

Table of Contents

Part VI: Uncertainty Analysis

RESRAD Uncertainty Analysis Results

| | |
|---|----|
| Probabilistic Input | 2 |
| Total Dose | 3 |
| Total Risk | 4 |
| Dose vs Pathway: Ground External | 5 |
| Dose vs Pathway: Inhalation (w/o Radon) | 6 |
| Dose vs Pathway: Radon (Water Ind.) | 7 |
| Dose vs Pathway: Plant (Water Ind.) | 8 |
| Dose vs Pathway: Meat (Water Ind.) | 9 |
| Dose vs Pathway: Milk (Water Ind.) | 10 |
| Dose vs Pathway: Soil Ingestion | 11 |
| Dose vs Pathway: Water Ingestion | 12 |
| Dose vs Pathway: Fish Ingestion | 13 |
| Dose vs Pathway: Radon (Water Dep.) | 14 |
| Dose vs Pathway: Plant (Water Dep.) | 15 |
| Dose vs Pathway: Meat (Water Dep.) | 16 |
| Dose vs Pathway: Milk (Water Dep.) | 17 |
| Cumulative Probability Summary..... | 18 |
| Summary of dose at graphical times, reptition 1..... | 19 |
| Summary of dose at graphical times, reptition 2..... | 20 |
| Summary of dose at graphical times, reptition 3..... | 21 |
| Peak of the mean dose at graphical times..... | 22 |
| Correlation and Regression coefficients (if any)..... | 23 |

[illegible]

Probabilistic Total Dose Summary

| Nuclide (j) | Peak Time | Peak Dose | DOSE(j,t), mrem/yr | | | | | | | |
|----------------|--------------|--------------|--------------------|----------|----------|----------|----------|----------|----------|----------|
| | | t= | 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| Pu-239 | | | | | | | | | | |
| Min | 0.00E+00 | 3.23E-01 | 1.86E-01 | 1.86E-01 | 1.86E-01 | 1.86E-01 | 1.86E-01 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | 1.00E+03 | 4.49E+02 | 4.49E+02 | 4.43E+02 | 4.32E+02 | 3.94E+02 | 3.04E+02 | 1.22E+02 | 5.70E+01 | 1.84E+01 |
| Avg | 1.93E+02 | 1.25E+01 | 1.23E+01 | 1.23E+01 | 1.23E+01 | 1.21E+01 | 1.16E+01 | 1.03E+01 | 8.17E+00 | 4.34E+00 |
| Std | 2.95E+02 | 2.56E+01 | 2.56E+01 | 2.54E+01 | 2.51E+01 | 2.38E+01 | 2.08E+01 | 1.46E+01 | 8.53E+00 | 3.34E+00 |
| ALL | | | | | | | | | | |
| Min | 0.00E+00 | 3.23E-01 | 1.86E-01 | 1.86E-01 | 1.86E-01 | 1.86E-01 | 1.86E-01 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | 1.00E+03 | 4.49E+02 | 4.49E+02 | 4.43E+02 | 4.32E+02 | 3.94E+02 | 3.04E+02 | 1.22E+02 | 5.70E+01 | 1.84E+01 |
| Avg | 1.93E+02 | 1.25E+01 | 1.23E+01 | 1.23E+01 | 1.23E+01 | 1.21E+01 | 1.16E+01 | 1.03E+01 | 8.17E+00 | 4.34E+00 |
| Std | 2.95E+02 | 2.56E+01 | 2.56E+01 | 2.54E+01 | 2.51E+01 | 2.38E+01 | 2.08E+01 | 1.46E+01 | 8.53E+00 | 3.34E+00 |

ALL is total dose summed for all nuclides.

Probabilistic Risk Summary

| Nuclide | | RISK(j,t) | | | | | | | |
|---------|----|-----------|----------|----------|----------|----------|----------|----------|----------|
| (j) | t= | 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| <hr/> | | | | | | | | | |
| Pu-239 | | | | | | | | | |
| Min | | 2.23E-07 | 2.23E-07 | 2.23E-07 | 2.23E-07 | 2.23E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 5.30E-04 | 5.23E-04 | 5.09E-04 | 4.65E-04 | 3.58E-04 | 1.44E-04 | 6.63E-05 | 2.27E-05 |
| Avg | | 1.46E-05 | 1.46E-05 | 1.45E-05 | 1.43E-05 | 1.38E-05 | 1.23E-05 | 9.76E-06 | 5.27E-06 |
| Std | | 3.01E-05 | 2.99E-05 | 2.94E-05 | 2.80E-05 | 2.44E-05 | 1.71E-05 | 9.99E-06 | 3.90E-06 |
| <hr/> | | | | | | | | | |
| U-235 | | | | | | | | | |
| Min | | 2.23E-07 | 2.23E-07 | 2.23E-07 | 2.23E-07 | 2.23E-07 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 5.30E-04 | 5.23E-04 | 5.09E-04 | 4.65E-04 | 3.58E-04 | 1.44E-04 | 6.63E-05 | 2.27E-05 |
| Avg | | 1.46E-05 | 1.46E-05 | 1.45E-05 | 1.43E-05 | 1.38E-05 | 1.23E-05 | 9.76E-06 | 5.27E-06 |
| Std | | 3.01E-05 | 2.99E-05 | 2.94E-05 | 2.80E-05 | 2.44E-05 | 1.71E-05 | 9.99E-06 | 3.90E-06 |
| <hr/> | | | | | | | | | |

ALL is total risk summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

| Nuclide | | DOSE(i,j,t), mrem/yr | | | | | | | |
|---------|----|----------------------|----------|----------|----------|----------|----------|----------|----------|
| (j) | t= | 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| <hr/> | | | | | | | | | |
| Pu-239 | | | | | | | | | |
| Min | | 9.23E-13 | 9.14E-13 | 8.97E-13 | 8.39E-13 | 6.92E-13 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 1.12E-11 | 5.38E-10 | 1.23E-06 | 1.37E-04 | 1.37E-04 | 1.37E-04 | 1.36E-04 | 1.33E-04 |
| Avg | | 1.01E-12 | 2.52E-12 | 1.77E-09 | 1.57E-06 | 3.55E-06 | 5.49E-06 | 3.06E-05 | 6.85E-05 |
| Std | | 5.52E-13 | 2.08E-11 | 3.81E-08 | 1.42E-05 | 2.16E-05 | 2.63E-05 | 5.27E-05 | 5.39E-05 |
| <hr/> | | | | | | | | | |
| ALL | | | | | | | | | |
| Min | | 9.23E-13 | 9.14E-13 | 8.97E-13 | 8.39E-13 | 6.92E-13 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 1.12E-11 | 5.38E-10 | 1.23E-06 | 1.37E-04 | 1.37E-04 | 1.37E-04 | 1.36E-04 | 1.33E-04 |
| Avg | | 1.01E-12 | 2.52E-12 | 1.77E-09 | 1.57E-06 | 3.55E-06 | 5.49E-06 | 3.06E-05 | 6.85E-05 |
| Std | | 5.52E-13 | 2.08E-11 | 3.81E-08 | 1.42E-05 | 2.16E-05 | 2.63E-05 | 5.27E-05 | 5.39E-05 |
| <hr/> | | | | | | | | | |

ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Inhalation (w/o Radon)

| Nuclide | | DOSE(i,j,t), mrem/yr | | | | | | | |
|---------|----|----------------------|----------|----------|----------|----------|----------|----------|----------|
| (j) | t= | 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| <hr/> | | | | | | | | | |
| Pu-239 | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 0.00E+00 | 0.00E+00 | 2.62E-03 | 1.24E-02 | 1.29E-02 | 1.26E-02 | 2.19E-02 | 2.17E-02 |
| Avg | | 0.00E+00 | 0.00E+00 | 2.43E-06 | 6.55E-05 | 1.42E-04 | 2.13E-04 | 1.31E-03 | 2.62E-03 |
| Std | | 0.00E+00 | 0.00E+00 | 7.05E-05 | 6.43E-04 | 9.37E-04 | 1.12E-03 | 2.49E-03 | 2.77E-03 |
| <hr/> | | | | | | | | | |
| TOTAL | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 0.00E+00 | 0.00E+00 | 2.62E-03 | 1.24E-02 | 1.29E-02 | 1.26E-02 | 2.19E-02 | 2.17E-02 |
| Avg | | 0.00E+00 | 0.00E+00 | 2.43E-06 | 6.55E-05 | 1.42E-04 | 2.13E-04 | 1.31E-03 | 2.62E-03 |
| Std | | 0.00E+00 | 0.00E+00 | 7.05E-05 | 6.43E-04 | 9.37E-04 | 1.12E-03 | 2.49E-03 | 2.77E-03 |
| <hr/> | | | | | | | | | |

TOTAL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Radon (Water Ind.)

| Nuclide | | DOSE(i,j,t), mrem/yr | | | | | | | |
|---------|----|----------------------|----------|----------|----------|----------|----------|----------|----------|
| (j) | t= | 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| <hr/> | | | | | | | | | |
| Pu-239 | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Avg | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Std | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| U-235 | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Avg | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Std | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| <hr/> | | | | | | | | | |

U-235 is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Plant (Water Ind.)

| Nuclide | | DOSE(i,j,t), mrem/yr | | | | | | | |
|---------|----|----------------------|----------|----------|----------|----------|----------|----------|----------|
| (j) | t= | 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| Pu-239 | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 6.76E-01 | 7.08E-01 | 7.74E-01 | 8.65E-01 | 8.64E-01 | 8.62E-01 | 8.57E-01 | 8.37E-01 |
| Avg | | 4.04E-01 | 4.06E-01 | 4.09E-01 | 4.18E-01 | 4.32E-01 | 4.69E-01 | 5.62E-01 | 5.20E-01 |
| Std | | 2.37E-01 | 2.36E-01 | 2.36E-01 | 2.40E-01 | 2.42E-01 | 2.39E-01 | 2.42E-01 | 2.56E-01 |
| U-235 | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 6.76E-01 | 7.08E-01 | 7.74E-01 | 8.65E-01 | 8.64E-01 | 8.62E-01 | 8.57E-01 | 8.37E-01 |
| Avg | | 4.04E-01 | 4.06E-01 | 4.09E-01 | 4.18E-01 | 4.32E-01 | 4.69E-01 | 5.62E-01 | 5.20E-01 |
| Std | | 2.37E-01 | 2.36E-01 | 2.36E-01 | 2.40E-01 | 2.42E-01 | 2.39E-01 | 2.42E-01 | 2.56E-01 |

ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Meat (Water Ind.)

| Nuclide | | DOSE(i,j,t), mrem/yr | | | | | | | |
|---------|----|----------------------|----------|----------|----------|----------|----------|----------|----------|
| (j) | t= | 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| Pu-239 | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 8.47E-04 | 8.85E-04 | 4.26E-03 | 1.64E-02 | 1.64E-02 | 1.64E-02 | 1.63E-02 | 1.59E-02 |
| Avg | | 5.09E-04 | 5.10E-04 | 5.19E-04 | 7.23E-04 | 9.68E-04 | 1.23E-03 | 4.68E-03 | 8.69E-03 |
| Std | | 2.98E-04 | 2.98E-04 | 3.25E-04 | 1.76E-03 | 2.57E-03 | 3.07E-03 | 6.25E-03 | 6.08E-03 |
| UALL | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 8.47E-04 | 8.85E-04 | 4.26E-03 | 1.64E-02 | 1.64E-02 | 1.64E-02 | 1.63E-02 | 1.59E-02 |
| Avg | | 5.09E-04 | 5.10E-04 | 5.19E-04 | 7.23E-04 | 9.68E-04 | 1.23E-03 | 4.68E-03 | 8.69E-03 |
| Std | | 2.98E-04 | 2.98E-04 | 3.25E-04 | 1.76E-03 | 2.57E-03 | 3.07E-03 | 6.25E-03 | 6.08E-03 |

UALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Milk (Water Ind.)

| Nuclide | | DOSE(i,j,t), mrem/yr | | | | | | | |
|---------|----|----------------------|----------|----------|----------|----------|----------|----------|----------|
| (j) | t= | 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| Pu-239 | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 8.64E-05 | 9.03E-05 | 2.56E-04 | 7.81E-04 | 7.81E-04 | 7.79E-04 | 7.74E-04 | 7.56E-04 |
| Avg | | 5.18E-05 | 5.19E-05 | 5.26E-05 | 6.22E-05 | 7.39E-05 | 8.79E-05 | 2.46E-04 | 4.17E-04 |
| Std | | 3.03E-05 | 3.03E-05 | 3.11E-05 | 8.50E-05 | 1.20E-04 | 1.42E-04 | 2.84E-04 | 2.80E-04 |
| ΣALL | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 8.64E-05 | 9.03E-05 | 2.56E-04 | 7.81E-04 | 7.81E-04 | 7.79E-04 | 7.74E-04 | 7.56E-04 |
| Avg | | 5.18E-05 | 5.19E-05 | 5.26E-05 | 6.22E-05 | 7.39E-05 | 8.79E-05 | 2.46E-04 | 4.17E-04 |
| Std | | 3.03E-05 | 3.03E-05 | 3.11E-05 | 8.50E-05 | 1.20E-04 | 1.42E-04 | 2.84E-04 | 2.80E-04 |

