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Probabilistic Total Dose Summary

Nuclide (j)	Peak	Peak	DOSE(j,t), mrem/yr							
	Time	Dose	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
C-14										
Min	0.00E+00	1.51E+00	1.51E+00	6.66E-04	6.61E-19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.87E+00	2.87E+00	2.34E-01	2.57E-01	1.72E-01	5.23E-02	5.69E-02	5.92E-03	1.38E-02
Avg	0.00E+00	2.16E+00	2.16E+00	4.32E-03	8.50E-04	8.97E-04	5.20E-04	2.10E-04	7.57E-05	2.22E-05
Std	0.00E+00	3.26E-01	3.26E-01	6.80E-03	8.85E-03	6.49E-03	3.03E-03	1.69E-03	4.09E-04	3.63E-04
ALL										
Min	0.00E+00	1.51E+00	1.51E+00	6.66E-04	6.61E-19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.87E+00	2.87E+00	2.34E-01	2.57E-01	1.72E-01	5.23E-02	5.69E-02	5.92E-03	1.38E-02
Avg	0.00E+00	2.16E+00	2.16E+00	4.32E-03	8.50E-04	8.97E-04	5.20E-04	2.10E-04	7.57E-05	2.22E-05
Std	0.00E+00	3.26E-01	3.26E-01	6.80E-03	8.85E-03	6.49E-03	3.03E-03	1.69E-03	4.09E-04	3.63E-04

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
C-14									
Min		2.44E-04	1.90E-07	5.48E-22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		4.10E-04	2.55E-06	6.89E-06	4.59E-06	1.40E-06	1.52E-06	1.57E-07	3.70E-07
Avg		3.13E-04	7.28E-07	2.18E-08	2.40E-08	1.40E-08	5.66E-09	2.01E-09	5.93E-10
Std		4.67E-05	1.58E-07	2.36E-07	1.74E-07	8.11E-08	4.52E-08	1.09E-08	9.74E-09
TOTAL									
Min		2.44E-04	1.90E-07	5.48E-22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		4.10E-04	2.55E-06	6.89E-06	4.59E-06	1.40E-06	1.52E-06	1.57E-07	3.70E-07
Avg		3.13E-04	7.28E-07	2.18E-08	2.40E-08	1.40E-08	5.66E-09	2.01E-09	5.93E-10
Std		4.67E-05	1.58E-07	2.36E-07	1.74E-07	8.11E-08	4.52E-08	1.09E-08	9.74E-09

TOTAL 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
C-14									
Min		8.19E-07	1.31E-10	1.08E-27	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		9.78E-07	1.28E-09	2.21E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		9.66E-07	1.16E-09	1.64E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		2.21E-08	1.97E-10	5.66E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ALL									
Min		8.19E-07	1.31E-10	1.08E-27	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		9.78E-07	1.28E-09	2.21E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		9.66E-07	1.16E-09	1.64E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		2.21E-08	1.97E-10	5.66E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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/>									
C-14									
Min		9.76E-05	2.06E-08	1.75E-25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.88E-04	2.45E-07	4.21E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		1.42E-04	1.70E-07	2.41E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		2.16E-05	3.88E-08	9.18E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ΣALL									
Min		9.76E-05	2.06E-08	1.75E-25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.88E-04	2.45E-07	4.21E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		1.42E-04	1.70E-07	2.41E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		2.16E-05	3.88E-08	9.18E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
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ΣALL 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/>									
C-14									
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
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	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
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TOTAL 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
C-14									
Min		7.33E-01	2.09E-04	1.02E-20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.42E+00	2.14E-03	3.66E-09	2.44E-29	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		1.07E+00	1.49E-03	2.11E-09	5.96E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		1.61E-01	3.33E-04	7.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ΣALL									
Min		7.33E-01	2.09E-04	1.02E-20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.42E+00	2.14E-03	3.66E-09	2.44E-29	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		1.07E+00	1.49E-03	2.11E-09	5.96E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		1.61E-01	3.33E-04	7.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

