %	4.2 %	3.2 %	2.4 %	1.7 %	1.3 %	0.9 %	0.9 %
L = 1; D = 4; C = 1	6.0 %	5.6 %	5.4 %	4.5 %	3.9 %	3.3 %	3.0 %	2.4 %	2.0 %	1.4 %	1.0 %	0.7 %	0.6 %	0.3 %	0.5 %
L = 3; D = 12; C = 0.3	26.0 %	24.8 %	23.5 %	21.6 %	19.9 %	18.8 %	17.2 %	15.2 %	13.4 %	10.3 %	8.4 %	6.1 %	4.8 %	3.8 %	3.3 %
L = 3; D = 12; C = 0.6	68.2 %	65.4 %	61.0 %	54.0 %	47.5 %	41.9 %	37.3 %	30.8 %	26.1 %	18.5 %	14.4 %	10.1 %	8.0 %	6.4 %	5.7 %
L = 3; D = 12; C = 1	23.7 %	23.4 %	23.3 %	21.5 %	20.1 %	18.3 %	17.3 %	15.1 %	13.2 %	9.2 %	7.2 %	4.9 %	3.8 %	2.8 %	2.6 %
L = 3; D = 1.5; C = 0.3	14.4 %	10.9 %	8.6 %	6.2 %	4.8 %	3.9 %	3.2 %	2.3 %	1.9 %	1.3 %	0.9 %	0.7 %	0.6 %	0.4 %	0.6 %
L = 3; D = 1.5; C = 0.6	20.8 %	15.6 %	12.2 %	8.4 %	6.3 %	5.0 %	4.3 %	3.4 %	2.7 %	2.0 %	1.5 %	1.2 %	1.1 %	0.8 %	0.8 %
L = 3; D = 1.5; C = 1	6.6 %	5.3 %	4.5 %	3.1 %	2.4 %	2.0 %	1.7 %	1.3 %	1.1 %	0.7 %	0.5 %	0.4 %	0.3 %	-0.1 %	0.3 %
L = 3; D = 4; C = 0.3	31.8 %	27.4 %	24.2 %	19.2 %	15.7 %	13.1 %	11.2 %	8.6 %	7.0 %	4.7 %	3.7 %	2.7 %	2.1 %	1.7 %	1.5 %
L = 3; D = 4; C = 0.6	45.5 %	39.6 %	35.2 %	27.2 %	21.6 %	17.9 %	15.2 %	11.6 %	9.3 %	6.5 %	5.1 %	3.7 %	3.0 %	2.4 %	2.2 %
L = 3; D = 4; C = 1	15.5 %	14.5 %	12.8 %	11.1 %	9.6 %	8.3 %	7.4 %	5.9 %	4.6 %	3.1 %	2.4 %	1.8 %	1.4 %	0.9 %	1.1 %
T = 0.8	0.5 %	0.1 %	0.0 %	0.0 %	0.0 %	0.1 %	0.1 %	0.1 %	0.0 %	0.1 %	0.0 %	0.0 %	0.0 %	-0.2 %	-0.3 %
T = 0.6	3.5 %	2.0 %	1.4 %	0.9 %	0.6 %	0.6 %	0.4 %	0.3 %	0.3 %	0.2 %	0.2 %	0.1 %	0.2 %	0.0 %	0.1 %
T = 0.4	11.4 %	7.9 %	5.5 %	3.3 %	2.4 %	2.2 %	1.8 %	1.4 %	1.2 %	0.9 %	0.7 %	0.7 %	0.8 %	0.5 %	0.6 %
T = 0.2	32.1 %	22.9 %	17.4 %	11.0 %	8.0 %	6.4 %	5.3 %	4.0 %	3.3 %	2.5 %	2.0 %	1.7 %	1.7 %	1.5 %	1.6 %

Table 37: Error in sphere approximation for ^{131}I

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	12.7 %	8.8 %	6.6 %	4.6 %	3.6 %	3.1 %	2.7 %	2.4 %	2.3 %	2.1 %	2.2 %	2.7 %	3.6 %	4.3 %	5.1 %
L = 0; Z = 0.5	3.8 %	2.2 %	1.4 %	0.9 %	0.4 %	0.6 %	0.5 %	0.6 %	0.8 %	0.6 %	0.5 %	0.6 %	0.9 %	1.2 %	1.7 %
L = 0; Z = 2	2.2 %	1.1 %	0.5 %	0.3 %	0.0 %	0.3 %	0.3 %	0.3 %	0.4 %	0.6 %	0.5 %	0.5 %	0.9 %	1.3 %	1.5 %
L = 0; Z = 4	9.3 %	5.5 %	4.6 %	2.2 %	2.3 %	1.8 %	1.6 %	1.6 %	1.4 %	1.5 %	2.1 %	3.8 %	3.2 %	5.2 %	4.6 %
L = 0.3; D = 12; C = 0.3	1.5 %	1.2 %	0.8 %	0.8 %	0.6 %	0.7 %	0.8 %	0.8 %	0.7 %	0.8 %	0.7 %	0.5 %	0.3 %	0.4 %	0.4 %
L = 0.3; D = 12; C = 0.6	3.1 %	3.3 %	3.1 %	3.5 %	3.5 %	3.8 %	3.6 %	3.5 %	3.2 %	2.5 %	2.0 %	1.4 %	1.4 %	1.5 %	1.3 %
L = 0.3; D = 12; C = 1	2.1 %	1.7 %	1.9 %	2.2 %	2.1 %	2.3 %	2.1 %	2.2 %	1.9 %	1.7 %	1.5 %	1.0 %	0.8 %	0.8 %	0.6 %
L = 0.3; D = 1.5; C = 0.3	1.0 %	0.4 %	0.1 %	0.4 %	0.0 %	0.2 %	0.1 %	0.4 %	0.2 %	0.2 %	0.3 %	-0.3 %	0.1 %	0.3 %	0.3 %
L = 0.3; D = 1.5; C = 0.6	1.3 %	1.0 %	0.3 %	0.4 %	0.0 %	0.3 %	0.1 %	0.5 %	0.3 %	0.4 %	0.1 %	0.1 %	0.4 %	0.8 %	0.6 %
L = 0.3; D = 1.5; C = 1	0.5 %	0.4 %	0.0 %	0.2 %	0.0 %	0.3 %	0.2 %	0.4 %	0.2 %	0.6 %	0.6 %	0.5 %	0.9 %	0.9 %	0.8 %
L = 0.3; D = 4; C = 0.3	1.1 %	0.4 %	0.2 %	0.4 %	0.2 %	0.5 %	0.4 %	0.6 %	0.5 %	0.7 %	0.6 %	0.1 %	0.5 %	0.6 %	0.7 %
L = 0.3; D = 4; C = 0.6	2.5 %	2.4 %	1.8 %	2.0 %	1.6 %	1.8 %	1.5 %	1.4 %	1.1 %	0.9 %	0.9 %	0.8 %	1.1 %	1.2 %	1.2 %
L = 0.3; D = 4; C = 1	1.9 %	1.7 %	1.3 %	1.1 %	1.1 %	1.2 %	0.9 %	0.7 %	0.7 %	0.5 %	0.3 %	0.2 %	0.6 %	0.6 %	0.5 %
L = 1; D = 12; C = 0.3	5.1 %	5.3 %	5.2 %	5.3 %	5.2 %	5.5 %	5.1 %	4.9 %	4.5 %	4.0 %	3.5 %	2.3 %	2.0 %	2.0 %	2.1 %
L = 1; D = 12; C = 0.6	18.7 %	19.7 %	19.3 %	20.2 %	19.4 %	18.6 %	17.9 %	16.0 %	14.1 %	11.3 %	9.5 %	7.0 %	6.1 %	5.8 %	5.6 %
L = 1; D = 12; C = 1	8.6 %	9.1 %	9.2 %	10.0 %	9.7 %	9.9 %	9.5 %	8.8 %	8.0 %	6.7 %	5.4 %	4.0 %	3.3 %	3.1 %	3.1 %
L = 1; D = 1.5; C = 0.3	4.0 %	3.7 %	3.0 %	2.2 %	1.6 %	1.3 %	0.9 %	0.7 %	0.7 %	0.7 %	0.6 %	0.5 %	0.6 %	0.8 %	0.8 %
L = 1; D = 1.5; C = 0.6	8.3 %	7.2 %	5.9 %	4.4 %	3.3 %	3.0 %	2.4 %	1.9 %	1.7 %	1.5 %	1.3 %	1.4 %	1.6 %	1.8 %	2.0 %
L = 1; D = 1.5; C = 1	4.0 %	3.2 %	2.3 %	1.5 %	1.0 %	1.1 %	0.9 %	0.9 %	0.9 %	1.1 %	1.1 %	0.7 %	0.8 %	1.1 %	1.1 %
L = 1; D = 4; C = 0.3	5.4 %	5.3 %	5.0 %	4.8 %	4.2 %	4.4 %	3.8 %	3.3 %	3.0 %	2.5 %	2.1 %	1.4 %	1.4 %	1.7 %	1.6 %
L = 1; D = 4; C = 0.6	15.7 %	15.4 %	14.6 %	13.7 %	11.6 %	10.5 %	9.3 %	7.7 %	6.5 %	5.1 %	4.4 %	3.6 %	3.6 %	3.7 %	3.8 %
L = 1; D = 4; C = 1	6.9 %	6.4 %	6.4 %	5.9 %	5.2 %	5.2 %	4.5 %	3.5 %	2.8 %	2.0 %	2.0 %	1.3 %	1.2 %	1.5 %	1.9 %
L = 3; D = 12; C = 0.3	28.2 %	27.3 %	26.6 %	25.8 %	24.4 %	23.4 %	22.2 %	20.4 %	18.6 %	15.4 %	13.0 %	10.4 %	9.4 %	8.9 %	9.0 %
L = 3; D = 12; C = 0.6	70.7 %	71.6 %	70.2 %	66.5 %	61.8 %	57.4 %	52.5 %	45.2 %	39.1 %	29.9 %	25.1 %	19.4 %	16.8 %	16.0 %	15.6 %
L = 3; D = 12; C = 1	23.3 %	24.7 %	24.8 %	24.6 %	23.7 %	23.5 %	22.2 %	20.0 %	18.0 %	14.0 %	11.2 %	8.1 %	6.9 %	6.8 %	6.2 %
L = 3; D = 1.5; C = 0.3	19.4 %	16.0 %	13.0 %	9.7 %	7.5 %	6.4 %	5.4 %	4.3 %	3.7 %	3.3 %	3.3 %	3.4 %	4.0 %	4.6 %	5.2 %
L = 3; D = 1.5; C = 0.6	28.7 %	23.6 %	19.3 %	13.8 %	10.6 %	9.0 %	7.3 %	6.0 %	5.5 %	4.7 %	4.3 %	4.6 %	5.2 %	5.9 %	6.7 %
L = 3; D = 1.5; C = 1	9.2 %	7.8 %	6.4 %	4.8 %	3.7 %	3.2 %	2.7 %	2.4 %	2.0 %	1.8 %	1.7 %	1.6 %	2.0 %	2.4 %	2.8 %
L = 3; D = 4; C = 0.3	38.9 %	35.1 %	31.8 %	27.0 %	23.0 %	20.4 %	17.7 %	14.1 %	12.3 %	9.8 %	8.7 %	7.8 %	7.9 %	8.2 %	9.1 %
L = 3; D = 4; C = 0.6	55.4 %	52.6 %	47.0 %	39.5 %	33.1 %	27.9 %	24.3 %	19.3 %	15.9 %	12.0 %	10.1 %	9.1 %	9.2 %	9.8 %	10.7 %
L = 3; D = 4; C = 1	17.3 %	16.9 %	16.2 %	14.6 %	12.7 %	11.5 %	10.2 %	8.1 %	6.7 %	5.2 %	4.4 %	3.9 %	3.8 %	4.3 %	4.4 %
T = 0.8	1.6 %	1.0 %	0.6 %	0.4 %	-0.2 %	0.0 %	0.0 %	0.2 %	0.1 %	0.0 %	0.1 %	0.2 %	0.1 %	0.6 %	1.1 %
T = 0.6	6.0 %	4.4 %	3.0 %	1.8 %	1.1 %	1.2 %	1.0 %	0.9 %	0.8 %	0.9 %	0.8 %	1.0 %	0.9 %	1.3 %	1.7 %
T = 0.4	17.8 %	13.3 %	9.9 %	6.3 %	4.5 %	3.9 %	3.2 %	2.8 %	2.6 %	2.5 %	2.3 %	2.4 %	3.2 %	4.4 %	5.0 %
T = 0.2	48.1 %	37.4 %	29.7 %	19.7 %	14.6 %	11.9 %	9.7 %	7.9 %	7.2 %	6.3 %	6.3 %	7.0 %	8.3 %	9.3 %	10.8 %