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\BFM INSITU UNCERTAINTY ANALYSIS\FCS BFM INSITU UA PU-239.RAD

Probabilistic Dose vs Pathway(i): Soil Ingestion

| Nuclide | | DOSE(i,j,t), mrem/yr | | | | | | | |
|---------|----|----------------------|----------|----------|----------|----------|----------|----------|----------|
| (j) | t= | 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| <hr/> | | | | | | | | | |
| Pu-239 | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 0.00E+00 | 0.00E+00 | 1.21E-02 | 5.05E-02 | 5.05E-02 | 5.04E-02 | 5.00E-02 | 4.89E-02 |
| Avg | | 0.00E+00 | 0.00E+00 | 1.81E-05 | 6.52E-04 | 1.40E-03 | 2.10E-03 | 1.31E-02 | 2.64E-02 |
| Std | | 0.00E+00 | 0.00E+00 | 4.31E-04 | 5.51E-03 | 8.10E-03 | 9.75E-03 | 1.99E-02 | 1.92E-02 |
| <hr/> | | | | | | | | | |
| U-235 | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 0.00E+00 | 0.00E+00 | 1.21E-02 | 5.05E-02 | 5.05E-02 | 5.04E-02 | 5.00E-02 | 4.89E-02 |
| Avg | | 0.00E+00 | 0.00E+00 | 1.81E-05 | 6.52E-04 | 1.40E-03 | 2.10E-03 | 1.31E-02 | 2.64E-02 |
| Std | | 0.00E+00 | 0.00E+00 | 4.31E-04 | 5.51E-03 | 8.10E-03 | 9.75E-03 | 1.99E-02 | 1.92E-02 |
| <hr/> | | | | | | | | | |

U-235 is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Water Ingestion

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\BFM INSITU UNCERTAINTY ANALYSIS\FCS BFM INSITU UA PU-239.RAD

Probabilistic Dose vs Pathway(i): Fish Ingestion

| Nuclide | | DOSE(i,j,t), mrem/yr | | | | | | | |
|---------|----|----------------------|----------|----------|----------|----------|----------|----------|----------|
| (j) | t= | 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| <hr/> | | | | | | | | | |
| Pu-239 | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Avg | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Std | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| ALL | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Avg | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Std | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| <hr/> | | | | | | | | | |

ALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\BFM INSITU UNCERTAINTY ANALYSIS\FCS BFM INSITU UA PU-239.RAD

Probabilistic Dose vs Pathway(i): Radon (Water Dep.)

| Nuclide | | DOSE(i,j,t), mrem/yr | | | | | | | |
|---------|----|----------------------|----------|----------|----------|----------|----------|----------|----------|
| (j) | t= | 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| <hr/> | | | | | | | | | |
| Pu-239 | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Avg | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Std | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| ALL | | | | | | | | | |
| Min | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Avg | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Std | | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| <hr/> | | | | | | | | | |

ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Plant (Water Dep.)

| Nuclide | | DOSE(i,j,t), mrem/yr | | | | | | | |
|---------|----|----------------------|----------|----------|----------|----------|----------|----------|----------|
| (j) | t= | 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| | | | | | | | | | |
| Pu-239 | | | | | | | | | |
| Min | | 1.56E-03 | 1.56E-03 | 1.56E-03 | 1.55E-03 | 1.55E-03 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 3.78E+01 | 3.73E+01 | 3.63E+01 | 3.32E+01 | 2.56E+01 | 2.01E+01 | 1.05E+01 | 4.58E+00 |
| Avg | | 9.79E-01 | 9.77E-01 | 9.73E-01 | 9.59E-01 | 9.23E-01 | 8.19E-01 | 6.34E-01 | 3.18E-01 |
| Std | | 2.23E+00 | 2.22E+00 | 2.19E+00 | 2.11E+00 | 1.91E+00 | 1.47E+00 | 9.16E-01 | 3.98E-01 |
| TOTAL | | | | | | | | | |
| Min | | 1.56E-03 | 1.56E-03 | 1.56E-03 | 1.55E-03 | 1.55E-03 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 3.78E+01 | 3.73E+01 | 3.63E+01 | 3.32E+01 | 2.56E+01 | 2.01E+01 | 1.05E+01 | 4.58E+00 |
| Avg | | 9.79E-01 | 9.77E-01 | 9.73E-01 | 9.59E-01 | 9.23E-01 | 8.19E-01 | 6.34E-01 | 3.18E-01 |
| Std | | 2.23E+00 | 2.22E+00 | 2.19E+00 | 2.11E+00 | 1.91E+00 | 1.47E+00 | 9.16E-01 | 3.98E-01 |

TOTAL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Meat (Water Dep.)

| Nuclide | | DOSE(i,j,t), mrem/yr | | | | | | | |
|---------|----|----------------------|----------|----------|----------|----------|----------|----------|----------|
| (j) | t= | 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| Pu-239 | | | | | | | | | |
| Min | | 3.04E-05 | 3.04E-05 | 3.04E-05 | 3.04E-05 | 3.04E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 3.89E-01 | 3.84E-01 | 3.74E-01 | 3.41E-01 | 2.63E-01 | 1.13E-01 | 6.53E-02 | 1.90E-02 |
| Avg | | 1.12E-02 | 1.12E-02 | 1.11E-02 | 1.10E-02 | 1.05E-02 | 9.30E-03 | 7.16E-03 | 3.56E-03 |
| Std | | 2.36E-02 | 2.34E-02 | 2.31E-02 | 2.20E-02 | 1.95E-02 | 1.40E-02 | 8.27E-03 | 3.25E-03 |
| TOTAL | | | | | | | | | |
| Min | | 3.04E-05 | 3.04E-05 | 3.04E-05 | 3.04E-05 | 3.04E-05 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | | 3.89E-01 | 3.84E-01 | 3.74E-01 | 3.41E-01 | 2.63E-01 | 1.13E-01 | 6.53E-02 | 1.90E-02 |
| Avg | | 1.12E-02 | 1.12E-02 | 1.11E-02 | 1.10E-02 | 1.05E-02 | 9.30E-03 | 7.16E-03 | 3.56E-03 |
| Std | | 2.36E-02 | 2.34E-02 | 2.31E-02 | 2.20E-02 | 1.95E-02 | 1.40E-02 | 8.27E-03 | 3.25E-03 |

TOTAL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\BFM INSITU UNCERTAINTY ANALYSIS\FCS BFM INSITU UA PU-239.RAD

Probabilistic Dose vs Pathway(i): Milk (Water Dep.)

| Nuclide (j) | DOSE(i,j,t), mrem/yr | | | | | | | |
|----------------|----------------------|----------|----------|----------|----------|----------|----------|----------|
| | t= 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| <hr/> | | | | | | | | |
| Pu-239 | | | | | | | | |
| Min | 2.20E-06 | 2.20E-06 | 2.20E-06 | 2.20E-06 | 2.20E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | 2.61E-02 | 2.57E-02 | 2.51E-02 | 2.29E-02 | 1.76E-02 | 8.48E-03 | 4.88E-03 | 1.50E-03 |
| Avg | 7.83E-04 | 7.81E-04 | 7.78E-04 | 7.66E-04 | 7.35E-04 | 6.50E-04 | 5.01E-04 | 2.49E-04 |
| Std | 1.63E-03 | 1.62E-03 | 1.60E-03 | 1.53E-03 | 1.36E-03 | 9.98E-04 | 5.91E-04 | 2.33E-04 |
| ΣALL | | | | | | | | |
| Min | 2.20E-06 | 2.20E-06 | 2.20E-06 | 2.20E-06 | 2.20E-06 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Max | 2.61E-02 | 2.57E-02 | 2.51E-02 | 2.29E-02 | 1.76E-02 | 8.48E-03 | 4.88E-03 | 1.50E-03 |
| Avg | 7.83E-04 | 7.81E-04 | 7.78E-04 | 7.66E-04 | 7.35E-04 | 6.50E-04 | 5.01E-04 | 2.49E-04 |
| Std | 1.63E-03 | 1.62E-03 | 1.60E-03 | 1.53E-03 | 1.36E-03 | 9.98E-04 | 5.91E-04 | 2.33E-04 |
| <hr/> | | | | | | | | |

ΣALL is total pathway dose summed for all nuclides.

| Cumulative Probability Summary for: Total Dose Over Pathways | | | | | | | | | |
|--|------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Cumulative | Dose(t), mrem/yr | | | | | | | | |
| Probability | t= | 0.00E+00 | 1.00E+00 | 3.00E+00 | 1.00E+01 | 3.00E+01 | 1.00E+02 | 3.00E+02 | 1.00E+03 |
| | | | | | | | | | |
| 0.025 | | 6.74E-01 | 6.74E-01 | 6.74E-01 | 6.74E-01 | 6.86E-01 | 7.16E-01 | 7.38E-01 | 0.00E+00 |
| 0.050 | | 8.67E-01 | 8.66E-01 | 8.72E-01 | 8.80E-01 | 8.87E-01 | 9.10E-01 | 1.01E+00 | 5.43E-01 |
| 0.075 | | 1.02E+00 | 1.02E+00 | 1.02E+00 | 1.02E+00 | 1.03E+00 | 1.09E+00 | 1.17E+00 | 8.45E-01 |
| 0.100 | | 1.16E+00 | 1.16E+00 | 1.16E+00 | 1.16E+00 | 1.17E+00 | 1.21E+00 | 1.34E+00 | 1.04E+00 |
| 0.125 | | 1.31E+00 | 1.31E+00 | 1.31E+00 | 1.32E+00 | 1.34E+00 | 1.41E+00 | 1.49E+00 | 1.17E+00 |
| 0.150 | | 1.52E+00 | 1.52E+00 | 1.52E+00 | 1.53E+00 | 1.54E+00 | 1.58E+00 | 1.66E+00 | 1.28E+00 |
| 0.175 | | 1.70E+00 | 1.70E+00 | 1.70E+00 | 1.71E+00 | 1.72E+00 | 1.74E+00 | 1.84E+00 | 1.41E+00 |
| 0.200 | | 1.84E+00 | 1.84E+00 | 1.84E+00 | 1.85E+00 | 1.86E+00 | 1.92E+00 | 2.00E+00 | 1.51E+00 |
| 0.225 | | 2.05E+00 | 2.05E+00 | 2.05E+00 | 2.07E+00 | 2.07E+00 | 2.11E+00 | 2.21E+00 | 1.65E+00 |
| 0.250 | | 2.25E+00 | 2.25E+00 | 2.25E+00 | 2.26E+00 | 2.27E+00 | 2.34E+00 | 2.39E+00 | 1.79E+00 |
| 0.275 | | 2.47E+00 | 2.47E+00 | 2.48E+00 | 2.48E+00 | 2.50E+00 | 2.51E+00 | 2.57E+00 | 1.91E+00 |
| 0.300 | | 2.62E+00 | 2.62E+00 | 2.64E+00 | 2.64E+00 | 2.65E+00 | 2.67E+00 | 2.71E+00 | 2.07E+00 |
| 0.325 | | 2.82E+00 | 2.82E+00 | 2.82E+00 | 2.84E+00 | 2.87E+00 | 2.87E+00 | 2.92E+00 | 2.18E+00 |
| 0.350 | | 3.08E+00 | 3.08E+00 | 3.08E+00 | 3.09E+00 | 3.10E+00 | 3.12E+00 | 3.19E+00 | 2.31E+00 |
| 0.375 | | 3.35E+00 | 3.35E+00 | 3.35E+00 | 3.36E+00 | 3.37E+00 | 3.39E+00 | 3.41E+00 | 2.45E+00 |
| 0.400 | | 3.64E+00 | 3.64E+00 | 3.64E+00 | 3.67E+00 | 3.67E+00 | 3.71E+00 | 3.64E+00 | 2.57E+00 |
| 0.425 | | 3.94E+00 | 3.94E+00 | 3.94E+00 | 3.95E+00 | 3.96E+00 | 3.96E+00 | 3.92E+00 | 2.76E+00 |
| 0.450 | | 4.29E+00 | 4.29E+00 | 4.30E+00 | 4.31E+00 | 4.33E+00 | 4.31E+00 | 4.26E+00 | 2.99E+00 |
| 0.475 | | 4.63E+00 | 4.63E+00 | 4.63E+00 | 4.64E+00 | 4.65E+00 | 4.67E+00 | 4.59E+00 | 3.14E+00 |
| 0.500 | | 5.04E+00 | 5.04E+00 | 5.04E+00 | 5.03E+00 | 5.02E+00 | 5.01E+00 | 4.94E+00 | 3.40E+00 |
| 0.525 | | 5.41E+00 | 5.42E+00 | 5.42E+00 | 5.42E+00 | 5.43E+00 | 5.44E+00 | 5.36E+00 | 3.66E+00 |
| 0.550 | | 5.93E+00 | 5.93E+00 | 5.94E+00 | 5.94E+00 | 5.94E+00 | 5.90E+00 | 5.75E+00 | 3.87E+00 |
| 0.575 | | 6.39E+00 | 6.39E+00 | 6.38E+00 | 6.42E+00 | 6.40E+00 | 6.36E+00 | 6.15E+00 | 4.09E+00 |
| 0.600 | | 7.02E+00 | 7.02E+00 | 7.02E+00 | 7.03E+00 | 7.00E+00 | 6.91E+00 | 6.65E+00 | 4.35E+00 |
| 0.625 | | 7.59E+00 | 7.59E+00 | 7.58E+00 | 7.57E+00 | 7.56E+00 | 7.45E+00 | 7.19E+00 | 4.59E+00 |
| 0.650 | | 8.24E+00 | 8.27E+00 | 8.31E+00 | 8.29E+00 | 8.26E+00 | 8.19E+00 | 7.84E+00 | 4.88E+00 |
| 0.675 | | 9.17E+00 | 9.17E+00 | 9.16E+00 | 9.18E+00 | 9.12E+00 | 8.95E+00 | 8.47E+00 | 5.19E+00 |
| 0.700 | | 1.01E+01 | 1.01E+01 | 1.01E+01 | 1.01E+01 | 1.01E+01 | 9.82E+00 | 9.14E+00 | 5.51E+00 |
| 0.725 | | 1.10E+01 | 1.10E+01 | 1.10E+01 | 1.10E+01 | 1.09E+01 | 1.07E+01 | 9.81E+00 | 5.92E+00 |
| 0.750 | | 1.24E+01 | 1.24E+01 | 1.24E+01 | 1.23E+01 | 1.22E+01 | 1.18E+01 | 1.08E+01 | 6.33E+00 |
| 0.775 | | 1.35E+01 | 1.35E+01 | 1.35E+01 | 1.35E+01 | 1.34E+01 | 1.30E+01 | 1.16E+01 | 6.74E+00 |
| 0.800 | | 1.52E+01 | 1.52E+01 | 1.52E+01 | 1.51E+01 | 1.49E+01 | 1.43E+01 | 1.28E+01 | 6.99E+00 |
| 0.825 | | 1.73E+01 | 1.73E+01 | 1.73E+01 | 1.72E+01 | 1.69E+01 | 1.61E+01 | 1.40E+01 | 7.44E+00 |
| 0.850 | | 2.03E+01 | 2.02E+01 | 2.02E+01 | 2.01E+01 | 1.98E+01 | 1.89E+01 | 1.61E+01 | 8.07E+00 |
| 0.875 | | 2.30E+01 | 2.30E+01 | 2.30E+01 | 2.28E+01 | 2.25E+01 | 2.15E+01 | 1.81E+01 | 8.54E+00 |
| 0.900 | | 2.76E+01 | 2.76E+01 | 2.75E+01 | 2.74E+01 | 2.70E+01 | 2.54E+01 | 2.01E+01 | 9.18E+00 |
| 0.925 | | 3.43E+01 | 3.43E+01 | 3.43E+01 | 3.41E+01 | 3.32E+01 | 3.08E+01 | 2.31E+01 | 9.89E+00 |
| 0.950 | | 4.55E+01 | 4.54E+01 | 4.53E+01 | 4.49E+01 | 4.36E+01 | 3.90E+01 | 2.75E+01 | 1.10E+01 |
| 0.975 | | 7.09E+01 | 7.08E+01 | 7.05E+01 | 6.90E+01 | 6.45E+01 | 5.41E+01 | 3.22E+01 | 1.26E+01 |
| 1.000 | | 4.49E+02 | 4.43E+02 | 4.32E+02 | 3.94E+02 | 3.04E+02 | 1.22E+02 | 5.70E+01 | 1.84E+01 |