ΣALL 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
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C-14									
Min		4.29E-01	2.81E-04	1.61E-19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		7.87E-01	1.81E-03	3.09E-09	2.06E-29	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		5.95E-01	1.28E-03	1.81E-09	5.10E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		8.93E-02	2.67E-04	6.67E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
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ALL									
Min		4.29E-01	2.81E-04	1.61E-19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		7.87E-01	1.81E-03	3.09E-09	2.06E-29	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		5.95E-01	1.28E-03	1.81E-09	5.10E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		8.93E-02	2.67E-04	6.67E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
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ALL 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
C-14									
Min		3.51E-01	1.76E-04	3.10E-20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.63E-01	1.34E-03	2.29E-09	1.53E-29	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		5.01E-01	9.39E-04	1.33E-09	3.70E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		7.54E-02	2.01E-04	4.95E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ALL									
Min		3.51E-01	1.76E-04	3.10E-20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.63E-01	1.34E-03	2.29E-09	1.53E-29	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		5.01E-01	9.39E-04	1.33E-09	3.70E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		7.54E-02	2.01E-04	4.95E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

ALL is total pathway dose summed for all nuclides.

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
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C-14									
Min		3.76E-06	6.02E-10	4.96E-27	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		4.49E-06	5.89E-09	1.01E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		4.44E-06	5.32E-09	7.53E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		1.02E-07	9.03E-10	2.60E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TOTAL									
Min		3.76E-06	6.02E-10	4.96E-27	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		4.49E-06	5.89E-09	1.01E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		4.44E-06	5.32E-09	7.53E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		1.02E-07	9.03E-10	2.60E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
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TOTAL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Water 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
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C-14									
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		1.16E-02	6.93E-02	7.46E-02	5.21E-02	1.50E-02	1.66E-02	1.90E-03	3.89E-03
Avg		6.75E-05	1.86E-04	2.53E-04	2.68E-04	1.53E-04	6.19E-05	2.25E-05	6.40E-06
Std		5.30E-04	2.07E-03	2.63E-03	1.99E-03	8.97E-04	4.94E-04	1.25E-04	1.02E-04
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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		1.16E-02	6.93E-02	7.46E-02	5.21E-02	1.50E-02	1.66E-02	1.90E-03	3.89E-03
Avg		6.75E-05	1.86E-04	2.53E-04	2.68E-04	1.53E-04	6.19E-05	2.25E-05	6.40E-06
Std		5.30E-04	2.07E-03	2.63E-03	1.99E-03	8.97E-04	4.94E-04	1.25E-04	1.02E-04
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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\SOIL UNCERTAINTY ANALYSIS\FCS SOIL UNCERTAINTY ANALYSIS C-14.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
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C-14									
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
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	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
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TOTAL is total pathway dose summed for all nuclides.

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/>									
C-14									
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
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	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
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TOTAL 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
C-14									
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		1.23E-02	8.71E-02	9.60E-02	6.09E-02	2.03E-02	2.11E-02	1.96E-03	5.36E-03
Avg		7.90E-05	2.28E-04	3.10E-04	3.26E-04	1.93E-04	7.73E-05	2.77E-05	8.43E-06
Std		6.19E-04	2.55E-03	3.23E-03	2.29E-03	1.12E-03	6.27E-04	1.45E-04	1.41E-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		1.23E-02	8.71E-02	9.60E-02	6.09E-02	2.03E-02	2.11E-02	1.96E-03	5.36E-03
Avg		7.90E-05	2.28E-04	3.10E-04	3.26E-04	1.93E-04	7.73E-05	2.77E-05	8.43E-06
Std		6.19E-04	2.55E-03	3.23E-03	2.29E-03	1.12E-03	6.27E-04	1.45E-04	1.41E-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\SOIL UNCERTAINTY ANALYSIS\FCS SOIL UNCERTAINTY ANALYSIS C-14.RAD