Table 38: Error in sphere approximation for ^{90}Y

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Systematic error [%]**														
L = 0; Z = 1.0	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0; Z = 0.25	21.8 %	22.0 %	21.9 %	20.8 %	19.8 %	17.9 %	16.0 %	12.2 %	9.4 %	6.1 %	4.3 %	2.7 %	2.0 %	1.6 %	1.4 %
L = 0; Z = 0.5	5.4 %	5.5 %	5.2 %	4.5 %	4.4 %	3.6 %	3.1 %	2.3 %	1.8 %	1.1 %	0.7 %	0.4 %	0.3 %	0.1 %	0.1 %
L = 0; Z = 2	4.2 %	4.7 %	4.6 %	4.1 %	3.8 %	3.2 %	2.7 %	1.9 %	1.4 %	0.9 %	0.5 %	0.4 %	0.3 %	0.3 %	0.3 %
L = 0; Z = 4	18.5 %	18.6 %	18.1 %	17.6 %	15.9 %	13.7 %	11.6 %	8.3 %	6.5 %	4.0 %	2.8 %	1.7 %	1.2 %	0.8 %	0.7 %
L = 0.3; D = 12; C = 0.3	0.1 %	0.4 %	0.3 %	0.2 %	0.3 %	0.5 %	0.4 %	0.5 %	0.4 %	0.5 %	0.6 %	0.8 %	0.9 %	1.0 %	1.0 %
L = 0.3; D = 12; C = 0.6	2.3 %	2.3 %	1.9 %	1.8 %	1.9 %	2.2 %	2.3 %	2.4 %	2.5 %	3.1 %	3.4 %	3.8 %	4.0 %	3.9 %	3.7 %
L = 0.3; D = 12; C = 1	1.0 %	1.2 %	1.5 %	1.0 %	1.1 %	1.1 %	1.1 %	1.2 %	1.4 %	1.7 %	1.9 %	2.1 %	2.1 %	2.1 %	2.1 %
L = 0.3; D = 1.5; C = 0.3	0.7 %	1.0 %	0.9 %	0.7 %	0.6 %	0.4 %	0.4 %	0.2 %	0.0 %	-0.2 %	-0.3 %	-0.1 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 1.5; C = 0.6	1.4 %	1.1 %	1.3 %	1.3 %	1.0 %	1.1 %	1.2 %	1.0 %	0.9 %	0.8 %	0.6 %	0.6 %	0.4 %	0.3 %	0.3 %
L = 0.3; D = 1.5; C = 1	0.7 %	1.0 %	1.2 %	0.6 %	0.6 %	0.6 %	0.3 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
L = 0.3; D = 4; C = 0.3	1.2 %	1.1 %	0.9 %	0.8 %	0.6 %	0.6 %	0.4 %	0.4 %	0.5 %	0.5 %	0.4 %	0.6 %	0.6 %	0.5 %	0.5 %
L = 0.3; D = 4; C = 0.6	2.1 %	2.3 %	2.3 %	2.1 %	2.2 %	2.3 %	2.2 %	2.2 %	2.1 %	2.1 %	2.2 %	2.0 %	1.6 %	1.4 %	1.3 %
L = 0.3; D = 4; C = 1	1.6 %	1.7 %	1.4 %	1.1 %	1.3 %	1.2 %	1.1 %	1.1 %	1.0 %	1.1 %	1.0 %	0.9 %	0.8 %	0.7 %	0.7 %
L = 1; D = 12; C = 0.3	3.4 %	3.0 %	3.5 %	3.6 %	3.9 %	4.0 %	4.3 %	4.6 %	4.8 %	5.1 %	5.2 %	5.5 %	5.3 %	5.2 %	5.0 %
L = 1; D = 12; C = 0.6	14.1 %	14.6 %	14.7 %	15.8 %	16.6 %	17.2 %	17.9 %	19.2 %	19.9 %	21.4 %	22.2 %	21.5 %	20.1 %	18.6 %	17.1 %
L = 1; D = 12; C = 1	6.1 %	6.3 %	6.4 %	6.6 %	7.2 %	7.7 %	8.0 %	8.4 %	8.8 %	9.9 %	10.4 %	10.7 %	10.3 %	9.8 %	9.3 %
L = 1; D = 1.5; C = 0.3	3.1 %	3.5 %	3.2 %	3.1 %	3.1 %	3.2 %	3.3 %	3.2 %	3.1 %	2.6 %	2.1 %	1.5 %	1.2 %	1.0 %	0.8 %
L = 1; D = 1.5; C = 0.6	8.9 %	9.2 %	9.6 %	9.2 %	9.5 %	9.3 %	9.0 %	8.4 %	7.7 %	5.9 %	4.7 %	3.3 %	2.4 %	1.8 %	1.5 %
L = 1; D = 1.5; C = 1	3.3 %	3.5 %	3.5 %	3.7 %	3.9 %	3.9 %	3.6 %	3.3 %	2.8 %	2.1 %	1.6 %	1.0 %	0.8 %	0.6 %	0.6 %
L = 1; D = 4; C = 0.3	5.0 %	4.9 %	5.3 %	5.0 %	5.0 %	5.3 %	5.5 %	5.5 %	5.7 %	5.7 %	5.5 %	5.1 %	4.4 %	3.8 %	3.3 %
L = 1; D = 4; C = 0.6	13.0 %	13.6 %	13.7 %	14.5 %	15.1 %	15.7 %	15.8 %	16.3 %	16.5 %	16.0 %	14.6 %	12.0 %	9.7 %	8.0 %	6.8 %
L = 1; D = 4; C = 1	5.9 %	5.7 %	5.7 %	5.5 %	6.1 %	6.2 %	6.4 %	6.6 %	6.7 %	6.7 %	6.3 %	5.5 %	4.7 %	4.0 %	3.5 %
L = 3; D = 12; C = 0.3	24.0 %	24.4 %	25.7 %	26.8 %	27.6 %	28.2 %	28.4 %	28.7 %	28.8 %	28.6 %	27.8 %	26.3 %	24.7 %	23.0 %	21.3 %
L = 3; D = 12; C = 0.6	55.7 %	57.0 %	59.6 %	63.6 %	67.8 %	71.6 %	73.9 %	77.3 %	78.0 %	78.4 %	75.6 %	68.3 %	60.6 %	53.8 %	47.7 %
L = 3; D = 12; C = 1	16.1 %	16.7 %	17.9 %	18.8 %	20.2 %	21.3 %	21.9 %	23.5 %	24.5 %	26.0 %	26.8 %	25.7 %	24.1 %	22.2 %	20.5 %
L = 3; D = 1.5; C = 0.3	24.1 %	25.1 %	25.5 %	25.5 %	25.3 %	24.3 %	23.1 %	20.4 %	18.2 %	13.5 %	10.4 %	7.2 %	5.4 %	4.3 %	3.5 %
L = 3; D = 1.5; C = 0.6	31.8 %	32.5 %	33.2 %	34.2 %	35.0 %	34.6 %	33.1 %	29.4 %	25.7 %	18.6 %	14.2 %	9.5 %	7.0 %	5.5 %	4.5 %
L = 3; D = 1.5; C = 1	10.1 %	10.2 %	9.9 %	10.3 %	10.8 %	10.5 %	10.4 %	9.7 %	8.8 %	6.8 %	5.4 %	3.9 %	3.0 %	2.5 %	2.2 %
L = 3; D = 4; C = 0.3	40.9 %	42.3 %	42.9 %	44.4 %	44.5 %	44.3 %	43.5 %	41.3 %	39.4 %	34.7 %	30.4 %	24.0 %	19.0 %	15.6 %	13.1 %
L = 3; D = 4; C = 0.6	50.7 %	51.6 %	53.1 %	56.4 %	59.5 %	61.3 %	61.6 %	61.0 %	58.5 %	51.4 %	44.4 %	32.9 %	25.2 %	20.0 %	16.8 %
L = 3; D = 4; C = 1	15.1 %	15.3 %	15.4 %	16.0 %	17.2 %	17.7 %	18.2 %	18.6 %	18.7 %	17.9 %	16.3 %	13.3 %	10.8 %	9.1 %	7.8 %
T = 0.8	1.6 %	1.3 %	1.4 %	0.8 %	1.0 %	1.1 %	1.1 %	1.0 %	0.7 %	0.4 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %
T = 0.6	7.1 %	7.0 %	6.9 %	7.0 %	7.2 %	7.2 %	6.6 %	5.5 %	4.4 %	2.7 %	1.9 %	1.2 %	0.8 %	0.6 %	0.5 %
T = 0.4	21.5 %	21.6 %	22.3 %	22.7 %	23.5 %	23.1 %	21.8 %	18.1 %	14.4 %	9.0 %	6.4 %	4.1 %	3.1 %	2.6 %	2.2 %
T = 0.2	62.0 %	63.4 %	65.1 %	67.8 %	68.2 %	65.7 %	61.3 %	51.7 %	43.1 %	28.7 %	20.5 %	12.4 %	8.9 %	7.0 %	5.7 %