| Summary of dose at graphical times, reptition 1 | | | | | | | | |
|---|---|----------|----------|----------|----------|----------|----------|----------|
| Time | Dose statistics at graphical times, mrem/yr | | | | | | | |
| Years | Minimum | Maximum | Mean | Median | 90% | 95% | 97.5% | 99% |
| 0.00E+00 | 2.87E-01 | 2.42E+02 | 1.21E+01 | 5.05E+00 | 2.77E+01 | 4.54E+01 | 7.21E+01 | 1.27E+02 |
| 1.00E+00 | 2.88E-01 | 2.40E+02 | 1.20E+01 | 5.05E+00 | 2.77E+01 | 4.54E+01 | 7.19E+01 | 1.26E+02 |
| 1.06E+00 | 2.88E-01 | 2.40E+02 | 1.20E+01 | 5.05E+00 | 2.77E+01 | 4.54E+01 | 7.19E+01 | 1.26E+02 |
| 1.12E+00 | 2.88E-01 | 2.40E+02 | 1.20E+01 | 5.05E+00 | 2.77E+01 | 4.54E+01 | 7.19E+01 | 1.26E+02 |
| 1.19E+00 | 2.88E-01 | 2.39E+02 | 1.20E+01 | 5.05E+00 | 2.77E+01 | 4.54E+01 | 7.19E+01 | 1.26E+02 |
| 1.25E+00 | 2.88E-01 | 2.39E+02 | 1.20E+01 | 5.05E+00 | 2.77E+01 | 4.54E+01 | 7.19E+01 | 1.26E+02 |
| 1.33E+00 | 2.88E-01 | 2.39E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.54E+01 | 7.19E+01 | 1.26E+02 |
| 1.40E+00 | 2.88E-01 | 2.39E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.54E+01 | 7.19E+01 | 1.26E+02 |
| 1.49E+00 | 2.88E-01 | 2.39E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.54E+01 | 7.18E+01 | 1.26E+02 |
| 1.57E+00 | 2.88E-01 | 2.39E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.18E+01 | 1.26E+02 |
| 1.66E+00 | 2.88E-01 | 2.39E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.18E+01 | 1.26E+02 |
| 1.76E+00 | 2.88E-01 | 2.38E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.18E+01 | 1.26E+02 |
| 1.86E+00 | 2.89E-01 | 2.38E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.18E+01 | 1.26E+02 |
| 1.97E+00 | 2.89E-01 | 2.38E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.18E+01 | 1.26E+02 |
| 2.09E+00 | 2.89E-01 | 2.38E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.17E+01 | 1.26E+02 |
| 2.21E+00 | 2.89E-01 | 2.38E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.17E+01 | 1.26E+02 |
| 2.34E+00 | 2.89E-01 | 2.37E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.17E+01 | 1.26E+02 |
| 2.47E+00 | 2.89E-01 | 2.37E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.17E+01 | 1.26E+02 |
| 2.62E+00 | 2.89E-01 | 2.37E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.16E+01 | 1.26E+02 |
| 2.77E+00 | 2.90E-01 | 2.36E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.16E+01 | 1.25E+02 |
| 2.93E+00 | 2.90E-01 | 2.36E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.16E+01 | 1.25E+02 |
| 3.00E+00 | 2.90E-01 | 2.36E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.16E+01 | 1.25E+02 |
| 3.10E+00 | 2.90E-01 | 2.36E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.15E+01 | 1.25E+02 |
| 3.28E+00 | 2.90E-01 | 2.36E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.53E+01 | 7.15E+01 | 1.25E+02 |
| 3.48E+00 | 2.90E-01 | 2.35E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.52E+01 | 7.15E+01 | 1.25E+02 |
| 3.68E+00 | 2.90E-01 | 2.35E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.52E+01 | 7.14E+01 | 1.25E+02 |
| 3.89E+00 | 2.91E-01 | 2.34E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.52E+01 | 7.14E+01 | 1.25E+02 |
| 4.12E+00 | 2.91E-01 | 2.34E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.52E+01 | 7.13E+01 | 1.25E+02 |
| 4.36E+00 | 2.91E-01 | 2.34E+02 | 1.20E+01 | 5.05E+00 | 2.76E+01 | 4.52E+01 | 7.13E+01 | 1.25E+02 |
| 4.61E+00 | 2.91E-01 | 2.33E+02 | 1.20E+01 | 5.05E+00 | 2.75E+01 | 4.52E+01 | 7.12E+01 | 1.25E+02 |
| 4.88E+00 | 2.92E-01 | 2.33E+02 | 1.20E+01 | 5.04E+00 | 2.75E+01 | 4.52E+01 | 7.12E+01 | 1.25E+02 |
| 5.17E+00 | 2.92E-01 | 2.32E+02 | 1.20E+01 | 5.04E+00 | 2.75E+01 | 4.51E+01 | 7.11E+01 | 1.24E+02 |
| 5.47E+00 | 2.92E-01 | 2.32E+02 | 1.19E+01 | 5.04E+00 | 2.75E+01 | 4.51E+01 | 7.11E+01 | 1.24E+02 |
| 5.78E+00 | 2.93E-01 | 2.31E+02 | 1.19E+01 | 5.04E+00 | 2.75E+01 | 4.51E+01 | 7.10E+01 | 1.24E+02 |
| 6.12E+00 | 2.93E-01 | 2.30E+02 | 1.19E+01 | 5.04E+00 | 2.75E+01 | 4.51E+01 | 7.10E+01 | 1.24E+02 |
| 6.48E+00 | 2.93E-01 | 2.30E+02 | 1.19E+01 | 5.04E+00 | 2.75E+01 | 4.51E+01 | 7.09E+01 | 1.24E+02 |
| 6.86E+00 | 2.94E-01 | 2.29E+02 | 1.19E+01 | 5.04E+00 | 2.75E+01 | 4.50E+01 | 7.08E+01 | 1.24E+02 |
| 7.26E+00 | 2.94E-01 | 2.28E+02 | 1.19E+01 | 5.04E+00 | 2.75E+01 | 4.50E+01 | 7.07E+01 | 1.24E+02 |
| 7.68E+00 | 2.95E-01 | 2.28E+02 | 1.19E+01 | 5.04E+00 | 2.74E+01 | 4.50E+01 | 7.07E+01 | 1.23E+02 |
| 8.13E+00 | 2.95E-01 | 2.27E+02 | 1.19E+01 | 5.04E+00 | 2.74E+01 | 4.50E+01 | 7.06E+01 | 1.23E+02 |
| 8.60E+00 | 2.96E-01 | 2.26E+02 | 1.19E+01 | 5.04E+00 | 2.74E+01 | 4.49E+01 | 7.05E+01 | 1.23E+02 |
| 9.10E+00 | 2.96E-01 | 2.25E+02 | 1.19E+01 | 5.04E+00 | 2.74E+01 | 4.49E+01 | 7.04E+01 | 1.23E+02 |
| 9.63E+00 | 2.97E-01 | 2.24E+02 | 1.19E+01 | 5.04E+00 | 2.74E+01 | 4.49E+01 | 7.03E+01 | 1.23E+02 |
| 1.00E+01 | 2.97E-01 | 2.24E+02 | 1.19E+01 | 5.04E+00 | 2.74E+01 | 4.49E+01 | 7.02E+01 | 1.23E+02 |
| 1.02E+01 | 2.97E-01 | 2.23E+02 | 1.18E+01 | 5.04E+00 | 2.74E+01 | 4.49E+01 | 7.02E+01 | 1.22E+02 |
| 1.08E+01 | 2.98E-01 | 2.22E+02 | 1.18E+01 | 5.04E+00 | 2.74E+01 | 4.48E+01 | 7.01E+01 | 1.22E+02 |
| 1.14E+01 | 2.99E-01 | 2.21E+02 | 1.18E+01 | 5.04E+00 | 2.74E+01 | 4.48E+01 | 6.99E+01 | 1.22E+02 |
| 1.21E+01 | 3.00E-01 | 2.20E+02 | 1.18E+01 | 5.04E+00 | 2.73E+01 | 4.47E+01 | 6.98E+01 | 1.22E+02 |
| 1.28E+01 | 3.00E-01 | 2.19E+02 | 1.18E+01 | 5.04E+00 | 2.73E+01 | 4.47E+01 | 6.97E+01 | 1.21E+02 |
| 1.35E+01 | 3.00E-01 | 2.17E+02 | 1.18E+01 | 5.04E+00 | 2.73E+01 | 4.46E+01 | 6.95E+01 | 1.21E+02 |
| 1.43E+01 | 3.00E-01 | 2.16E+02 | 1.18E+01 | 5.04E+00 | 2.73E+01 | 4.46E+01 | 6.94E+01 | 1.21E+02 |
| 1.51E+01 | 3.00E-01 | 2.15E+02 | 1.17E+01 | 5.04E+00 | 2.73E+01 | 4.45E+01 | 6.92E+01 | 1.20E+02 |
| 1.60E+01 | 3.00E-01 | 2.13E+02 | 1.17E+01 | 5.04E+00 | 2.73E+01 | 4.45E+01 | 6.90E+01 | 1.20E+02 |
| 1.70E+01 | 3.00E-01 | 2.12E+02 | 1.17E+01 | 5.04E+00 | 2.72E+01 | 4.44E+01 | 6.88E+01 | 1.20E+02 |
| 1.80E+01 | 3.00E-01 | 2.10E+02 | 1.17E+01 | 5.04E+00 | 2.72E+01 | 4.43E+01 | 6.86E+01 | 1.19E+02 |
| 1.90E+01 | 3.00E-01 | 2.08E+02 | 1.17E+01 | 5.04E+00 | 2.72E+01 | 4.42E+01 | 6.83E+01 | 1.19E+02 |