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
<hr/>									
C-14									
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		6.67E-03	4.34E-02	5.00E-02	3.41E-02	9.94E-03	1.11E-02	1.20E-03	2.62E-03
Avg		3.84E-05	1.18E-04	1.66E-04	1.76E-04	1.01E-04	4.09E-05	1.48E-05	4.27E-06
Std		3.08E-04	1.29E-03	1.74E-03	1.29E-03	5.91E-04	3.28E-04	8.14E-05	6.90E-05
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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		6.67E-03	4.34E-02	5.00E-02	3.41E-02	9.94E-03	1.11E-02	1.20E-03	2.62E-03
Avg		3.84E-05	1.18E-04	1.66E-04	1.76E-04	1.01E-04	4.09E-05	1.48E-05	4.27E-06
Std		3.08E-04	1.29E-03	1.74E-03	1.29E-03	5.91E-04	3.28E-04	8.14E-05	6.90E-05
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ΣALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Milk (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
C-14									
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		5.08E-03	3.26E-02	3.65E-02	2.46E-02	7.26E-03	8.04E-03	8.56E-04	1.91E-03
Avg		3.00E-05	8.72E-05	1.20E-04	1.27E-04	7.33E-05	2.96E-05	1.07E-05	3.10E-06
Std		2.37E-04	9.69E-04	1.26E-03	9.31E-04	4.28E-04	2.38E-04	5.85E-05	5.04E-05
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		5.08E-03	3.26E-02	3.65E-02	2.46E-02	7.26E-03	8.04E-03	8.56E-04	1.91E-03
Avg		3.00E-05	8.72E-05	1.20E-04	1.27E-04	7.33E-05	2.96E-05	1.07E-05	3.10E-06
Std		2.37E-04	9.69E-04	1.26E-03	9.31E-04	4.28E-04	2.38E-04	5.85E-05	5.04E-05

ΣALL is total pathway dose summed for all nuclides.

2.01E+01 0.00E+00 9.17E-02 1.01E-03 6.45E-07 8.75E-04 3.80E-03 8.42E-03 3.19E-02

2.13E+01 0.00E+00 9.21E-02 1.00E-03 7.62E-07 8.12E-04 3.38E-03 8.42E-03 3.18E-02

2.25E+01 0.00E+00 9.25E-02 1.01E-03 6.91E-07 8.13E-04 3.42E-03 8.42E-03 3.14E-02

2.38E+01	0.00E+00	9.09E-02	1.06E-03	8.33E-07	8.76E-04	3.83E-03	9.24E-03	3.14E-02
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2.52E+01	0.00E+00	5.26E-02	9.33E-04	6.91E-07	8.03E-04	3.85E-03	9.24E-03	3.04E-02
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2.67E+01 0.00E+00 5.21E-02 8.78E-04 8.53E-07 8.20E-04 3.38E-03 8.43E-03 3.07E-02

2.82E+01 0.00E+00 5.22E-02 8.21E-04 7.76E-07 6.96E-04 2.96E-03 7.98E-03 2.71E-02

2.99E+01 0.00E+00 5.23E-02 7.90E-04 6.39E-07 6.96E-04 2.96E-03 7.72E-03 2.72E-02

3.00E+01 0.00E+00 5.23E-02 7.90E-04 6.30E-07 6.96E-04 2.96E-03 7.72E-03 2.72E-02

3.16E+01 0.00E+00 4.67E-02 6.92E-04 6.32E-07 6.98E-04 2.39E-03 7.50E-03 1.56E-02

3.35E+01 0.00E+00 4.69E-02 6.69E-04 6.22E-07 6.95E-04 2.24E-03 7.44E-03 1.57E-02

3.54E+01	0.00E+00	4.60E-02	7.47E-04	4.57E-07	6.91E-04	2.35E-03	7.46E-03	2.68E-02
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3.75E+01	0.00E+00	6.41E-02	8.12E-04	3.98E-07	6.99E-04	2.97E-03	7.65E-03	2.68E-02
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3.97E+01 0.00E+00 6.41E-02 7.97E-04 3.82E-07 6.07E-04 2.35E-03 7.65E-03 2.68E-02