SECTION 3: RADIOMIC SHAPE FEATURES

Table 39: Equivalent sphere radius

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Equivalent sphere radius (cm)**														
L = 0; Z = 1.0	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 0; Z = 0.25	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 0; Z = 0.5	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 0; Z = 2	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 0; Z = 4	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 0.3; D = 12; C = 0.3	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 0.3; D = 12; C = 0.6	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 0.3; D = 12; C = 1	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 0.3; D = 1.5; C = 0.3	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 0.3; D = 1.5; C = 0.6	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 0.3; D = 1.5; C = 1	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 0.3; D = 4; C = 0.3	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 0.3; D = 4; C = 0.6	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 0.3; D = 4; C = 1	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 1; D = 12; C = 0.3	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 1; D = 12; C = 0.6	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 1; D = 12; C = 1	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 1; D = 1.5; C = 0.3	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 1; D = 1.5; C = 0.6	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 1; D = 1.5; C = 1	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 1; D = 4; C = 0.3	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 1; D = 4; C = 0.6	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 1; D = 4; C = 1	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 3; D = 12; C = 0.3	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 3; D = 12; C = 0.6	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 3; D = 12; C = 1	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 3; D = 1.5; C = 0.3	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 3; D = 1.5; C = 0.6	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 3; D = 1.5; C = 1	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 3; D = 4; C = 0.3	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 3; D = 4; C = 0.6	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
L = 3; D = 4; C = 1	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
T = 0.8	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
T = 0.6	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
T = 0.4	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00
T = 0.2	0.10	0.15	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	3.00	4.00	5.00	6.00