2.01E+01 3.00E-01 2.07E+02 1.16E+01 5.04E+00 2.72E+01 4.42E+01 6.81E+01 1.19E+02

2.13E+01 3.00E-01 2.05E+02 1.16E+01 5.04E+00 2.72E+01 4.41E+01 6.78E+01 1.18E+02

2.25E+01 3.00E-01 2.03E+02 1.16E+01 5.04E+00 2.71E+01 4.40E+01 6.76E+01 1.18E+02

2.38E+01 3.00E-01 2.01E+02 1.16E+01 5.04E+00 2.71E+01 4.39E+01 6.73E+01 1.17E+02

2.52E+01 3.00E-01 1.98E+02 1.15E+01 5.04E+00 2.71E+01 4.38E+01 6.70E+01 1.17E+02

2.67E+01 3.00E-01 1.96E+02 1.15E+01 5.04E+00 2.71E+01 4.37E+01 6.66E+01 1.16E+02

2.82E+01 3.00E-01 1.94E+02 1.15E+01 5.04E+00 2.70E+01 4.36E+01 6.63E+01 1.15E+02

2.99E+01 3.00E-01 1.91E+02 1.14E+01 5.04E+00 2.70E+01 4.35E+01 6.60E+01 1.15E+02

3.00E+01 3.00E-01 1.91E+02 1.14E+01 5.04E+00 2.70E+01 4.35E+01 6.59E+01 1.15E+02

3.16E+01 3.00E-01 1.89E+02 1.14E+01 5.04E+00 2.70E+01 4.34E+01 6.56E+01 1.14E+02

3.35E+01 3.00E-01 1.86E+02 1.14E+01 5.04E+00 2.69E+01 4.33E+01 6.52E+01 1.12E+02

3.54E+01 3.00E-01 1.83E+02 1.13E+01 5.04E+00 2.69E+01 4.31E+01 6.48E+01 1.11E+02

3.75E+01 3.00E-01 1.80E+02 1.13E+01 5.04E+00 2.68E+01 4.30E+01 6.44E+01 1.10E+02

3.97E+01 3.00E-01 1.77E+02 1.13E+01 5.04E+00 2.68E+01 4.28E+01 6.39E+01 1.08E+02

4.20E+01 3.00E-01 1.74E+02 1.12E+01 5.04E+00 2.68E+01 4.27E+01 6.34E+01 1.07E+02

4.44E+01 3.00E-01 1.71E+02 1.12E+01 5.04E+00 2.67E+01 4.25E+01 6.29E+01 1.05E+02

4.70E+01 3.00E-01 1.67E+02 1.11E+01 5.04E+00 2.67E+01 4.24E+01 6.24E+01 1.04E+02

4.97E+01 3.00E-01 1.64E+02 1.11E+01 5.03E+00 2.66E+01 4.22E+01 6.18E+01 1.02E+02

5.26E+01 3.00E-01 1.60E+02 1.10E+01 5.03E+00 2.66E+01 4.20E+01 6.13E+01 1.00E+02

5.57E+01 3.00E-01 1.56E+02 1.10E+01 5.03E+00 2.65E+01 4.18E+01 6.07E+01 9.82E+01

5.90E+01 3.00E-01 1.52E+02 1.09E+01 5.03E+00 2.64E+01 4.16E+01 6.02E+01 9.63E+01

6.24E+01 3.00E-01 1.48E+02 1.09E+01 5.03E+00 2.64E+01 4.13E+01 5.96E+01 9.43E+01

6.60E+01 2.99E-01 1.44E+02 1.08E+01 5.03E+00 2.63E+01 4.11E+01 5.91E+01 9.22E+01

6.99E+01 2.99E-01 1.40E+02 1.07E+01 5.05E+00 2.62E+01 4.09E+01 5.85E+01 9.01E+01

7.39E+01 2.99E-01 1.36E+02 1.07E+01 5.05E+00 2.62E+01 4.06E+01 5.78E+01 8.79E+01

7.82E+01 2.99E-01 1.31E+02 1.06E+01 5.05E+00 2.60E+01 4.03E+01 5.72E+01 8.56E+01

8.28E+01 2.99E-01 1.27E+02 1.05E+01 5.05E+00 2.59E+01 4.01E+01 5.65E+01 8.33E+01

8.76E+01 2.99E-01 1.22E+02 1.04E+01 5.04E+00 2.58E+01 3.98E+01 5.57E+01 8.07E+01

9.27E+01 2.99E-01 1.17E+02 1.04E+01 5.04E+00 2.57E+01 3.94E+01 5.50E+01 7.68E+01

9.81E+01 2.99E-01 1.12E+02 1.03E+01 5.04E+00 2.56E+01 3.91E+01 5.42E+01 7.29E+01

1.00E+02 2.99E-01 1.11E+02 1.03E+01 5.04E+00 2.55E+01 3.90E+01 5.39E+01 7.17E+01

1.04E+02 2.99E-01 1.07E+02 1.02E+01 5.04E+00 2.54E+01 3.88E+01 5.34E+01 6.98E+01

1.10E+02 3.10E-01 1.02E+02 1.01E+01 5.05E+00 2.53E+01 3.85E+01 5.25E+01 6.91E+01

1.16E+02 3.21E-01 9.74E+01 1.00E+01 5.06E+00 2.51E+01 3.80E+01 5.18E+01 6.79E+01

1.23E+02 3.21E-01 9.24E+01 9.94E+00 5.06E+00 2.49E+01 3.76E+01 5.11E+01 6.52E+01

1.30E+02 3.21E-01 8.74E+01 9.84E+00 5.05E+00 2.48E+01 3.72E+01 5.03E+01 6.24E+01

1.38E+02 3.21E-01 8.23E+01 9.75E+00 5.05E+00 2.46E+01 3.67E+01 4.95E+01 5.96E+01

1.46E+02 3.21E-01 7.89E+01 9.65E+00 5.04E+00 2.44E+01 3.62E+01 4.76E+01 5.67E+01

1.54E+02 3.21E-01 7.68E+01 9.55E+00 5.04E+00 2.42E+01 3.57E+01 4.65E+01 5.45E+01

1.63E+02 3.21E-01 7.46E+01 9.44E+00 5.04E+00 2.40E+01 3.52E+01 4.54E+01 5.28E+01

1.73E+02 3.21E-01 7.23E+01 9.34E+00 5.03E+00 2.39E+01 3.47E+01 4.43E+01 5.15E+01

1.83E+02 3.21E-01 7.00E+01 9.23E+00 5.03E+00 2.37E+01 3.28E+01 4.31E+01 5.04E+01

1.94E+02 3.20E-01 6.76E+01 9.12E+00 5.02E+00 2.35E+01 3.23E+01 4.13E+01 4.94E+01

2.05E+02 3.20E-01 6.52E+01 9.00E+00 5.02E+00 2.31E+01 3.20E+01 3.92E+01 4.82E+01

2.17E+02 3.20E-01 6.27E+01 8.88E+00 5.03E+00 2.28E+01 3.17E+01 3.74E+01 4.44E+01

2.29E+02 3.20E-01 6.02E+01 8.76E+00 5.03E+00 2.18E+01 3.14E+01 3.60E+01 4.27E+01

2.43E+02 3.20E-01 5.76E+01 8.63E+00 5.01E+00 2.16E+01 3.10E+01 3.49E+01 4.12E+01

2.57E+02 3.20E-01 5.51E+01 8.49E+00 5.00E+00 2.13E+01 2.95E+01 3.32E+01 3.96E+01

2.72E+02 0.00E+00 5.24E+01 8.35E+00 4.98E+00 2.11E+01 2.88E+01 3.24E+01 3.82E+01

| | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 2.88E+02 | 0.00E+00 | 4.98E+01 | 8.21E+00 | 4.96E+00 | 2.07E+01 | 2.73E+01 | 3.16E+01 | 3.70E+01 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|

3.00E+02 0.00E+00 4.79E+01 8.10E+00 4.95E+00 2.06E+01 2.65E+01 3.12E+01 3.61E+01

3.05E+02 0.00E+00 4.72E+01 8.07E+00 4.94E+00 2.05E+01 2.64E+01 3.10E+01 3.58E+01

3.22E+02 0.00E+00 4.47E+01 7.92E+00 4.93E+00 1.97E+01 2.59E+01 3.03E+01 3.36E+01

3.41E+02 0.00E+00 4.23E+01 7.77E+00 4.91E+00 1.89E+01 2.51E+01 2.91E+01 3.14E+01

3.61E+02 0.00E+00 3.99E+01 7.62E+00 4.90E+00 1.87E+01 2.38E+01 2.82E+01 3.00E+01

3.82E+02 0.00E+00 3.74E+01 7.47E+00 4.83E+00 1.83E+01 2.27E+01 2.74E+01 2.93E+01

4.04E+02 0.00E+00 3.50E+01 7.31E+00 4.69E+00 1.79E+01 2.20E+01 2.65E+01 2.86E+01

4.28E+02 0.00E+00 3.25E+01 7.15E+00 4.65E+00 1.73E+01 2.10E+01 2.51E+01 2.79E+01

4.53E+02 0.00E+00 3.01E+01 6.98E+00 4.65E+00 1.69E+01 2.04E+01 2.38E+01 2.68E+01

4.79E+02 0.00E+00 2.77E+01 6.81E+00 4.63E+00 1.62E+01 1.94E+01 2.26E+01 2.61E+01

| | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 5.07E+02 | 0.00E+00 | 2.62E+01 | 6.64E+00 | 4.56E+00 | 1.58E+01 | 1.88E+01 | 2.17E+01 | 2.53E+01 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|

| | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 5.36E+02 | 0.00E+00 | 2.51E+01 | 6.46E+00 | 4.55E+00 | 1.49E+01 | 1.78E+01 | 2.12E+01 | 2.45E+01 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|

5.68E+02 0.00E+00 2.45E+01 6.27E+00 4.47E+00 1.43E+01 1.70E+01 2.06E+01 2.37E+01

6.01E+02 0.00E+00 2.33E+01 6.08E+00 4.37E+00 1.39E+01 1.66E+01 1.94E+01 2.17E+01

6.36E+02 0.00E+00 2.27E+01 5.89E+00 4.31E+00 1.30E+01 1.60E+01 1.80E+01 2.05E+01

6.73E+02 0.00E+00 2.21E+01 5.69E+00 4.22E+00 1.25E+01 1.49E+01 1.73E+01 1.95E+01

7.12E+02 0.00E+00 2.15E+01 5.49E+00 4.08E+00 1.21E+01 1.45E+01 1.65E+01 1.88E+01

7.53E+02 0.00E+00 2.08E+01 5.29E+00 3.99E+00 1.11E+01 1.39E+01 1.59E+01 1.82E+01

7.97E+02 0.00E+00 2.02E+01 5.10E+00 3.86E+00 1.07E+01 1.33E+01 1.51E+01 1.77E+01

8.44E+02 0.00E+00 1.95E+01 4.87E+00 3.75E+00 1.02E+01 1.27E+01 1.43E+01 1.69E+01

8.93E+02 0.00E+00 1.89E+01 4.67E+00 3.56E+00 9.77E+00 1.22E+01 1.38E+01 1.62E+01

9.45E+02 0.00E+00 1.82E+01 4.48E+00 3.45E+00 9.44E+00 1.18E+01 1.33E+01 1.56E+01

| | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1.00E+03 | 0.00E+00 | 1.75E+01 | 4.29E+00 | 3.28E+00 | 9.12E+00 | 1.15E+01 | 1.25E+01 | 1.49E+01 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\BFM INSITU UNCERTAINTY ANALYSIS\FCS BFM INSITU UA PU-239.RAD