Table 40: Surface area

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Surface area (cm^2)**														
L = 0; Z = 1.0	1.26E-01	2.83E-01	5.03E-01	1.13E+00	2.01E+00	3.15E+00	4.53E+00	8.06E+00	1.26E+01	2.83E+01	5.03E+01	1.13E+02	2.01E+02	3.15E+02	4.53E+02
L = 0; Z = 0.25	1.79E-01	4.04E-01	7.18E-01	1.61E+00	2.87E+00	4.49E+00	6.46E+00	1.15E+01	1.79E+01	4.04E+01	7.18E+01	1.61E+02	2.87E+02	4.49E+02	6.46E+02
L = 0; Z = 0.5	1.38E-01	3.10E-01	5.51E-01	1.24E+00	2.20E+00	3.44E+00	4.96E+00	8.81E+00	1.38E+01	3.10E+01	5.51E+01	1.24E+02	2.20E+02	3.44E+02	4.96E+02
L = 0; Z = 2	1.35E-01	3.04E-01	5.41E-01	1.22E+00	2.17E+00	3.38E+00	4.87E+00	8.66E+00	1.35E+01	3.04E+01	5.41E+01	1.22E+02	2.17E+02	3.38E+02	4.87E+02
L = 0; Z = 4	1.61E-01	3.62E-01	6.43E-01	1.45E+00	2.57E+00	4.02E+00	5.79E+00	1.03E+01	1.61E+01	3.62E+01	6.43E+01	1.45E+02	2.57E+02	4.02E+02	5.79E+02
L = 0.3; D = 12; C = 0.3	2.24E-01	5.03E-01	8.95E-01	2.01E+00	3.58E+00	5.59E+00	8.05E+00	1.43E+01	2.24E+01	5.03E+01	8.95E+01	2.01E+02	3.58E+02	5.59E+02	8.05E+02
L = 0.3; D = 12; C = 0.6	3.82E-01	8.58E-01	1.53E+00	3.43E+00	6.10E+00	9.54E+00	1.37E+01	2.44E+01	3.82E+01	8.58E+01	1.53E+02	3.43E+02	6.10E+02	9.54E+02	1.37E+03
L = 0.3; D = 12; C = 1	2.97E-01	6.67E-01	1.19E+00	2.67E+00	4.74E+00	7.41E+00	1.07E+01	1.90E+01	2.97E+01	6.67E+01	1.19E+02	2.67E+02	4.74E+02	7.41E+02	1.07E+03
L = 0.3; D = 1.5; C = 0.3	1.31E-01	2.96E-01	5.26E-01	1.18E+00	2.10E+00	3.29E+00	4.73E+00	8.41E+00	1.31E+01	2.96E+01	5.26E+01	1.18E+02	2.10E+02	3.29E+02	4.73E+02
L = 0.3; D = 1.5; C = 0.6	1.37E-01	3.09E-01	5.49E-01	1.24E+00	2.20E+00	3.43E+00	4.94E+00	8.79E+00	1.37E+01	3.09E+01	5.49E+01	1.24E+02	2.20E+02	3.43E+02	4.94E+02
L = 0.3; D = 1.5; C = 1	1.31E-01	2.96E-01	5.26E-01	1.18E+00	2.10E+00	3.28E+00	4.73E+00	8.41E+00	1.31E+01	2.96E+01	5.26E+01	1.18E+02	2.10E+02	3.28E+02	4.73E+02
L = 0.3; D = 4; C = 0.3	1.57E-01	3.54E-01	6.29E-01	1.42E+00	2.52E+00	3.93E+00	5.66E+00	1.01E+01	1.57E+01	3.54E+01	6.29E+01	1.42E+02	2.52E+02	3.93E+02	5.66E+02
L = 0.3; D = 4; C = 0.6	1.90E-01	4.28E-01	7.61E-01	1.71E+00	3.04E+00	4.76E+00	6.85E+00	1.22E+01	1.90E+01	4.28E+01	7.61E+01	1.71E+02	3.04E+02	4.76E+02	6.85E+02
L = 0.3; D = 4; C = 1	1.61E-01	3.62E-01	6.44E-01	1.45E+00	2.58E+00	4.03E+00	5.80E+00	1.03E+01	1.61E+01	3.62E+01	6.44E+01	1.45E+02	2.58E+02	4.03E+02	5.80E+02
L = 1; D = 12; C = 0.3	5.10E-01	1.15E+00	2.04E+00	4.59E+00	8.15E+00	1.27E+01	1.83E+01	3.26E+01	5.10E+01	1.15E+02	2.04E+02	4.59E+02	8.15E+02	1.27E+03	1.83E+03
L = 1; D = 12; C = 0.6	1.02E+00	2.30E+00	4.09E+00	9.20E+00	1.64E+01	2.56E+01	3.68E+01	6.54E+01	1.02E+02	2.30E+02	4.09E+02	9.20E+02	1.64E+03	2.56E+03	3.68E+03
L = 1; D = 12; C = 1	6.84E-01	1.54E+00	2.73E+00	6.15E+00	1.09E+01	1.71E+01	2.46E+01	4.38E+01	6.84E+01	1.54E+02	2.73E+02	6.15E+02	1.09E+03	1.71E+03	2.46E+03
L = 1; D = 1.5; C = 0.3	1.62E-01	3.64E-01	6.47E-01	1.46E+00	2.59E+00	4.04E+00	5.82E+00	1.04E+01	1.62E+01	3.64E+01	6.47E+01	1.46E+02	2.59E+02	4.04E+02	5.82E+02
L = 1; D = 1.5; C = 0.6	1.95E-01	4.39E-01	7.81E-01	1.76E+00	3.12E+00	4.88E+00	7.03E+00	1.25E+01	1.95E+01	4.39E+01	7.81E+01	1.76E+02	3.12E+02	4.88E+02	7.03E+02
L = 1; D = 1.5; C = 1	1.58E-01	3.56E-01	6.33E-01	1.42E+00	2.53E+00	3.96E+00	5.70E+00	1.01E+01	1.58E+01	3.56E+01	6.33E+01	1.42E+02	2.53E+02	3.96E+02	5.70E+02
L = 1; D = 4; C = 0.3	2.70E-01	6.09E-01	1.08E+00	2.43E+00	4.33E+00	6.76E+00	9.74E+00	1.73E+01	2.70E+01	6.09E+01	1.08E+02	2.43E+02	4.33E+02	6.76E+02	9.74E+02
L = 1; D = 4; C = 0.6	4.04E-01	9.10E-01	1.62E+00	3.64E+00	6.47E+00	1.01E+01	1.46E+01	2.59E+01	4.04E+01	9.10E+01	1.62E+02	3.64E+02	6.47E+02	1.01E+03	1.46E+03
L = 1; D = 4; C = 1	2.79E-01	6.28E-01	1.12E+00	2.51E+00	4.46E+00	6.97E+00	1.00E+01	1.78E+01	2.79E+01	6.28E+01	1.12E+02	2.51E+02	4.46E+02	6.97E+02	1.00E+03
L = 3; D = 12; C = 0.3	1.36E+00	3.06E+00	5.44E+00	1.22E+01	2.17E+01	3.40E+01	4.89E+01	8.70E+01	1.36E+02	3.06E+02	5.44E+02	1.22E+03	2.17E+03	3.40E+03	4.89E+03
L = 3; D = 12; C = 0.6	2.04E+00	4.60E+00	8.18E+00	1.84E+01	3.27E+01	5.11E+01	7.36E+01	1.31E+02	2.04E+02	4.60E+02	8.18E+02	1.84E+03	3.27E+03	5.11E+03	7.36E+03
L = 3; D = 12; C = 1	1.17E+00	2.64E+00	4.70E+00	1.06E+01	1.88E+01	2.94E+01	4.23E+01	7.52E+01	1.17E+02	2.64E+02	4.70E+02	1.06E+03	1.88E+03	2.94E+03	4.23E+03
L = 3; D = 1.5; C = 0.3	2.60E-01	5.86E-01	1.04E+00	2.34E+00	4.17E+00	6.51E+00	9.38E+00	1.67E+01	2.60E+01	5.86E+01	1.04E+02	2.34E+02	4.17E+02	6.51E+02	9.38E+02
L = 3; D = 1.5; C = 0.6	3.03E-01	6.81E-01	1.21E+00	2.73E+00	4.85E+00	7.57E+00	1.09E+01	1.94E+01	3.03E+01	6.81E+01	1.21E+02	2.73E+02	4.85E+02	7.57E+02	1.09E+03
L = 3; D = 1.5; C = 1	2.07E-01	4.65E-01	8.26E-01	1.86E+00	3.31E+00	5.16E+00	7.44E+00	1.32E+01	2.07E+01	4.65E+01	8.26E+01	1.86E+02	3.31E+02	5.16E+02	7.44E+02
L = 3; D = 4; C = 0.3	6.11E-01	1.37E+00	2.44E+00	5.50E+00	9.77E+00	1.53E+01	2.20E+01	3.91E+01	6.11E+01	1.37E+02	2.44E+02	5.50E+02	9.77E+02	1.53E+03	2.20E+03
L = 3; D = 4; C = 0.6	7.39E-01	1.66E+00	2.96E+00	6.65E+00	1.18E+01	1.85E+01	2.66E+01	4.73E+01	7.39E+01	1.66E+02	2.96E+02	6.65E+02	1.18E+03	1.85E+03	2.66E+03
L = 3; D = 4; C = 1	4.43E-01	9.97E-01	1.77E+00	3.99E+00	7.09E+00	1.11E+01	1.59E+01	2.83E+01	4.43E+01	9.97E+01	1.77E+02	3.99E+02	7.09E+02	1.11E+03	1.59E+03
T = 0.8	1.31E-01	2.96E-01	5.26E-01	1.18E+00	2.10E+00	3.29E+00	4.73E+00	8.41E+00	1.31E+01	2.96E+01	5.26E+01	1.18E+02	2.10E+02	3.29E+02	4.73E+02
T = 0.6	1.52E-01	3.43E-01	6.10E-01	1.37E+00	2.44E+00	3.81E+00	5.49E+00	9.75E+00	1.52E+01	3.43E+01	6.10E+01	1.37E+02	2.44E+02	3.81E+02	5.49E+02
T = 0.4	2.01E-01	4.52E-01	8.04E-01	1.81E+00	3.22E+00	5.03E+00	7.24E+00	1.29E+01	2.01E+01	4.52E+01	8.04E+01	1.81E+02	3.22E+02	5.03E+02	7.24E+02
T = 0.2	3.33E-01	7.48E-01	1.33E+00	2.99E+00	5.32E+00	8.31E+00	1.20E+01	2.13E+01	3.33E+01	7.48E+01	1.33E+02	2.99E+02	5.32E+02	8.31E+02	1.20E+03