| Summary of dose at graphical times, reptition 2 | | | | | | | | |
|---|---|----------|----------|----------|----------|----------|----------|----------|
| Time | Dose statistics at graphical times, mrem/yr | | | | | | | |
| Years | Minimum | Maximum | Mean | Median | 90% | 95% | 97.5% | 99% |
| 0.00E+00 | 2.29E-01 | 4.49E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.58E+01 | 7.20E+01 | 1.14E+02 |
| 1.00E+00 | 2.30E-01 | 4.43E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.58E+01 | 7.19E+01 | 1.14E+02 |
| 1.06E+00 | 2.30E-01 | 4.43E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.58E+01 | 7.18E+01 | 1.14E+02 |
| 1.12E+00 | 2.30E-01 | 4.42E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.58E+01 | 7.18E+01 | 1.14E+02 |
| 1.19E+00 | 2.30E-01 | 4.42E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.58E+01 | 7.18E+01 | 1.14E+02 |
| 1.25E+00 | 2.30E-01 | 4.41E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.58E+01 | 7.18E+01 | 1.14E+02 |
| 1.33E+00 | 2.30E-01 | 4.41E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.58E+01 | 7.18E+01 | 1.14E+02 |
| 1.40E+00 | 2.30E-01 | 4.41E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.57E+01 | 7.18E+01 | 1.14E+02 |
| 1.49E+00 | 2.30E-01 | 4.40E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.57E+01 | 7.18E+01 | 1.14E+02 |
| 1.57E+00 | 2.30E-01 | 4.40E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.57E+01 | 7.18E+01 | 1.14E+02 |
| 1.66E+00 | 2.30E-01 | 4.39E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.57E+01 | 7.17E+01 | 1.14E+02 |
| 1.76E+00 | 2.31E-01 | 4.39E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.57E+01 | 7.17E+01 | 1.14E+02 |
| 1.86E+00 | 2.31E-01 | 4.38E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.57E+01 | 7.17E+01 | 1.14E+02 |
| 1.97E+00 | 2.31E-01 | 4.37E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.57E+01 | 7.17E+01 | 1.14E+02 |
| 2.09E+00 | 2.31E-01 | 4.37E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.57E+01 | 7.17E+01 | 1.13E+02 |
| 2.21E+00 | 2.31E-01 | 4.36E+02 | 1.25E+01 | 4.92E+00 | 2.76E+01 | 4.57E+01 | 7.17E+01 | 1.13E+02 |
| 2.34E+00 | 2.31E-01 | 4.35E+02 | 1.25E+01 | 4.92E+00 | 2.75E+01 | 4.57E+01 | 7.16E+01 | 1.13E+02 |
| 2.47E+00 | 2.31E-01 | 4.34E+02 | 1.25E+01 | 4.92E+00 | 2.75E+01 | 4.57E+01 | 7.16E+01 | 1.13E+02 |
| 2.62E+00 | 2.31E-01 | 4.34E+02 | 1.25E+01 | 4.92E+00 | 2.75E+01 | 4.57E+01 | 7.16E+01 | 1.13E+02 |
| 2.77E+00 | 2.31E-01 | 4.33E+02 | 1.25E+01 | 4.92E+00 | 2.75E+01 | 4.56E+01 | 7.16E+01 | 1.13E+02 |
| 2.93E+00 | 2.31E-01 | 4.32E+02 | 1.25E+01 | 4.92E+00 | 2.75E+01 | 4.56E+01 | 7.15E+01 | 1.13E+02 |
| 3.00E+00 | 2.31E-01 | 4.32E+02 | 1.25E+01 | 4.92E+00 | 2.75E+01 | 4.56E+01 | 7.15E+01 | 1.13E+02 |
| 3.10E+00 | 2.32E-01 | 4.31E+02 | 1.25E+01 | 4.92E+00 | 2.75E+01 | 4.56E+01 | 7.15E+01 | 1.13E+02 |
| 3.28E+00 | 2.32E-01 | 4.30E+02 | 1.24E+01 | 4.92E+00 | 2.75E+01 | 4.56E+01 | 7.15E+01 | 1.13E+02 |
| 3.48E+00 | 2.32E-01 | 4.29E+02 | 1.24E+01 | 4.92E+00 | 2.75E+01 | 4.56E+01 | 7.14E+01 | 1.13E+02 |
| 3.68E+00 | 2.32E-01 | 4.28E+02 | 1.24E+01 | 4.92E+00 | 2.75E+01 | 4.56E+01 | 7.14E+01 | 1.13E+02 |
| 3.89E+00 | 2.32E-01 | 4.27E+02 | 1.24E+01 | 4.92E+00 | 2.75E+01 | 4.56E+01 | 7.14E+01 | 1.13E+02 |
| 4.12E+00 | 2.32E-01 | 4.25E+02 | 1.24E+01 | 4.92E+00 | 2.75E+01 | 4.56E+01 | 7.13E+01 | 1.13E+02 |
| 4.36E+00 | 2.32E-01 | 4.24E+02 | 1.24E+01 | 4.92E+00 | 2.75E+01 | 4.55E+01 | 7.13E+01 | 1.13E+02 |
| 4.61E+00 | 2.33E-01 | 4.23E+02 | 1.24E+01 | 4.92E+00 | 2.75E+01 | 4.55E+01 | 7.12E+01 | 1.13E+02 |
| 4.88E+00 | 2.33E-01 | 4.21E+02 | 1.24E+01 | 4.92E+00 | 2.75E+01 | 4.55E+01 | 7.12E+01 | 1.12E+02 |
| 5.17E+00 | 2.33E-01 | 4.20E+02 | 1.24E+01 | 4.92E+00 | 2.75E+01 | 4.55E+01 | 7.12E+01 | 1.12E+02 |
| 5.47E+00 | 2.33E-01 | 4.18E+02 | 1.24E+01 | 4.92E+00 | 2.75E+01 | 4.55E+01 | 7.11E+01 | 1.12E+02 |
| 5.78E+00 | 2.33E-01 | 4.16E+02 | 1.24E+01 | 4.92E+00 | 2.75E+01 | 4.54E+01 | 7.10E+01 | 1.12E+02 |
| 6.12E+00 | 2.34E-01 | 4.14E+02 | 1.24E+01 | 4.92E+00 | 2.75E+01 | 4.54E+01 | 7.10E+01 | 1.12E+02 |
| 6.48E+00 | 2.34E-01 | 4.12E+02 | 1.24E+01 | 4.92E+00 | 2.75E+01 | 4.54E+01 | 7.09E+01 | 1.12E+02 |
| 6.86E+00 | 2.34E-01 | 4.10E+02 | 1.23E+01 | 4.92E+00 | 2.75E+01 | 4.54E+01 | 7.09E+01 | 1.12E+02 |
| 7.26E+00 | 2.34E-01 | 4.08E+02 | 1.23E+01 | 4.92E+00 | 2.75E+01 | 4.53E+01 | 7.08E+01 | 1.12E+02 |
| 7.68E+00 | 2.35E-01 | 4.06E+02 | 1.23E+01 | 4.92E+00 | 2.75E+01 | 4.53E+01 | 7.07E+01 | 1.12E+02 |
| 8.13E+00 | 2.35E-01 | 4.04E+02 | 1.23E+01 | 4.92E+00 | 2.74E+01 | 4.53E+01 | 7.07E+01 | 1.11E+02 |
| 8.60E+00 | 2.35E-01 | 4.01E+02 | 1.23E+01 | 4.92E+00 | 2.74E+01 | 4.52E+01 | 7.06E+01 | 1.11E+02 |
| 9.10E+00 | 2.36E-01 | 3.99E+02 | 1.23E+01 | 4.92E+00 | 2.74E+01 | 4.52E+01 | 7.05E+01 | 1.11E+02 |
| 9.63E+00 | 2.36E-01 | 3.96E+02 | 1.23E+01 | 4.92E+00 | 2.74E+01 | 4.52E+01 | 7.04E+01 | 1.11E+02 |
| 1.00E+01 | 2.36E-01 | 3.94E+02 | 1.23E+01 | 4.92E+00 | 2.74E+01 | 4.51E+01 | 7.03E+01 | 1.11E+02 |
| 1.02E+01 | 2.37E-01 | 3.93E+02 | 1.23E+01 | 4.92E+00 | 2.74E+01 | 4.51E+01 | 7.03E+01 | 1.11E+02 |
| 1.08E+01 | 2.37E-01 | 3.90E+02 | 1.22E+01 | 4.92E+00 | 2.74E+01 | 4.51E+01 | 7.02E+01 | 1.10E+02 |
| 1.14E+01 | 2.37E-01 | 3.87E+02 | 1.22E+01 | 4.92E+00 | 2.74E+01 | 4.50E+01 | 7.01E+01 | 1.10E+02 |
| 1.21E+01 | 2.38E-01 | 3.83E+02 | 1.22E+01 | 4.92E+00 | 2.74E+01 | 4.50E+01 | 7.00E+01 | 1.10E+02 |
| 1.28E+01 | 2.38E-01 | 3.80E+02 | 1.22E+01 | 4.92E+00 | 2.74E+01 | 4.49E+01 | 6.99E+01 | 1.10E+02 |
| 1.35E+01 | 2.39E-01 | 3.76E+02 | 1.22E+01 | 4.92E+00 | 2.73E+01 | 4.49E+01 | 6.98E+01 | 1.10E+02 |
| 1.43E+01 | 2.39E-01 | 3.72E+02 | 1.21E+01 | 4.92E+00 | 2.73E+01 | 4.48E+01 | 6.96E+01 | 1.09E+02 |
| 1.51E+01 | 2.40E-01 | 3.68E+02 | 1.21E+01 | 4.92E+00 | 2.73E+01 | 4.48E+01 | 6.95E+01 | 1.09E+02 |
| 1.60E+01 | 2.41E-01 | 3.64E+02 | 1.21E+01 | 4.92E+00 | 2.73E+01 | 4.47E+01 | 6.93E+01 | 1.09E+02 |
| 1.70E+01 | 2.41E-01 | 3.60E+02 | 1.21E+01 | 4.92E+00 | 2.73E+01 | 4.47E+01 | 6.92E+01 | 1.08E+02 |
| 1.80E+01 | 2.42E-01 | 3.55E+02 | 1.20E+01 | 4.92E+00 | 2.72E+01 | 4.46E+01 | 6.90E+01 | 1.08E+02 |
| 1.90E+01 | 2.43E-01 | 3.50E+02 | 1.20E+01 | 4.92E+00 | 2.72E+01 | 4.45E+01 | 6.89E+01 | 1.08E+02 |