Table 41: Surface area to volume ratio

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	Surface area to volume ratio (cm^{-1})														
L = 0; Z = 1.0	3.00E+01	2.00E+01	1.50E+01	1.00E+01	7.51E+00	6.01E+00	5.01E+00	3.76E+00	3.00E+00	2.00E+00	1.50E+00	1.00E+00	7.51E-01	6.01E-01	5.01E-01
L = 0; Z = 0.25	4.28E+01	2.86E+01	2.14E+01	1.43E+01	1.07E+01	8.57E+00	7.14E+00	5.35E+00	4.28E+00	2.86E+00	2.14E+00	1.43E+00	1.07E+00	8.57E-01	7.14E-01
L = 0; Z = 0.5	3.29E+01	2.19E+01	1.64E+01	1.10E+01	8.22E+00	6.57E+00	5.48E+00	4.11E+00	3.29E+00	2.19E+00	1.64E+00	1.10E+00	8.22E-01	6.57E-01	5.48E-01
L = 0; Z = 2	3.23E+01	2.15E+01	1.62E+01	1.08E+01	8.08E+00	6.46E+00	5.38E+00	4.04E+00	3.23E+00	2.15E+00	1.62E+00	1.08E+00	8.08E-01	6.46E-01	5.38E-01
L = 0; Z = 4	3.84E+01	2.56E+01	1.92E+01	1.28E+01	9.59E+00	7.67E+00	6.40E+00	4.80E+00	3.84E+00	2.56E+00	1.92E+00	1.28E+00	9.59E-01	7.67E-01	6.40E-01
L = 0.3; D = 12; C = 0.3	5.34E+01	3.56E+01	2.67E+01	1.78E+01	1.34E+01	1.07E+01	8.90E+00	6.68E+00	5.34E+00	3.56E+00	2.67E+00	1.78E+00	1.34E+00	1.07E+00	8.90E-01
L = 0.3; D = 12; C = 0.6	9.11E+01	6.07E+01	4.55E+01	3.04E+01	2.28E+01	1.82E+01	1.52E+01	1.14E+01	9.11E+00	6.07E+00	4.55E+00	3.04E+00	2.28E+00	1.82E+00	1.52E+00
L = 0.3; D = 12; C = 1	7.08E+01	4.72E+01	3.54E+01	2.36E+01	1.77E+01	1.42E+01	1.18E+01	8.85E+00	7.08E+00	4.72E+00	3.54E+00	2.36E+00	1.77E+00	1.42E+00	1.18E+00
L = 0.3; D = 1.5; C = 0.3	3.14E+01	2.09E+01	1.57E+01	1.05E+01	7.84E+00	6.27E+00	5.23E+00	3.92E+00	3.14E+00	2.09E+00	1.57E+00	1.05E+00	7.84E-01	6.27E-01	5.23E-01
L = 0.3; D = 1.5; C = 0.6	3.28E+01	2.19E+01	1.64E+01	1.09E+01	8.20E+00	6.56E+00	5.46E+00	4.10E+00	3.28E+00	2.19E+00	1.64E+00	1.09E+00	8.20E-01	6.56E-01	5.46E-01
L = 0.3; D = 1.5; C = 1	3.14E+01	2.09E+01	1.57E+01	1.05E+01	7.84E+00	6.27E+00	5.23E+00	3.92E+00	3.14E+00	2.09E+00	1.57E+00	1.05E+00	7.84E-01	6.27E-01	5.23E-01
L = 0.3; D = 4; C = 0.3	3.76E+01	2.50E+01	1.88E+01	1.25E+01	9.39E+00	7.51E+00	6.26E+00	4.69E+00	3.76E+00	2.50E+00	1.88E+00	1.25E+00	9.39E-01	7.51E-01	6.26E-01
L = 0.3; D = 4; C = 0.6	4.54E+01	3.03E+01	2.27E+01	1.51E+01	1.14E+01	9.08E+00	7.57E+00	5.68E+00	4.54E+00	3.03E+00	2.27E+00	1.51E+00	1.14E+00	9.08E-01	7.57E-01
L = 0.3; D = 4; C = 1	3.85E+01	2.56E+01	1.92E+01	1.28E+01	9.61E+00	7.69E+00	6.41E+00	4.81E+00	3.85E+00	2.56E+00	1.92E+00	1.28E+00	9.61E-01	7.69E-01	6.41E-01
L = 1; D = 12; C = 0.3	1.22E+02	8.11E+01	6.08E+01	4.05E+01	3.04E+01	2.43E+01	2.03E+01	1.52E+01	1.22E+01	8.11E+00	6.08E+00	4.05E+00	3.04E+00	2.43E+00	2.03E+00
L = 1; D = 12; C = 0.6	2.44E+02	1.63E+02	1.22E+02	8.13E+01	6.10E+01	4.88E+01	4.07E+01	3.05E+01	2.44E+01	1.63E+01	1.22E+01	8.13E+00	6.10E+00	4.88E+00	4.07E+00
L = 1; D = 12; C = 1	1.63E+02	1.09E+02	8.16E+01	5.44E+01	4.08E+01	3.26E+01	2.72E+01	2.04E+01	1.63E+01	1.09E+01	8.16E+00	5.44E+00	4.08E+00	3.26E+00	2.72E+00
L = 1; D = 1.5; C = 0.3	3.86E+01	2.57E+01	1.93E+01	1.29E+01	9.65E+00	7.72E+00	6.44E+00	4.83E+00	3.86E+00	2.57E+00	1.93E+00	1.29E+00	9.65E-01	7.72E-01	6.44E-01
L = 1; D = 1.5; C = 0.6	4.66E+01	3.11E+01	2.33E+01	1.55E+01	1.16E+01	9.32E+00	7.77E+00	5.82E+00	4.66E+00	3.11E+00	2.33E+00	1.55E+00	1.16E+00	9.32E-01	7.77E-01
L = 1; D = 1.5; C = 1	3.78E+01	2.52E+01	1.89E+01	1.26E+01	9.44E+00	7.55E+00	6.30E+00	4.72E+00	3.78E+00	2.52E+00	1.89E+00	1.26E+00	9.44E-01	7.55E-01	6.30E-01
L = 1; D = 4; C = 0.3	6.46E+01	4.30E+01	3.23E+01	2.15E+01	1.61E+01	1.29E+01	1.08E+01	8.07E+00	6.46E+00	4.30E+00	3.23E+00	2.15E+00	1.61E+00	1.29E+00	1.08E+00
L = 1; D = 4; C = 0.6	9.65E+01	6.43E+01	4.83E+01	3.22E+01	2.41E+01	1.93E+01	1.61E+01	1.21E+01	9.65E+00	6.43E+00	4.83E+00	3.22E+00	2.41E+00	1.93E+00	1.61E+00
L = 1; D = 4; C = 1	6.66E+01	4.44E+01	3.33E+01	2.22E+01	1.66E+01	1.33E+01	1.11E+01	8.32E+00	6.66E+00	4.44E+00	3.33E+00	2.22E+00	1.66E+00	1.33E+00	1.11E+00
L = 3; D = 12; C = 0.3	3.24E+02	2.16E+02	1.62E+02	1.08E+02	8.11E+01	6.49E+01	5.41E+01	4.05E+01	3.24E+01	2.16E+01	1.62E+01	1.08E+01	8.11E+00	6.49E+00	5.41E+00
L = 3; D = 12; C = 0.6	4.88E+02	3.25E+02	2.44E+02	1.63E+02	1.22E+02	9.76E+01	8.14E+01	6.10E+01	4.88E+01	3.25E+01	2.44E+01	1.63E+01	1.22E+01	9.76E+00	8.14E+00
L = 3; D = 12; C = 1	2.80E+02	1.87E+02	1.40E+02	9.35E+01	7.01E+01	5.61E+01	4.67E+01	3.51E+01	2.80E+01	1.87E+01	1.40E+01	9.35E+00	7.01E+00	5.61E+00	4.67E+00
L = 3; D = 1.5; C = 0.3	6.22E+01	4.15E+01	3.11E+01	2.07E+01	1.55E+01	1.24E+01	1.04E+01	7.77E+00	6.22E+00	4.15E+00	3.11E+00	2.07E+00	1.55E+00	1.24E+00	1.04E+00
L = 3; D = 1.5; C = 0.6	7.23E+01	4.82E+01	3.62E+01	2.41E+01	1.81E+01	1.45E+01	1.21E+01	9.04E+00	7.23E+00	4.82E+00	3.62E+00	2.41E+00	1.81E+00	1.45E+00	1.21E+00
L = 3; D = 1.5; C = 1	4.93E+01	3.29E+01	2.47E+01	1.64E+01	1.23E+01	9.86E+00	8.22E+00	6.16E+00	4.93E+00	3.29E+00	2.47E+00	1.64E+00	1.23E+00	9.86E-01	8.22E-01
L = 3; D = 4; C = 0.3	1.46E+02	9.72E+01	7.29E+01	4.86E+01	3.65E+01	2.92E+01	2.43E+01	1.82E+01	1.46E+01	9.72E+00	7.29E+00	4.86E+00	3.65E+00	2.92E+00	2.43E+00
L = 3; D = 4; C = 0.6	1.76E+02	1.18E+02	8.82E+01	5.88E+01	4.41E+01	3.53E+01	2.94E+01	2.21E+01	1.76E+01	1.18E+01	8.82E+00	5.88E+00	4.41E+00	3.53E+00	2.94E+00
L = 3; D = 4; C = 1	1.06E+02	7.05E+01	5.29E+01	3.52E+01	2.64E+01	2.11E+01	1.76E+01	1.32E+01	1.06E+01	7.05E+00	5.29E+00	3.52E+00	2.64E+00	2.11E+00	1.76E+00
T = 0.8	3.14E+01	2.09E+01	1.57E+01	1.05E+01	7.84E+00	6.28E+00	5.23E+00	3.92E+00	3.14E+00	2.09E+00	1.57E+00	1.05E+00	7.84E-01	6.28E-01	5.23E-01
T = 0.6	3.64E+01	2.43E+01	1.82E+01	1.21E+01	9.09E+00	7.28E+00	6.06E+00	4.55E+00	3.64E+00	2.43E+00	1.82E+00	1.21E+00	9.09E-01	7.28E-01	6.06E-01
T = 0.4	4.80E+01	3.20E+01	2.40E+01	1.60E+01	1.20E+01	9.60E+00	8.00E+00	6.00E+00	4.80E+00	3.20E+00	2.40E+00	1.60E+00	1.20E+00	9.60E-01	8.00E-01
T = 0.2	7.94E+01	5.29E+01	3.97E+01	2.65E+01	1.98E+01	1.59E+01	1.32E+01	9.92E+00	7.94E+00	5.29E+00	3.97E+00	2.65E+00	1.98E+00	1.59E+00	1.32E+00

Table 42: Sphericity

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set								**Sphericity**							
L = 0; Z = 1.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
L = 0; Z = 0.25	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
L = 0; Z = 0.5	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
L = 0; Z = 2	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
L = 0; Z = 4	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
L = 0.3; D = 12; C = 0.3	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
L = 0.3; D = 12; C = 0.6	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
L = 0.3; D = 12; C = 1	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
L = 0.3; D = 1.5; C = 0.3	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
L = 0.3; D = 1.5; C = 0.6	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
L = 0.3; D = 1.5; C = 1	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
L = 0.3; D = 4; C = 0.3	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
L = 0.3; D = 4; C = 0.6	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
L = 0.3; D = 4; C = 1	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
L = 1; D = 12; C = 0.3	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
L = 1; D = 12; C = 0.6	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
L = 1; D = 12; C = 1	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
L = 1; D = 1.5; C = 0.3	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
L = 1; D = 1.5; C = 0.6	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64
L = 1; D = 1.5; C = 1	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
L = 1; D = 4; C = 0.3	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
L = 1; D = 4; C = 0.6	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
L = 1; D = 4; C = 1	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
L = 3; D = 12; C = 0.3	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
L = 3; D = 12; C = 0.6	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
L = 3; D = 12; C = 1	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
L = 3; D = 1.5; C = 0.3	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
L = 3; D = 1.5; C = 0.6	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
L = 3; D = 1.5; C = 1	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61
L = 3; D = 4; C = 0.3	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
L = 3; D = 4; C = 0.6	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
L = 3; D = 4; C = 1	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
T = 0.8	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
T = 0.6	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
T = 0.4	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
T = 0.2	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38

Table 43: Spherical disproportion

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Spherical disproportion**														
L = 0; Z = 1.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
L = 0; Z = 0.25	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43
L = 0; Z = 0.5	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
L = 0; Z = 2	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
L = 0; Z = 4	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28
L = 0.3; D = 12; C = 0.3	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
L = 0.3; D = 12; C = 0.6	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04	3.04
L = 0.3; D = 12; C = 1	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36
L = 0.3; D = 1.5; C = 0.3	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
L = 0.3; D = 1.5; C = 0.6	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
L = 0.3; D = 1.5; C = 1	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
L = 0.3; D = 4; C = 0.3	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
L = 0.3; D = 4; C = 0.6	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51
L = 0.3; D = 4; C = 1	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28
L = 1; D = 12; C = 0.3	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05
L = 1; D = 12; C = 0.6	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13	8.13
L = 1; D = 12; C = 1	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44
L = 1; D = 1.5; C = 0.3	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
L = 1; D = 1.5; C = 0.6	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
L = 1; D = 1.5; C = 1	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26
L = 1; D = 4; C = 0.3	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
L = 1; D = 4; C = 0.6	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
L = 1; D = 4; C = 1	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22
L = 3; D = 12; C = 0.3	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81
L = 3; D = 12; C = 0.6	16.27	16.27	16.27	16.27	16.27	16.27	16.27	16.27	16.27	16.27	16.27	16.27	16.27	16.27	16.27
L = 3; D = 12; C = 1	9.35	9.35	9.35	9.35	9.35	9.35	9.35	9.35	9.35	9.35	9.35	9.35	9.35	9.35	9.35
L = 3; D = 1.5; C = 0.3	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07
L = 3; D = 1.5; C = 0.6	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41
L = 3; D = 1.5; C = 1	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64
L = 3; D = 4; C = 0.3	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86
L = 3; D = 4; C = 0.6	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88
L = 3; D = 4; C = 1	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52
T = 0.8	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
T = 0.6	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21
T = 0.4	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
T = 0.2	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65