2.01E+01 2.44E-01 3.45E+02 1.20E+01 4.92E+00 2.72E+01 4.44E+01 6.87E+01 1.07E+02

2.13E+01 2.44E-01 3.40E+02 1.20E+01 4.92E+00 2.71E+01 4.44E+01 6.85E+01 1.07E+02

2.25E+01 2.45E-01 3.35E+02 1.19E+01 4.92E+00 2.71E+01 4.43E+01 6.83E+01 1.07E+02

2.38E+01 2.46E-01 3.29E+02 1.19E+01 4.92E+00 2.71E+01 4.42E+01 6.81E+01 1.06E+02

2.52E+01 2.47E-01 3.23E+02 1.19E+01 4.92E+00 2.71E+01 4.41E+01 6.78E+01 1.06E+02

2.67E+01 2.48E-01 3.17E+02 1.18E+01 4.92E+00 2.71E+01 4.40E+01 6.76E+01 1.05E+02

2.82E+01 2.49E-01 3.11E+02 1.18E+01 4.92E+00 2.70E+01 4.39E+01 6.74E+01 1.05E+02

2.99E+01 2.51E-01 3.04E+02 1.17E+01 4.92E+00 2.70E+01 4.38E+01 6.71E+01 1.04E+02

3.00E+01 2.51E-01 3.04E+02 1.17E+01 4.92E+00 2.70E+01 4.38E+01 6.71E+01 1.04E+02

3.16E+01 2.52E-01 2.97E+02 1.17E+01 4.92E+00 2.70E+01 4.37E+01 6.68E+01 1.04E+02

3.35E+01 2.53E-01 2.90E+02 1.17E+01 4.92E+00 2.69E+01 4.35E+01 6.65E+01 1.03E+02

3.54E+01 2.54E-01 2.83E+02 1.16E+01 4.92E+00 2.69E+01 4.34E+01 6.62E+01 1.02E+02

3.75E+01 2.56E-01 2.76E+02 1.16E+01 4.92E+00 2.69E+01 4.33E+01 6.59E+01 1.02E+02

3.97E+01 2.57E-01 2.68E+02 1.15E+01 4.92E+00 2.68E+01 4.31E+01 6.56E+01 1.01E+02

4.20E+01 2.59E-01 2.60E+02 1.15E+01 4.92E+00 2.68E+01 4.30E+01 6.52E+01 1.00E+02

4.44E+01 2.61E-01 2.52E+02 1.14E+01 4.92E+00 2.68E+01 4.28E+01 6.48E+01 9.96E+01

4.70E+01 2.63E-01 2.43E+02 1.14E+01 4.92E+00 2.67E+01 4.27E+01 6.44E+01 9.88E+01

4.97E+01 2.65E-01 2.35E+02 1.13E+01 4.92E+00 2.67E+01 4.25E+01 6.40E+01 9.79E+01

5.26E+01 2.67E-01 2.26E+02 1.12E+01 4.92E+00 2.66E+01 4.22E+01 6.36E+01 9.71E+01

5.57E+01 2.69E-01 2.17E+02 1.12E+01 4.92E+00 2.66E+01 4.20E+01 6.31E+01 9.61E+01

5.90E+01 2.71E-01 2.08E+02 1.11E+01 4.93E+00 2.65E+01 4.17E+01 6.26E+01 9.52E+01

6.24E+01 2.74E-01 1.99E+02 1.10E+01 4.93E+00 2.65E+01 4.15E+01 6.21E+01 9.42E+01

6.60E+01 5.47E-02 1.90E+02 1.10E+01 4.94E+00 2.64E+01 4.12E+01 6.16E+01 9.31E+01

6.99E+01 0.00E+00 1.81E+02 1.09E+01 4.93E+00 2.63E+01 4.09E+01 6.10E+01 9.20E+01

7.39E+01 0.00E+00 1.72E+02 1.08E+01 4.94E+00 2.62E+01 4.06E+01 6.04E+01 9.09E+01

7.82E+01 0.00E+00 1.62E+02 1.07E+01 4.94E+00 2.62E+01 4.03E+01 5.98E+01 8.97E+01

8.28E+01 0.00E+00 1.53E+02 1.07E+01 4.94E+00 2.61E+01 3.99E+01 5.92E+01 8.84E+01

8.76E+01 0.00E+00 1.44E+02 1.06E+01 4.94E+00 2.60E+01 3.96E+01 5.85E+01 8.71E+01

9.27E+01 0.00E+00 1.34E+02 1.05E+01 4.95E+00 2.59E+01 3.94E+01 5.78E+01 8.54E+01

9.81E+01 0.00E+00 1.25E+02 1.04E+01 4.96E+00 2.57E+01 3.91E+01 5.71E+01 8.11E+01

1.00E+02 0.00E+00 1.22E+02 1.04E+01 4.96E+00 2.57E+01 3.90E+01 5.68E+01 8.08E+01

1.04E+02 0.00E+00 1.16E+02 1.03E+01 4.96E+00 2.56E+01 3.88E+01 5.63E+01 8.01E+01

1.10E+02 0.00E+00 1.07E+02 1.02E+01 4.97E+00 2.54E+01 3.85E+01 5.55E+01 7.90E+01

1.16E+02 0.00E+00 9.89E+01 1.01E+01 4.98E+00 2.53E+01 3.81E+01 5.46E+01 7.74E+01

1.23E+02 0.00E+00 9.28E+01 1.00E+01 4.98E+00 2.51E+01 3.78E+01 5.38E+01 7.43E+01

1.30E+02 0.00E+00 9.10E+01 9.95E+00 4.99E+00 2.50E+01 3.74E+01 5.29E+01 7.11E+01

1.38E+02 0.00E+00 8.91E+01 9.85E+00 5.00E+00 2.48E+01 3.71E+01 5.19E+01 6.80E+01

1.46E+02 0.00E+00 8.71E+01 9.75E+00 5.00E+00 2.46E+01 3.66E+01 5.06E+01 6.48E+01

1.54E+02 0.00E+00 8.51E+01 9.65E+00 5.00E+00 2.44E+01 3.61E+01 4.98E+01 6.03E+01

1.63E+02 0.00E+00 8.30E+01 9.54E+00 5.00E+00 2.42E+01 3.56E+01 4.89E+01 5.82E+01

1.73E+02 0.00E+00 8.09E+01 9.43E+00 5.00E+00 2.40E+01 3.51E+01 4.74E+01 5.50E+01

1.83E+02 0.00E+00 7.87E+01 9.32E+00 5.00E+00 2.38E+01 3.37E+01 4.50E+01 5.25E+01

1.94E+02 0.00E+00 7.64E+01 9.21E+00 5.01E+00 2.35E+01 3.34E+01 4.39E+01 5.12E+01

| | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 2.05E+02 | 0.00E+00 | 7.40E+01 | 9.10E+00 | 5.00E+00 | 2.33E+01 | 3.25E+01 | 4.27E+01 | 4.98E+01 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|

2.17E+02 0.00E+00 7.16E+01 8.98E+00 4.98E+00 2.30E+01 3.21E+01 4.13E+01 4.79E+01

2.29E+02 0.00E+00 6.92E+01 8.86E+00 4.97E+00 2.27E+01 3.17E+01 3.94E+01 4.69E+01

2.43E+02 0.00E+00 6.67E+01 8.74E+00 4.98E+00 2.20E+01 3.13E+01 3.81E+01 4.54E+01

2.57E+02 0.00E+00 6.41E+01 8.61E+00 4.98E+00 2.17E+01 3.06E+01 3.72E+01 4.41E+01

| | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 2.72E+02 | 0.00E+00 | 6.15E+01 | 8.48E+00 | 4.98E+00 | 2.14E+01 | 2.93E+01 | 3.64E+01 | 4.33E+01 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|

2.88E+02 0.00E+00 5.89E+01 8.35E+00 4.96E+00 2.11E+01 2.88E+01 3.54E+01 4.25E+01

3.00E+02 0.00E+00 5.70E+01 8.25E+00 4.95E+00 2.07E+01 2.80E+01 3.45E+01 4.18E+01

3.05E+02 0.00E+00 5.62E+01 8.21E+00 4.94E+00 2.06E+01 2.77E+01 3.42E+01 4.16E+01

3.22E+02 0.00E+00 5.36E+01 8.07E+00 4.89E+00 2.00E+01 2.69E+01 3.23E+01 4.07E+01

3.41E+02 0.00E+00 5.09E+01 7.93E+00 4.86E+00 1.95E+01 2.56E+01 3.11E+01 3.97E+01

3.61E+02 0.00E+00 4.81E+01 7.78E+00 4.80E+00 1.87E+01 2.49E+01 2.99E+01 3.74E+01

3.82E+02 0.00E+00 4.54E+01 7.62E+00 4.69E+00 1.84E+01 2.43E+01 2.91E+01 3.50E+01

4.04E+02 0.00E+00 4.27E+01 7.46E+00 4.66E+00 1.79E+01 2.30E+01 2.82E+01 3.32E+01

4.28E+02 0.00E+00 4.00E+01 7.30E+00 4.64E+00 1.72E+01 2.25E+01 2.69E+01 3.23E+01

4.53E+02 0.00E+00 3.74E+01 7.13E+00 4.63E+00 1.68E+01 2.20E+01 2.58E+01 3.12E+01

4.79E+02 0.00E+00 3.52E+01 6.96E+00 4.60E+00 1.63E+01 2.14E+01 2.49E+01 3.02E+01

5.07E+02 0.00E+00 3.32E+01 6.79E+00 4.57E+00 1.57E+01 2.06E+01 2.38E+01 2.92E+01

5.36E+02 0.00E+00 3.15E+01 6.61E+00 4.55E+00 1.51E+01 2.00E+01 2.23E+01 2.81E+01

5.68E+02 0.00E+00 3.03E+01 6.43E+00 4.51E+00 1.47E+01 1.92E+01 2.13E+01 2.70E+01

6.01E+02 0.00E+00 2.91E+01 6.24E+00 4.47E+00 1.43E+01 1.80E+01 2.00E+01 2.49E+01

6.36E+02 0.00E+00 2.79E+01 6.05E+00 4.35E+00 1.40E+01 1.69E+01 1.92E+01 2.35E+01

6.73E+02 0.00E+00 2.67E+01 5.85E+00 4.23E+00 1.33E+01 1.61E+01 1.87E+01 2.26E+01

7.12E+02 0.00E+00 2.51E+01 5.66E+00 4.15E+00 1.24E+01 1.52E+01 1.80E+01 2.13E+01

7.53E+02 0.00E+00 2.37E+01 5.46E+00 4.06E+00 1.19E+01 1.45E+01 1.75E+01 2.04E+01

| | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 7.97E+02 | 0.00E+00 | 2.23E+01 | 5.26E+00 | 3.93E+00 | 1.13E+01 | 1.36E+01 | 1.69E+01 | 1.94E+01 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|

| | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 8.44E+02 | 0.00E+00 | 2.10E+01 | 5.06E+00 | 3.82E+00 | 1.09E+01 | 1.31E+01 | 1.59E+01 | 1.83E+01 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|

8.93E+02 0.00E+00 1.97E+01 4.85E+00 3.67E+00 1.04E+01 1.24E+01 1.53E+01 1.70E+01

9.45E+02 0.00E+00 1.90E+01 4.65E+00 3.54E+00 9.81E+00 1.18E+01 1.46E+01 1.61E+01

1.00E+03 0.00E+00 1.84E+01 4.43E+00 3.44E+00 9.51E+00 1.12E+01 1.39E+01 1.52E+01

| Summary of dose at graphical times, reptition 3 | | | | | | | | |
|---|---|----------|----------|----------|----------|----------|----------|----------|
| Time | Dose statistics at graphical times, mrem/yr | | | | | | | |
| Years | Minimum | Maximum | Mean | Median | 90% | 95% | 97.5% | 99% |
| 0.00E+00 | 1.86E-01 | 3.73E+02 | 1.24E+01 | 5.06E+00 | 2.72E+01 | 4.54E+01 | 7.10E+01 | 1.29E+02 |
| 1.00E+00 | 1.86E-01 | 3.68E+02 | 1.24E+01 | 5.06E+00 | 2.72E+01 | 4.54E+01 | 7.08E+01 | 1.29E+02 |
| 1.06E+00 | 1.86E-01 | 3.68E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.54E+01 | 7.08E+01 | 1.29E+02 |
| 1.12E+00 | 1.86E-01 | 3.68E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.54E+01 | 7.08E+01 | 1.29E+02 |
| 1.19E+00 | 1.86E-01 | 3.67E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.54E+01 | 7.07E+01 | 1.29E+02 |
| 1.25E+00 | 1.86E-01 | 3.67E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.54E+01 | 7.07E+01 | 1.29E+02 |
| 1.33E+00 | 1.86E-01 | 3.67E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.07E+01 | 1.29E+02 |
| 1.40E+00 | 1.86E-01 | 3.66E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.07E+01 | 1.29E+02 |
| 1.49E+00 | 1.86E-01 | 3.66E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.07E+01 | 1.29E+02 |
| 1.57E+00 | 1.86E-01 | 3.66E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.07E+01 | 1.28E+02 |
| 1.66E+00 | 1.86E-01 | 3.65E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.07E+01 | 1.28E+02 |
| 1.76E+00 | 1.86E-01 | 3.65E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.06E+01 | 1.28E+02 |
| 1.86E+00 | 1.86E-01 | 3.64E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.06E+01 | 1.28E+02 |
| 1.97E+00 | 1.86E-01 | 3.64E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.06E+01 | 1.28E+02 |
| 2.09E+00 | 1.86E-01 | 3.63E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.06E+01 | 1.28E+02 |
| 2.21E+00 | 1.86E-01 | 3.63E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.06E+01 | 1.28E+02 |
| 2.24E+00 | 1.86E-01 | 3.62E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.05E+01 | 1.28E+02 |
| 2.27E+00 | 1.86E-01 | 3.61E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.05E+01 | 1.28E+02 |
| 2.26E+00 | 1.86E-01 | 3.61E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.05E+01 | 1.28E+02 |
| 2.27E+00 | 1.86E-01 | 3.60E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.05E+01 | 1.28E+02 |
| 2.29E+00 | 1.86E-01 | 3.59E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.04E+01 | 1.28E+02 |
| 3.00E+00 | 1.86E-01 | 3.59E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.04E+01 | 1.28E+02 |
| 3.10E+00 | 1.86E-01 | 3.59E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.53E+01 | 7.04E+01 | 1.28E+02 |
| 3.28E+00 | 1.86E-01 | 3.58E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.52E+01 | 7.04E+01 | 1.28E+02 |
| 3.48E+00 | 1.86E-01 | 3.57E+02 | 1.24E+01 | 5.06E+00 | 2.71E+01 | 4.52E+01 | 7.03E+01 | 1.27E+02 |
| 3.68E+00 | 1.86E-01 | 3.56E+02 | 1.23E+01 | 5.06E+00 | 2.71E+01 | 4.52E+01 | 7.03E+01 | 1.27E+02 |
| 3.89E+00 | 1.86E-01 | 3.55E+02 | 1.23E+01 | 5.06E+00 | 2.71E+01 | 4.52E+01 | 7.03E+01 | 1.27E+02 |
| 4.12E+00 | 1.86E-01 | 3.54E+02 | 1.23E+01 | 5.06E+00 | 2.71E+01 | 4.52E+01 | 7.02E+01 | 1.27E+02 |
| 4.36E+00 | 1.86E-01 | 3.53E+02 | 1.23E+01 | 5.06E+00 | 2.71E+01 | 4.52E+01 | 7.02E+01 | 1.27E+02 |
| 4.61E+00 | 1.86E-01 | 3.52E+02 | 1.23E+01 | 5.06E+00 | 2.71E+01 | 4.52E+01 | 7.01E+01 | 1.27E+02 |
| 4.88E+00 | 1.86E-01 | 3.51E+02 | 1.23E+01 | 5.06E+00 | 2.71E+01 | 4.52E+01 | 7.01E+01 | 1.27E+02 |
| 5.17E+00 | 1.86E-01 | 3.50E+02 | 1.23E+01 | 5.06E+00 | 2.71E+01 | 4.51E+01 | 7.00E+01 | 1.27E+02 |
| 5.47E+00 | 1.86E-01 | 3.48E+02 | 1.23E+01 | 5.06E+00 | 2.71E+01 | 4.51E+01 | 7.00E+01 | 1.26E+02 |
| 5.78E+00 | 1.86E-01 | 3.47E+02 | 1.23E+01 | 5.06E+00 | 2.71E+01 | 4.51E+01 | 6.99E+01 | 1.26E+02 |
| 6.12E+00 | 1.86E-01 | 3.45E+02 | 1.23E+01 | 5.06E+00 | 2.71E+01 | 4.51E+01 | 6.98E+01 | 1.26E+02 |
| 6.48E+00 | 1.86E-01 | 3.44E+02 | 1.23E+01 | 5.06E+00 | 2.70E+01 | 4.51E+01 | 6.98E+01 | 1.26E+02 |
| 6.86E+00 | 1.86E-01 | 3.42E+02 | 1.23E+01 | 5.06E+00 | 2.70E+01 | 4.51E+01 | 6.97E+01 | 1.26E+02 |
| 7.26E+00 | 1.86E-01 | 3.41E+02 | 1.23E+01 | 5.06E+00 | 2.70E+01 | 4.50E+01 | 6.96E+01 | 1.25E+02 |
| 7.68E+00 | 1.86E-01 | 3.39E+02 | 1.22E+01 | 5.06E+00 | 2.70E+01 | 4.50E+01 | 6.96E+01 | 1.25E+02 |
| 8.13E+00 | 1.86E-01 | 3.37E+02 | 1.22E+01 | 5.06E+00 | 2.70E+01 | 4.50E+01 | 6.95E+01 | 1.25E+02 |
| 8.60E+00 | 1.86E-01 | 3.35E+02 | 1.22E+01 | 5.05E+00 | 2.70E+01 | 4.50E+01 | 6.94E+01 | 1.25E+02 |
| 9.10E+00 | 1.86E-01 | 3.33E+02 | 1.22E+01 | 5.05E+00 | 2.70E+01 | 4.49E+01 | 6.93E+01 | 1.25E+02 |
| 9.63E+00 | 1.86E-01 | 3.31E+02 | 1.22E+01 | 5.05E+00 | 2.70E+01 | 4.49E+01 | 6.92E+01 | 1.24E+02 |
| 1.00E+01 | 1.86E-01 | 3.29E+02 | 1.22E+01 | 5.05E+00 | 2.70E+01 | 4.49E+01 | 6.91E+01 | 1.24E+02 |
| 1.02E+01 | 1.86E-01 | 3.28E+02 | 1.22E+01 | 5.05E+00 | 2.70E+01 | 4.49E+01 | 6.91E+01 | 1.24E+02 |
| 1.08E+01 | 1.86E-01 | 3.26E+02 | 1.22E+01 | 5.05E+00 | 2.70E+01 | 4.49E+01 | 6.90E+01 | 1.24E+02 |
| 1.14E+01 | 1.86E-01 | 3.23E+02 | 1.21E+01 | 5.05E+00 | 2.70E+01 | 4.48E+01 | 6.89E+01 | 1.23E+02 |
| 1.21E+01 | 1.86E-01 | 3.21E+02 | 1.21E+01 | 5.05E+00 | 2.69E+01 | 4.48E+01 | 6.88E+01 | 1.23E+02 |
| 1.28E+01 | 1.86E-01 | 3.18E+02 | 1.21E+01 | 5.05E+00 | 2.69E+01 | 4.47E+01 | 6.87E+01 | 1.23E+02 |
| 1.35E+01 | 1.86E-01 | 3.15E+02 | 1.21E+01 | 5.05E+00 | 2.69E+01 | 4.47E+01 | 6.85E+01 | 1.22E+02 |
| 1.43E+01 | 1.86E-01 | 3.12E+02 | 1.21E+01 | 5.05E+00 | 2.69E+01 | 4.47E+01 | 6.84E+01 | 1.22E+02 |
| 1.51E+01 | 1.86E-01 | 3.09E+02 | 1.20E+01 | 5.05E+00 | 2.69E+01 | 4.46E+01 | 6.82E+01 | 1.21E+02 |
| 1.60E+01 | 1.86E-01 | 3.05E+02 | 1.20E+01 | 5.05E+00 | 2.69E+01 | 4.46E+01 | 6.81E+01 | 1.21E+02 |
| 1.70E+01 | 1.86E-01 | 3.02E+02 | 1.20E+01 | 5.05E+00 | 2.69E+01 | 4.45E+01 | 6.79E+01 | 1.21E+02 |
| 1.80E+01 | 1.86E-01 | 2.98E+02 | 1.20E+01 | 5.05E+00 | 2.68E+01 | 4.45E+01 | 6.77E+01 | 1.20E+02 |
| 1.90E+01 | 1.86E-01 | 2.94E+02 | 1.20E+01 | 5.05E+00 | 2.68E+01 | 4.44E+01 | 6.76E+01 | 1.20E+02 |

2.01E+01 1.86E-01 2.90E+02 1.19E+01 5.05E+00 2.68E+01 4.44E+01 6.74E+01 1.19E+02

2.13E+01 1.86E-01 2.86E+02 1.19E+01 5.05E+00 2.68E+01 4.43E+01 6.72E+01 1.18E+02

2.25E+01 1.86E-01 2.81E+02 1.19E+01 5.05E+00 2.67E+01 4.42E+01 6.69E+01 1.18E+02

2.38E+01 1.86E-01 2.77E+02 1.18E+01 5.05E+00 2.67E+01 4.42E+01 6.67E+01 1.17E+02

2.52E+01 1.86E-01 2.72E+02 1.18E+01 5.05E+00 2.67E+01 4.41E+01 6.65E+01 1.16E+02

2.67E+01 1.86E-01 2.67E+02 1.18E+01 5.04E+00 2.67E+01 4.40E+01 6.62E+01 1.16E+02

2.82E+01 1.86E-01 2.62E+02 1.17E+01 5.04E+00 2.66E+01 4.39E+01 6.60E+01 1.15E+02

2.99E+01 1.86E-01 2.57E+02 1.17E+01 5.04E+00 2.66E+01 4.38E+01 6.57E+01 1.14E+02

3.00E+01 1.86E-01 2.56E+02 1.17E+01 5.04E+00 2.66E+01 4.38E+01 6.57E+01 1.14E+02

3.16E+01 1.86E-01 2.51E+02 1.16E+01 5.04E+00 2.66E+01 4.37E+01 6.54E+01 1.13E+02

3.35E+01 1.86E-01 2.45E+02 1.16E+01 5.04E+00 2.65E+01 4.36E+01 6.51E+01 1.13E+02

3.54E+01 1.86E-01 2.40E+02 1.16E+01 5.04E+00 2.65E+01 4.35E+01 6.47E+01 1.12E+02

3.75E+01 1.86E-01 2.33E+02 1.15E+01 5.04E+00 2.65E+01 4.34E+01 6.44E+01 1.11E+02

3.97E+01 1.86E-01 2.27E+02 1.15E+01 5.04E+00 2.64E+01 4.33E+01 6.40E+01 1.10E+02

4.20E+01 1.86E-01 2.21E+02 1.14E+01 5.04E+00 2.64E+01 4.32E+01 6.36E+01 1.09E+02

4.44E+01 1.86E-01 2.14E+02 1.14E+01 5.03E+00 2.63E+01 4.31E+01 6.32E+01 1.08E+02

4.70E+01 1.86E-01 2.07E+02 1.13E+01 5.03E+00 2.63E+01 4.29E+01 6.28E+01 1.06E+02

4.97E+01 1.86E-01 2.00E+02 1.13E+01 5.03E+00 2.63E+01 4.28E+01 6.24E+01 1.05E+02

5.26E+01 1.86E-01 1.93E+02 1.12E+01 5.03E+00 2.62E+01 4.26E+01 6.19E+01 1.04E+02

5.57E+01 1.86E-01 1.86E+02 1.11E+01 5.03E+00 2.61E+01 4.25E+01 6.15E+01 1.03E+02

5.90E+01 1.89E-01 1.79E+02 1.11E+01 5.03E+00 2.61E+01 4.23E+01 6.11E+01 1.01E+02

6.24E+01 1.95E-01 1.71E+02 1.10E+01 5.02E+00 2.60E+01 4.21E+01 6.07E+01 9.98E+01

6.60E+01 2.01E-01 1.63E+02 1.09E+01 5.02E+00 2.60E+01 4.19E+01 6.02E+01 9.83E+01

6.99E+01 2.08E-01 1.56E+02 1.09E+01 5.02E+00 2.59E+01 4.17E+01 5.98E+01 9.68E+01

7.39E+01 2.16E-01 1.48E+02 1.08E+01 5.02E+00 2.58E+01 4.15E+01 5.93E+01 9.51E+01

7.82E+01 2.23E-01 1.40E+02 1.07E+01 5.01E+00 2.56E+01 4.13E+01 5.88E+01 9.19E+01

8.28E+01 2.31E-01 1.33E+02 1.06E+01 5.01E+00 2.55E+01 4.09E+01 5.81E+01 9.01E+01

8.76E+01 2.38E-01 1.25E+02 1.05E+01 5.01E+00 2.54E+01 4.04E+01 5.72E+01 8.83E+01

9.27E+01 2.40E-01 1.17E+02 1.05E+01 5.00E+00 2.53E+01 4.00E+01 5.62E+01 8.64E+01

9.81E+01 2.42E-01 1.09E+02 1.04E+01 5.00E+00 2.51E+01 3.95E+01 5.51E+01 8.45E+01

1.00E+02 2.42E-01 1.07E+02 1.03E+01 5.00E+00 2.51E+01 3.93E+01 5.48E+01 8.39E+01

1.04E+02 2.44E-01 1.05E+02 1.03E+01 4.99E+00 2.50E+01 3.90E+01 5.41E+01 8.26E+01

1.10E+02 2.46E-01 1.02E+02 1.02E+01 4.99E+00 2.49E+01 3.84E+01 5.34E+01 8.05E+01

1.16E+02 2.49E-01 9.93E+01 1.01E+01 4.98E+00 2.47E+01 3.81E+01 5.26E+01 7.84E+01

1.23E+02 2.52E-01 9.64E+01 1.00E+01 4.98E+00 2.46E+01 3.79E+01 5.18E+01 7.63E+01

1.30E+02 2.55E-01 9.34E+01 9.91E+00 4.97E+00 2.44E+01 3.76E+01 5.07E+01 7.33E+01

1.38E+02 2.58E-01 9.03E+01 9.81E+00 4.97E+00 2.42E+01 3.73E+01 4.85E+01 6.96E+01

1.46E+02 2.61E-01 8.71E+01 9.71E+00 4.96E+00 2.39E+01 3.67E+01 4.78E+01 6.81E+01

1.54E+02 2.64E-01 8.39E+01 9.60E+00 4.95E+00 2.37E+01 3.62E+01 4.71E+01 6.66E+01

1.63E+02 2.68E-01 8.06E+01 9.50E+00 4.95E+00 2.34E+01 3.56E+01 4.64E+01 6.45E+01

1.73E+02 2.72E-01 7.73E+01 9.39E+00 4.95E+00 2.32E+01 3.49E+01 4.45E+01 6.20E+01

1.83E+02 2.76E-01 7.39E+01 9.28E+00 4.94E+00 2.30E+01 3.40E+01 4.36E+01 5.95E+01

1.94E+02 2.80E-01 7.05E+01 9.16E+00 4.93E+00 2.29E+01 3.32E+01 4.26E+01 5.70E+01

2.05E+02 2.84E-01 6.70E+01 9.05E+00 4.94E+00 2.26E+01 3.26E+01 4.15E+01 5.52E+01

2.17E+02 2.89E-01 6.36E+01 8.93E+00 4.94E+00 2.16E+01 3.21E+01 4.05E+01 5.26E+01

2.29E+02 2.94E-01 6.01E+01 8.80E+00 4.94E+00 2.13E+01 3.14E+01 3.94E+01 4.99E+01

2.43E+02 2.99E-01 5.66E+01 8.67E+00 4.91E+00 2.11E+01 3.06E+01 3.82E+01 4.72E+01

2.57E+02 0.00E+00 5.32E+01 8.54E+00 4.90E+00 2.08E+01 2.98E+01 3.71E+01 4.46E+01

| | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 2.72E+02 | 0.00E+00 | 4.97E+01 | 8.41E+00 | 4.89E+00 | 2.05E+01 | 2.87E+01 | 3.58E+01 | 4.36E+01 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|