Table 44: Compactness 1

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set								**Compactness 1**							
L = 0; Z = 1.0	5.29E-02	5.29E-02	5.29E-02	5.29E-02	5.29E-02	5.29E-02	5.29E-02	5.29E-02	5.29E-02	5.29E-02	5.29E-02	5.29E-02	5.29E-02	5.29E-02	5.29E-02
L = 0; Z = 0.25	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02	3.11E-02
L = 0; Z = 0.5	4.63E-02	4.63E-02	4.63E-02	4.63E-02	4.63E-02	4.63E-02	4.63E-02	4.63E-02	4.63E-02	4.63E-02	4.63E-02	4.63E-02	4.63E-02	4.63E-02	4.63E-02
L = 0; Z = 2	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02	4.75E-02
L = 0; Z = 4	3.67E-02	3.67E-02	3.67E-02	3.67E-02	3.67E-02	3.67E-02	3.67E-02	3.67E-02	3.67E-02	3.67E-02	3.67E-02	3.67E-02	3.67E-02	3.67E-02	3.67E-02
L = 0.3; D = 12; C = 0.3	2.23E-02	2.23E-02	2.23E-02	2.23E-02	2.23E-02	2.23E-02	2.23E-02	2.23E-02	2.23E-02	2.23E-02	2.23E-02	2.23E-02	2.23E-02	2.23E-02	2.23E-02
L = 0.3; D = 12; C = 0.6	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02	1.00E-02
L = 0.3; D = 12; C = 1	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02
L = 0.3; D = 1.5; C = 0.3	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02
L = 0.3; D = 1.5; C = 0.6	4.64E-02	4.64E-02	4.64E-02	4.64E-02	4.64E-02	4.64E-02	4.64E-02	4.64E-02	4.64E-02	4.64E-02	4.64E-02	4.64E-02	4.64E-02	4.64E-02	4.64E-02
L = 0.3; D = 1.5; C = 1	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02
L = 0.3; D = 4; C = 0.3	3.79E-02	3.79E-02	3.79E-02	3.79E-02	3.79E-02	3.79E-02	3.79E-02	3.79E-02	3.79E-02	3.79E-02	3.79E-02	3.79E-02	3.79E-02	3.79E-02	3.79E-02
L = 0.3; D = 4; C = 0.6	2.85E-02	2.85E-02	2.85E-02	2.85E-02	2.85E-02	2.85E-02	2.85E-02	2.85E-02	2.85E-02	2.85E-02	2.85E-02	2.85E-02	2.85E-02	2.85E-02	2.85E-02
L = 0.3; D = 4; C = 1	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02	3.66E-02
L = 1; D = 12; C = 0.3	6.50E-03	6.50E-03	6.50E-03	6.50E-03	6.50E-03	6.50E-03	6.50E-03	6.50E-03	6.50E-03	6.50E-03	6.50E-03	6.50E-03	6.50E-03	6.50E-03	6.50E-03
L = 1; D = 12; C = 0.6	2.29E-03	2.29E-03	2.29E-03	2.29E-03	2.29E-03	2.29E-03	2.29E-03	2.29E-03	2.29E-03	2.29E-03	2.29E-03	2.29E-03	2.29E-03	2.29E-03	2.29E-03
L = 1; D = 12; C = 1	4.18E-03	4.18E-03	4.18E-03	4.18E-03	4.18E-03	4.18E-03	4.18E-03	4.18E-03	4.18E-03	4.18E-03	4.18E-03	4.18E-03	4.18E-03	4.18E-03	4.18E-03
L = 1; D = 1.5; C = 0.3	3.63E-02	3.63E-02	3.63E-02	3.63E-02	3.63E-02	3.63E-02	3.63E-02	3.63E-02	3.63E-02	3.63E-02	3.63E-02	3.63E-02	3.63E-02	3.63E-02	3.63E-02
L = 1; D = 1.5; C = 0.6	2.74E-02	2.74E-02	2.74E-02	2.74E-02	2.74E-02	2.74E-02	2.74E-02	2.74E-02	2.74E-02	2.74E-02	2.74E-02	2.74E-02	2.74E-02	2.74E-02	2.74E-02
L = 1; D = 1.5; C = 1	3.75E-02	3.75E-02	3.75E-02	3.75E-02	3.75E-02	3.75E-02	3.75E-02	3.75E-02	3.75E-02	3.75E-02	3.75E-02	3.75E-02	3.75E-02	3.75E-02	3.75E-02
L = 1; D = 4; C = 0.3	1.68E-02	1.68E-02	1.68E-02	1.68E-02	1.68E-02	1.68E-02	1.68E-02	1.68E-02	1.68E-02	1.68E-02	1.68E-02	1.68E-02	1.68E-02	1.68E-02	1.68E-02
L = 1; D = 4; C = 0.6	9.19E-03	9.19E-03	9.19E-03	9.19E-03	9.19E-03	9.19E-03	9.19E-03	9.19E-03	9.19E-03	9.19E-03	9.19E-03	9.19E-03	9.19E-03	9.19E-03	9.19E-03
L = 1; D = 4; C = 1	1.60E-02	1.60E-02	1.60E-02	1.60E-02	1.60E-02	1.60E-02	1.60E-02	1.60E-02	1.60E-02	1.60E-02	1.60E-02	1.60E-02	1.60E-02	1.60E-02	1.60E-02
L = 3; D = 12; C = 0.3	1.49E-03	1.49E-03	1.49E-03	1.49E-03	1.49E-03	1.49E-03	1.49E-03	1.49E-03	1.49E-03	1.49E-03	1.49E-03	1.49E-03	1.49E-03	1.49E-03	1.49E-03
L = 3; D = 12; C = 0.6	8.08E-04	8.08E-04	8.08E-04	8.08E-04	8.08E-04	8.08E-04	8.08E-04	8.08E-04	8.08E-04	8.08E-04	8.08E-04	8.08E-04	8.08E-04	8.08E-04	8.08E-04
L = 3; D = 12; C = 1	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03
L = 3; D = 1.5; C = 0.3	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02
L = 3; D = 1.5; C = 0.6	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.42E-02	1.42E-02
L = 3; D = 1.5; C = 1	2.52E-02	2.52E-02	2.52E-02	2.52E-02	2.52E-02	2.52E-02	2.52E-02	2.52E-02	2.52E-02	2.52E-02	2.52E-02	2.52E-02	2.52E-02	2.52E-02	2.52E-02
L = 3; D = 4; C = 0.3	4.95E-03	4.95E-03	4.95E-03	4.95E-03	4.95E-03	4.95E-03	4.95E-03	4.95E-03	4.95E-03	4.95E-03	4.95E-03	4.95E-03	4.95E-03	4.95E-03	4.95E-03
L = 3; D = 4; C = 0.6	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03
L = 3; D = 4; C = 1	8.02E-03	8.02E-03	8.02E-03	8.02E-03	8.02E-03	8.02E-03	8.02E-03	8.02E-03	8.02E-03	8.02E-03	8.02E-03	8.02E-03	8.02E-03	8.02E-03	8.02E-03
T = 0.8	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02
T = 0.6	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02	3.97E-02
T = 0.4	2.62E-02	2.62E-02	2.62E-02	2.62E-02	2.62E-02	2.62E-02	2.62E-02	2.62E-02	2.62E-02	2.62E-02	2.62E-02	2.62E-02	2.62E-02	2.62E-02	2.62E-02
T = 0.2	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02	1.23E-02