2.88E+02 0.00E+00 4.67E+01 8.27E+00 4.90E+00 2.02E+01 2.80E+01 3.43E+01 4.26E+01

| | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 3.00E+02 | 0.00E+00 | 4.54E+01 | 8.17E+00 | 4.91E+00 | 1.99E+01 | 2.76E+01 | 3.32E+01 | 4.12E+01 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|

3.05E+02 0.00E+00 4.49E+01 8.13E+00 4.90E+00 1.98E+01 2.74E+01 3.28E+01 4.05E+01

3.22E+02 0.00E+00 4.33E+01 7.99E+00 4.87E+00 1.95E+01 2.64E+01 3.15E+01 3.77E+01

3.41E+02 0.00E+00 4.15E+01 7.84E+00 4.85E+00 1.91E+01 2.55E+01 3.08E+01 3.66E+01

3.61E+02 0.00E+00 3.94E+01 7.68E+00 4.82E+00 1.86E+01 2.46E+01 2.88E+01 3.35E+01

3.82E+02 0.00E+00 3.74E+01 7.52E+00 4.79E+00 1.82E+01 2.40E+01 2.71E+01 3.05E+01

4.04E+02 0.00E+00 3.53E+01 7.36E+00 4.78E+00 1.77E+01 2.28E+01 2.61E+01 2.92E+01

4.28E+02 0.00E+00 3.33E+01 7.20E+00 4.76E+00 1.75E+01 2.18E+01 2.45E+01 2.86E+01

4.53E+02 0.00E+00 3.16E+01 7.03E+00 4.72E+00 1.72E+01 2.11E+01 2.33E+01 2.79E+01

4.79E+02 0.00E+00 3.05E+01 6.85E+00 4.70E+00 1.66E+01 1.98E+01 2.25E+01 2.73E+01

5.07E+02 0.00E+00 2.87E+01 6.67E+00 4.65E+00 1.61E+01 1.91E+01 2.12E+01 2.60E+01

5.36E+02 0.00E+00 2.67E+01 6.49E+00 4.61E+00 1.53E+01 1.77E+01 1.99E+01 2.40E+01

5.68E+02 0.00E+00 2.54E+01 6.31E+00 4.54E+00 1.44E+01 1.72E+01 1.91E+01 2.21E+01

| | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 6.01E+02 | 0.00E+00 | 2.47E+01 | 6.12E+00 | 4.46E+00 | 1.39E+01 | 1.65E+01 | 1.85E+01 | 2.10E+01 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|

6.36E+02 0.00E+00 2.39E+01 5.94E+00 4.40E+00 1.32E+01 1.57E+01 1.76E+01 1.94E+01

6.73E+02 0.00E+00 2.32E+01 5.74E+00 4.25E+00 1.29E+01 1.52E+01 1.65E+01 1.80E+01

7.12E+02 0.00E+00 2.24E+01 5.55E+00 4.16E+00 1.24E+01 1.45E+01 1.55E+01 1.74E+01

7.53E+02 0.00E+00 2.16E+01 5.35E+00 4.13E+00 1.17E+01 1.40E+01 1.48E+01 1.68E+01

7.97E+02 0.00E+00 2.08E+01 5.14E+00 4.01E+00 1.09E+01 1.31E+01 1.42E+01 1.62E+01

8.44E+02 0.00E+00 2.00E+01 4.92E+00 3.85E+00 1.05E+01 1.23E+01 1.34E+01 1.53E+01

8.93E+02 0.00E+00 1.92E+01 4.71E+00 3.70E+00 9.98E+00 1.16E+01 1.29E+01 1.44E+01

9.45E+02 0.00E+00 1.83E+01 4.51E+00 3.57E+00 9.43E+00 1.10E+01 1.25E+01 1.41E+01

1.00E+03 0.00E+00 1.75E+01 4.31E+00 3.42E+00 9.00E+00 1.03E+01 1.19E+01 1.37E+01

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\BFM INSITU UNCERTAINTY ANALYSIS\FCS BFM INSITU UA PU-239.RAD

Peak of the mean dose (averaged over observations) at graphical times

| Repetition | Time of peak mean dose | | Peak mean dose |
|------------|------------------------|-----------|----------------|
| | Years | mrem/yr | |
| 1 | 0.000E+00 | 1.206E+01 | |
| 2 | 0.000E+00 | 1.254E+01 | |
| 3 | 0.000E+00 | 1.244E+01 | |

Title : RESRAD Default Parameters
Input File : FCS BFM INSITU UA PU-239.RAD

Coefficients for peak All Pathways Dose

| Coefficient = | PCC | SRC | PRCC | SRRC |
|--|-----------|-----------|-----------|-----------|
| Repetition = | 1 | 1 | 1 | 1 |
| Description of Probabilistic Variable | Sig Coeff | Sig Coeff | Sig Coeff | Sig Coeff |
| Contaminated zone erosion rate | 11 -0.02 | 11 -0.02 | 12 -0.02 | 12 0.00 |
| Contaminated zone b parameter | 3 -0.08 | 3 -0.07 | 17 0.00 | 17 0.00 |
| Evapotranspiration coefficient | 6 -0.04 | 6 -0.04 | 7 0.09 | 7 0.01 |
| Wind Speed | 8 0.03 | 8 0.03 | 14 -0.01 | 14 0.00 |
| Runoff coefficient | 5 -0.06 | 5 -0.06 | 15 -0.01 | 15 0.00 |
| b Parameter of Unsaturated zone 1 | 13 -0.01 | 13 -0.01 | 16 0.00 | 16 0.00 |
| Mass loading for inhalation | 16 -0.01 | 16 -0.01 | 13 0.02 | 13 0.00 |
| Indoor dust filtration factor | 15 0.01 | 15 0.01 | 8 0.09 | 8 0.01 |
| Depth of soil mixing layer | 12 -0.02 | 12 -0.02 | 9 0.05 | 9 0.00 |
| Depth of roots | 9 -0.03 | 9 -0.03 | 4 0.32 | 4 0.02 |
| Wet weight crop yield of fruit, grain and non-leafy vegetables | 4 0.07 | 4 0.06 | 6 -0.15 | 6 -0.01 |
| Weathering removal constant of all vegetation | 17 0.00 | 17 0.00 | 3 -0.42 | 3 -0.03 |
| Wet foliar interception fraction of leafy vegetables | 7 -0.03 | 7 -0.03 | 5 0.22 | 5 0.01 |
| Humidity in air | 2 0.08 | 2 0.08 | 10 0.03 | 10 0.00 |
| Cover erosion rate | 10 -0.02 | 10 -0.02 | 2 0.54 | 2 0.04 |
| Kd of Pu-239 in Contaminated Zone | 1 -0.23 | 1 -0.23 | 1 -1.00 | 1 -1.00 |
| Kd of Pu-239 in Saturated Zone | 14 -0.01 | 14 -0.01 | 11 -0.02 | 11 0.00 |
| R-SQUARE | 0.07 | 0.07 | 1.00 | 1.00 |

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Title : RESRAD Default Parameters
Input File : FCS BFM INSITU UA PU-239.RAD

Coefficients for peak All Pathways Dose

| Coefficient = | PCC | SRC | PRCC | SRRC |
|--|-----------|-----------|-----------|-----------|
| Repetition = | 2 | 2 | 2 | 2 |
| Description of Probabilistic Variable | Sig Coeff | Sig Coeff | Sig Coeff | Sig Coeff |
| Contaminated zone erosion rate | 7 -0.03 | 7 -0.03 | 10 0.05 | 10 0.00 |
| Contaminated zone b parameter | 6 0.03 | 6 0.03 | 8 -0.07 | 8 0.00 |
| Evapotranspiration coefficient | 17 0.00 | 17 0.00 | 13 0.03 | 13 0.00 |
| Wind Speed | 4 0.05 | 4 0.05 | 7 -0.07 | 7 0.00 |
| Runoff coefficient | 8 0.01 | 8 0.01 | 17 -0.01 | 17 0.00 |
| b Parameter of Unsaturated zone 1 | 15 0.00 | 15 0.00 | 16 0.01 | 16 0.00 |
| Mass loading for inhalation | 12 -0.01 | 12 -0.01 | 15 0.01 | 15 0.00 |
| Indoor dust filtration factor | 5 -0.04 | 5 -0.04 | 11 -0.04 | 11 0.00 |
| Depth of soil mixing layer | 2 0.06 | 2 0.06 | 14 -0.02 | 14 0.00 |
| Depth of roots | 14 0.01 | 14 0.01 | 4 0.30 | 4 0.02 |
| Wet weight crop yield of fruit, grain and non-leafy vegetables | 9 -0.01 | 9 -0.01 | 5 -0.19 | 5 -0.01 |
| Weathering removal constant of all vegetation | 13 -0.01 | 13 -0.01 | 3 -0.39 | 3 -0.02 |
| Wet foliar interception fraction of leafy vegetables | 3 0.05 | 3 0.05 | 6 0.18 | 6 0.01 |
| Humidity in air | 10 0.01 | 10 0.01 | 12 0.03 | 12 0.00 |
| Cover erosion rate | 11 -0.01 | 11 -0.01 | 2 0.53 | 2 0.04 |
| Kd of Pu-239 in Contaminated Zone | 1 -0.13 | 1 -0.13 | 1 -1.00 | 1 -1.00 |
| Kd of Pu-239 in Saturated Zone | 16 0.00 | 16 0.00 | 9 -0.05 | 9 0.00 |
| R-SQUARE | 0.03 | 0.03 | 1.00 | 1.00 |

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Title : RESRAD Default Parameters
Input File : FCS BFM INSITU UA PU-239.RAD

Coefficients for peak All Pathways Dose

| Coefficient = | PCC | | SRC | | PRCC | | SRRC | |
|--|-----------|-------|-----------|-------|-----------|-------|-----------|-------|
| Repetition = | 3 | | 3 | | 3 | | 3 | |
| Description of Probabilistic Variable | Sig Coeff | | Sig Coeff | | Sig Coeff | | Sig Coeff | |
| Contaminated zone erosion rate | 17 | 0.00 | 17 | 0.00 | 11 | 0.05 | 11 | 0.00 |
| Contaminated zone b parameter | 11 | 0.01 | 11 | 0.01 | 9 | -0.07 | 9 | 0.00 |
| Evapotranspiration coefficient | 14 | 0.00 | 14 | 0.00 | 17 | -0.01 | 17 | 0.00 |
| Wind Speed | 5 | -0.05 | 5 | -0.05 | 15 | 0.01 | 15 | 0.00 |
| Runoff coefficient | 3 | -0.06 | 3 | -0.06 | 14 | 0.02 | 14 | 0.00 |
| b Parameter of Unsaturated zone 1 | 15 | 0.00 | 15 | 0.00 | 8 | 0.07 | 8 | 0.00 |
| Mass loading for inhalation | 2 | 0.10 | 2 | 0.09 | 10 | -0.06 | 10 | 0.00 |
| Indoor dust filtration factor | 12 | -0.01 | 12 | -0.01 | 16 | -0.01 | 16 | 0.00 |
| Depth of soil mixing layer | 13 | -0.01 | 13 | -0.01 | 13 | -0.03 | 13 | 0.00 |
| Depth of roots | 4 | 0.06 | 4 | 0.06 | 4 | 0.34 | 4 | 0.02 |
| Wet weight crop yield of fruit, grain and non-leafy vegetables | 7 | -0.04 | 7 | -0.04 | 6 | -0.16 | 6 | -0.01 |
| Weathering removal constant of all vegetation | 16 | 0.00 | 16 | 0.00 | 3 | -0.42 | 3 | -0.03 |
| Wet foliar interception fraction of leafy vegetables | 9 | 0.02 | 9 | 0.02 | 5 | 0.21 | 5 | 0.01 |
| Humidity in air | 8 | -0.03 | 8 | -0.03 | 7 | -0.07 | 7 | 0.00 |
| Cover erosion rate | 6 | 0.05 | 6 | 0.05 | 2 | 0.52 | 2 | 0.04 |
| Kd of Pu-239 in Contaminated Zone | 1 | -0.19 | 1 | -0.19 | 1 | -1.00 | 1 | -1.00 |
| Kd of Pu-239 in Saturated Zone | 10 | -0.02 | 10 | -0.02 | 12 | 0.04 | 12 | 0.00 |
| R-SQUARE | 0.06 | | 0.06 | | 1.00 | | 1.00 | |

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.