Table 45: Compactness 2

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set								**Compactness 2**							
L = 0; Z = 1.0	9.95E-01	9.95E-01	9.95E-01	9.95E-01	9.95E-01	9.95E-01	9.95E-01	9.95E-01	9.95E-01	9.95E-01	9.95E-01	9.95E-01	9.95E-01	9.95E-01	9.95E-01
L = 0; Z = 0.25	3.44E-01	3.44E-01	3.44E-01	3.44E-01	3.44E-01	3.44E-01	3.44E-01	3.44E-01	3.44E-01	3.44E-01	3.44E-01	3.44E-01	3.44E-01	3.44E-01	3.44E-01
L = 0; Z = 0.5	7.61E-01	7.61E-01	7.61E-01	7.61E-01	7.61E-01	7.61E-01	7.61E-01	7.61E-01	7.61E-01	7.61E-01	7.61E-01	7.61E-01	7.61E-01	7.61E-01	7.61E-01
L = 0; Z = 2	8.01E-01	8.01E-01	8.01E-01	8.01E-01	8.01E-01	8.01E-01	8.01E-01	8.01E-01	8.01E-01	8.01E-01	8.01E-01	8.01E-01	8.01E-01	8.01E-01	8.01E-01
L = 0; Z = 4	4.78E-01	4.78E-01	4.78E-01	4.78E-01	4.78E-01	4.78E-01	4.78E-01	4.78E-01	4.78E-01	4.78E-01	4.78E-01	4.78E-01	4.78E-01	4.78E-01	4.78E-01
L = 0.3; D = 12; C = 0.3	1.77E-01	1.77E-01	1.77E-01	1.77E-01	1.77E-01	1.77E-01	1.77E-01	1.77E-01	1.77E-01	1.77E-01	1.77E-01	1.77E-01	1.77E-01	1.77E-01	1.77E-01
L = 0.3; D = 12; C = 0.6	3.57E-02	3.57E-02	3.57E-02	3.57E-02	3.57E-02	3.57E-02	3.57E-02	3.57E-02	3.57E-02	3.57E-02	3.57E-02	3.57E-02	3.57E-02	3.57E-02	3.57E-02
L = 0.3; D = 12; C = 1	7.61E-02	7.61E-02	7.61E-02	7.61E-02	7.61E-02	7.61E-02	7.61E-02	7.61E-02	7.61E-02	7.61E-02	7.61E-02	7.61E-02	7.61E-02	7.61E-02	7.61E-02
L = 0.3; D = 1.5; C = 0.3	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01
L = 0.3; D = 1.5; C = 0.6	7.66E-01	7.66E-01	7.66E-01	7.66E-01	7.66E-01	7.66E-01	7.66E-01	7.66E-01	7.66E-01	7.66E-01	7.66E-01	7.66E-01	7.66E-01	7.66E-01	7.66E-01
L = 0.3; D = 1.5; C = 1	8.75E-01	8.75E-01	8.75E-01	8.75E-01	8.75E-01	8.75E-01	8.75E-01	8.75E-01	8.75E-01	8.75E-01	8.75E-01	8.75E-01	8.75E-01	8.75E-01	8.75E-01
L = 0.3; D = 4; C = 0.3	5.10E-01	5.10E-01	5.10E-01	5.10E-01	5.10E-01	5.10E-01	5.10E-01	5.10E-01	5.10E-01	5.10E-01	5.10E-01	5.10E-01	5.10E-01	5.10E-01	5.10E-01
L = 0.3; D = 4; C = 0.6	2.88E-01	2.88E-01	2.88E-01	2.88E-01	2.88E-01	2.88E-01	2.88E-01	2.88E-01	2.88E-01	2.88E-01	2.88E-01	2.88E-01	2.88E-01	2.88E-01	2.88E-01
L = 0.3; D = 4; C = 1	4.75E-01	4.75E-01	4.75E-01	4.75E-01	4.75E-01	4.75E-01	4.75E-01	4.75E-01	4.75E-01	4.75E-01	4.75E-01	4.75E-01	4.75E-01	4.75E-01	4.75E-01
L = 1; D = 12; C = 0.3	1.50E-02	1.50E-02	1.50E-02	1.50E-02	1.50E-02	1.50E-02	1.50E-02	1.50E-02	1.50E-02	1.50E-02	1.50E-02	1.50E-02	1.50E-02	1.50E-02	1.50E-02
L = 1; D = 12; C = 0.6	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03	1.86E-03
L = 1; D = 12; C = 1	6.21E-03	6.21E-03	6.21E-03	6.21E-03	6.21E-03	6.21E-03	6.21E-03	6.21E-03	6.21E-03	6.21E-03	6.21E-03	6.21E-03	6.21E-03	6.21E-03	6.21E-03
L = 1; D = 1.5; C = 0.3	4.69E-01	4.69E-01	4.69E-01	4.69E-01	4.69E-01	4.69E-01	4.69E-01	4.69E-01	4.69E-01	4.69E-01	4.69E-01	4.69E-01	4.69E-01	4.69E-01	4.69E-01
L = 1; D = 1.5; C = 0.6	2.67E-01	2.67E-01	2.67E-01	2.67E-01	2.67E-01	2.67E-01	2.67E-01	2.67E-01	2.67E-01	2.67E-01	2.67E-01	2.67E-01	2.67E-01	2.67E-01	2.67E-01
L = 1; D = 1.5; C = 1	5.01E-01	5.01E-01	5.01E-01	5.01E-01	5.01E-01	5.01E-01	5.01E-01	5.01E-01	5.01E-01	5.01E-01	5.01E-01	5.01E-01	5.01E-01	5.01E-01	5.01E-01
L = 1; D = 4; C = 0.3	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01	1.00E-01
L = 1; D = 4; C = 0.6	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02	3.00E-02
L = 1; D = 4; C = 1	9.15E-02	9.15E-02	9.15E-02	9.15E-02	9.15E-02	9.15E-02	9.15E-02	9.15E-02	9.15E-02	9.15E-02	9.15E-02	9.15E-02	9.15E-02	9.15E-02	9.15E-02
L = 3; D = 12; C = 0.3	7.91E-04	7.91E-04	7.91E-04	7.91E-04	7.91E-04	7.91E-04	7.91E-04	7.91E-04	7.91E-04	7.91E-04	7.91E-04	7.91E-04	7.91E-04	7.91E-04	7.91E-04
L = 3; D = 12; C = 0.6	2.32E-04	2.32E-04	2.32E-04	2.32E-04	2.32E-04	2.32E-04	2.32E-04	2.32E-04	2.32E-04	2.32E-04	2.32E-04	2.32E-04	2.32E-04	2.32E-04	2.32E-04
L = 3; D = 12; C = 1	1.22E-03	1.22E-03	1.22E-03	1.22E-03	1.22E-03	1.22E-03	1.22E-03	1.22E-03	1.22E-03	1.22E-03	1.22E-03	1.22E-03	1.22E-03	1.22E-03	1.22E-03
L = 3; D = 1.5; C = 0.3	1.12E-01	1.12E-01	1.12E-01	1.12E-01	1.12E-01	1.12E-01	1.12E-01	1.12E-01	1.12E-01	1.12E-01	1.12E-01	1.12E-01	1.12E-01	1.12E-01	1.12E-01
L = 3; D = 1.5; C = 0.6	7.14E-02	7.14E-02	7.14E-02	7.14E-02	7.14E-02	7.14E-02	7.14E-02	7.14E-02	7.14E-02	7.14E-02	7.14E-02	7.14E-02	7.14E-02	7.14E-02	7.14E-02
L = 3; D = 1.5; C = 1	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01	2.25E-01
L = 3; D = 4; C = 0.3	8.71E-03	8.71E-03	8.71E-03	8.71E-03	8.71E-03	8.71E-03	8.71E-03	8.71E-03	8.71E-03	8.71E-03	8.71E-03	8.71E-03	8.71E-03	8.71E-03	8.71E-03
L = 3; D = 4; C = 0.6	4.91E-03	4.91E-03	4.91E-03	4.91E-03	4.91E-03	4.91E-03	4.91E-03	4.91E-03	4.91E-03	4.91E-03	4.91E-03	4.91E-03	4.91E-03	4.91E-03	4.91E-03
L = 3; D = 4; C = 1	2.28E-02	2.28E-02	2.28E-02	2.28E-02	2.28E-02	2.28E-02	2.28E-02	2.28E-02	2.28E-02	2.28E-02	2.28E-02	2.28E-02	2.28E-02	2.28E-02	2.28E-02
T = 0.8	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01	8.74E-01
T = 0.6	5.61E-01	5.61E-01	5.61E-01	5.61E-01	5.61E-01	5.61E-01	5.61E-01	5.61E-01	5.61E-01	5.61E-01	5.61E-01	5.61E-01	5.61E-01	5.61E-01	5.61E-01
T = 0.4	2.44E-01	2.44E-01	2.44E-01	2.44E-01	2.44E-01	2.44E-01	2.44E-01	2.44E-01	2.44E-01	2.44E-01	2.44E-01	2.44E-01	2.44E-01	2.44E-01	2.44E-01
T = 0.2	5.40E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02

Table 46: Feret diameter

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Feret diameter [cm]**														
L = 0; Z = 1.0	0.20	0.30	0.40	0.61	0.81	1.01	1.21	1.61	2.02	3.03	4.03	6.05	8.07	10.09	12.10
L = 0; Z = 0.25	0.32	0.48	0.64	0.95	1.27	1.59	1.91	2.54	3.18	4.76	6.35	9.53	12.70	15.88	19.05
L = 0; Z = 0.5	0.25	0.38	0.50	0.76	1.01	1.26	1.51	2.02	2.52	3.78	5.04	7.56	10.08	12.60	15.12
L = 0; Z = 2	0.32	0.48	0.64	0.95	1.27	1.59	1.91	2.54	3.18	4.76	6.35	9.53	12.70	15.88	19.05
L = 0; Z = 4	0.50	0.76	1.01	1.51	2.02	2.52	3.02	4.03	5.04	7.56	10.08	15.12	20.16	25.20	30.24
L = 0.3; D = 12; C = 0.3	0.25	0.38	0.50	0.76	1.01	1.26	1.51	2.02	2.52	3.78	5.04	7.56	10.09	12.61	15.13
L = 0.3; D = 12; C = 0.6	0.24	0.36	0.48	0.73	0.97	1.21	1.45	1.94	2.42	3.63	4.84	7.27	9.69	12.11	14.53
L = 0.3; D = 12; C = 1	0.23	0.34	0.45	0.68	0.90	1.13	1.35	1.80	2.25	3.38	4.50	6.75	9.01	11.26	13.51
L = 0.3; D = 1.5; C = 0.3	0.23	0.35	0.47	0.70	0.93	1.17	1.40	1.87	2.33	3.50	4.66	7.00	9.33	11.66	13.99
L = 0.3; D = 1.5; C = 0.6	0.23	0.35	0.47	0.70	0.93	1.16	1.40	1.86	2.33	3.49	4.65	6.98	9.31	11.63	13.96
L = 0.3; D = 1.5; C = 1	0.22	0.33	0.44	0.66	0.88	1.10	1.32	1.76	2.20	3.29	4.39	6.59	8.79	10.98	13.18
L = 0.3; D = 4; C = 0.3	0.25	0.37	0.50	0.75	1.00	1.24	1.49	1.99	2.49	3.73	4.98	7.47	9.96	12.45	14.94
L = 0.3; D = 4; C = 0.6	0.24	0.36	0.48	0.72	0.96	1.20	1.44	1.92	2.40	3.60	4.80	7.19	9.59	11.99	14.39
L = 0.3; D = 4; C = 1	0.22	0.34	0.45	0.67	0.89	1.12	1.34	1.79	2.24	3.35	4.47	6.71	8.94	11.18	13.41
L = 1; D = 12; C = 0.3	0.37	0.56	0.74	1.11	1.48	1.85	2.22	2.97	3.71	5.56	7.41	11.12	14.83	18.53	22.24
L = 1; D = 12; C = 0.6	0.32	0.48	0.64	0.96	1.28	1.60	1.92	2.56	3.20	4.80	6.40	9.61	12.81	16.01	19.21
L = 1; D = 12; C = 1	0.26	0.40	0.53	0.79	1.06	1.32	1.58	2.11	2.64	3.96	5.28	7.92	10.55	13.19	15.83
L = 1; D = 1.5; C = 0.3	0.32	0.48	0.64	0.96	1.28	1.61	1.93	2.57	3.21	4.82	6.42	9.64	12.85	16.06	19.27
L = 1; D = 1.5; C = 0.6	0.29	0.44	0.59	0.88	1.17	1.46	1.76	2.34	2.93	4.39	5.85	8.78	11.70	14.63	17.55
L = 1; D = 1.5; C = 1	0.25	0.38	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.75	5.00	7.51	10.01	12.51	15.01
L = 1; D = 4; C = 0.3	0.36	0.54	0.72	1.08	1.43	1.79	2.15	2.87	3.59	5.38	7.17	10.76	14.34	17.93	21.52
L = 1; D = 4; C = 0.6	0.31	0.47	0.62	0.93	1.24	1.56	1.87	2.49	3.11	4.67	6.22	9.33	12.44	15.55	18.66
L = 1; D = 4; C = 1	0.26	0.39	0.52	0.78	1.04	1.30	1.56	2.07	2.59	3.89	5.18	7.78	10.37	12.96	15.55
L = 3; D = 12; C = 0.3	0.67	1.00	1.33	2.00	2.67	3.34	4.00	5.34	6.67	10.01	13.35	20.02	26.69	33.37	40.04
L = 3; D = 12; C = 0.6	0.44	0.66	0.88	1.32	1.76	2.20	2.63	3.51	4.39	6.59	8.78	13.17	17.56	21.95	26.35
L = 3; D = 12; C = 1	0.31	0.47	0.62	0.93	1.24	1.56	1.87	2.49	3.11	4.67	6.22	9.34	12.45	15.56	18.67
L = 3; D = 1.5; C = 0.3	0.54	0.81	1.09	1.63	2.17	2.71	3.26	4.34	5.43	8.14	10.85	16.28	21.70	27.13	32.55
L = 3; D = 1.5; C = 0.6	0.38	0.56	0.75	1.13	1.50	1.88	2.26	3.01	3.76	5.64	7.52	11.28	15.04	18.79	22.55
L = 3; D = 1.5; C = 1	0.29	0.43	0.57	0.86	1.15	1.43	1.72	2.29	2.86	4.30	5.73	8.59	11.46	14.32	17.18
L = 3; D = 4; C = 0.3	0.61	0.91	1.21	1.82	2.43	3.04	3.64	4.86	6.07	9.11	12.14	18.21	24.28	30.36	36.43
L = 3; D = 4; C = 0.6	0.41	0.62	0.82	1.23	1.64	2.05	2.47	3.29	4.11	6.16	8.22	12.33	16.44	20.55	24.66
L = 3; D = 4; C = 1	0.30	0.45	0.60	0.91	1.21	1.51	1.81	2.41	3.02	4.53	6.03	9.05	12.07	15.08	18.10
T = 0.8	0.20	0.30	0.40	0.60	0.80	1.00	1.20	1.61	2.01	3.01	4.01	6.02	8.03	10.03	12.04
T = 0.6	0.20	0.31	0.41	0.61	0.82	1.02	1.23	1.64	2.05	3.07	4.09	6.14	8.18	10.23	12.28
T = 0.4	0.22	0.33	0.43	0.65	0.87	1.09	1.30	1.74	2.17	3.26	4.34	6.51	8.68	10.85	13.02
T = 0.2	0.25	0.38	0.51	0.76	1.02	1.27	1.53	2.03	2.54	3.81	5.08	7.63	10.17	12.71	15.25

Table 47: Length parameter (L)

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Length parameter (L)**														
L = 0; Z = 1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
L = 0; Z = 0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
L = 0; Z = 0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
L = 0; Z = 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
L = 0; Z = 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
L = 0.3; D = 12; C = 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 0.3; D = 12; C = 0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 0.3; D = 12; C = 1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 0.3; D = 1.5; C = 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 0.3; D = 1.5; C = 0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 0.3; D = 1.5; C = 1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 0.3; D = 4; C = 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 0.3; D = 4; C = 0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 0.3; D = 4; C = 1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 1; D = 12; C = 0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 1; D = 12; C = 0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 1; D = 12; C = 1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 1; D = 1.5; C = 0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 1; D = 1.5; C = 0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 1; D = 1.5; C = 1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 1; D = 4; C = 0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 1; D = 4; C = 0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 1; D = 4; C = 1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 3; D = 12; C = 0.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
L = 3; D = 12; C = 0.6	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
L = 3; D = 12; C = 1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
L = 3; D = 1.5; C = 0.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
L = 3; D = 1.5; C = 0.6	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
L = 3; D = 1.5; C = 1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
L = 3; D = 4; C = 0.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
L = 3; D = 4; C = 0.6	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
L = 3; D = 4; C = 1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
T = 0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
T = 0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
T = 0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
T = 0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 48: Density parameter (D)

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Density parameter (D); NaN = undefined**														
L = 0; Z = 1.0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
L = 0; Z = 0.25	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
L = 0; Z = 0.5	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
L = 0; Z = 2	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
L = 0; Z = 4	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
L = 0.3; D = 12; C = 0.3	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
L = 0.3; D = 12; C = 0.6	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
L = 0.3; D = 12; C = 1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
L = 0.3; D = 1.5; C = 0.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
L = 0.3; D = 1.5; C = 0.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
L = 0.3; D = 1.5; C = 1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
L = 0.3; D = 4; C = 0.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
L = 0.3; D = 4; C = 0.6	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
L = 0.3; D = 4; C = 1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
L = 1; D = 12; C = 0.3	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
L = 1; D = 12; C = 0.6	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
L = 1; D = 12; C = 1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
L = 1; D = 1.5; C = 0.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
L = 1; D = 1.5; C = 0.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
L = 1; D = 1.5; C = 1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
L = 1; D = 4; C = 0.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
L = 1; D = 4; C = 0.6	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
L = 1; D = 4; C = 1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
L = 3; D = 12; C = 0.3	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
L = 3; D = 12; C = 0.6	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
L = 3; D = 12; C = 1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
L = 3; D = 1.5; C = 0.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
L = 3; D = 1.5; C = 0.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
L = 3; D = 1.5; C = 1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
L = 3; D = 4; C = 0.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
L = 3; D = 4; C = 0.6	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
L = 3; D = 4; C = 1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
T = 0.8	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
T = 0.6	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
T = 0.4	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
T = 0.2	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

Table 49: Coverage parameter (C)

Volume (cc)	4.19E-03	1.41E-02	3.35E-02	1.13E-01	2.68E-01	5.24E-01	9.05E-01	2.14E+00	4.19E+00	1.41E+01	3.35E+01	1.13E+02	2.68E+02	5.24E+02	9.05E+02
Shape parameter set	**Coverage parameter (C); NaN = undefined**														
L = 0; Z = 1.0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
L = 0; Z = 0.25	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
L = 0; Z = 0.5	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
L = 0; Z = 2	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
L = 0; Z = 4	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
L = 0.3; D = 12; C = 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 0.3; D = 12; C = 0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
L = 0.3; D = 12; C = 1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 0.3; D = 1.5; C = 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 0.3; D = 1.5; C = 0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
L = 0.3; D = 1.5; C = 1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 0.3; D = 4; C = 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 0.3; D = 4; C = 0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
L = 0.3; D = 4; C = 1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 1; D = 12; C = 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 1; D = 12; C = 0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
L = 1; D = 12; C = 1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 1; D = 1.5; C = 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 1; D = 1.5; C = 0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
L = 1; D = 1.5; C = 1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 1; D = 4; C = 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 1; D = 4; C = 0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
L = 1; D = 4; C = 1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 3; D = 12; C = 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 3; D = 12; C = 0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
L = 3; D = 12; C = 1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 3; D = 1.5; C = 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 3; D = 1.5; C = 0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
L = 3; D = 1.5; C = 1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
L = 3; D = 4; C = 0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
L = 3; D = 4; C = 0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
L = 3; D = 4; C = 1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
T = 0.8	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
T = 0.6	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
T = 0.4	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
T = 0.2	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

SECTION 4: VALIDATION OF S-VALUE COMPUTATIONS

Figure 1: Relative differences between S-values computed by PARaDIM (mesh icosphere) vs. MIRDcalc (mathematical sphere)

Relative differences are computed as: $\frac{S_{\text{PARaDIM}} - S_{\text{MIRDcalc}}}{S_{\text{MIRDcalc}}} \times 100\%$