4.20E+01 0.00E+00 6.46E-02 7.96E-04 3.59E-07 5.68E-04 2.35E-03 7.65E-03 2.68E-02

4.44E+01 0.00E+00 6.40E-02 6.97E-04 3.28E-07 5.58E-04 2.22E-03 7.46E-03 1.50E-02

4.70E+01 0.00E+00 6.42E-02 6.42E-04 3.10E-07 4.82E-04 1.80E-03 7.00E-03 1.50E-02

4.97E+01 0.00E+00 6.48E-02 5.51E-04 2.14E-07 4.17E-04 1.77E-03 6.10E-03 1.45E-02

5.26E+01	0.00E+00	6.39E-02	4.83E-04	2.14E-07	2.66E-04	1.39E-03	5.29E-03	1.18E-02
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5.57E+01 0.00E+00 6.40E-02 4.90E-04 1.97E-07 2.53E-04 1.55E-03 5.59E-03 1.16E-02

5.90E+01 0.00E+00 6.42E-02 4.62E-04 1.97E-07 2.41E-04 1.39E-03 5.29E-03 8.06E-03

6.24E+01 0.00E+00 6.44E-02 4.58E-04 1.45E-07 2.31E-04 1.35E-03 5.30E-03 8.08E-03

6.60E+01 0.00E+00 1.18E-02 2.42E-04 1.13E-07 1.99E-04 1.06E-03 3.15E-03 7.40E-03

6.99E+01 0.00E+00 8.14E-03 2.29E-04 1.15E-07 2.00E-04 1.08E-03 3.16E-03 6.80E-03

7.39E+01 0.00E+00 7.98E-03 2.24E-04 1.22E-07 1.96E-04 1.05E-03 3.16E-03 6.80E-03

7.82E+01 0.00E+00 7.98E-03 2.31E-04 1.43E-07 2.29E-04 1.06E-03 3.14E-03 6.80E-03

8.28E+01 0.00E+00 7.97E-03 2.28E-04 1.90E-07 2.29E-04 1.05E-03 3.14E-03 6.79E-03

8.76E+01	0.00E+00	7.97E-03	2.05E-04	1.90E-07	1.96E-04	9.13E-04	2.43E-03	6.69E-03
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9.27E+01 0.00E+00 7.97E-03 1.85E-04 1.79E-07 1.91E-04 8.04E-04 2.20E-03 5.33E-03

9.81E+01 0.00E+00 7.98E-03 1.78E-04 1.43E-07 1.73E-04 7.22E-04 1.94E-03 5.33E-03

1.00E+02 0.00E+00 7.98E-03 1.79E-04 1.61E-07 1.73E-04 7.22E-04 1.94E-03 5.34E-03

1.04E+02 0.00E+00 7.96E-03 1.93E-04 1.31E-07 1.74E-04 8.87E-04 2.20E-03 5.34E-03

1.10E+02 0.00E+00 7.83E-03 1.75E-04 9.54E-08 1.69E-04 8.69E-04 1.94E-03 5.25E-03

1.16E+02 0.00E+00 7.84E-03 1.77E-04 9.54E-08 1.69E-04 8.70E-04 1.98E-03 5.29E-03

1.23E+02	0.00E+00	7.86E-03	1.73E-04	9.54E-08	1.59E-04	7.33E-04	1.95E-03	5.24E-03
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1.30E+02 0.00E+00 7.89E-03 1.66E-04 8.43E-08 1.49E-04 7.35E-04 1.95E-03 5.15E-03

1.38E+02 0.00E+00 7.75E-03 1.70E-04 5.98E-08 1.60E-04 7.37E-04 1.96E-03 5.15E-03

1.46E+02 0.00E+00 7.74E-03 1.70E-04 6.14E-08 1.57E-04 7.23E-04 1.94E-03 5.14E-03

1.54E+02 0.00E+00 7.74E-03 1.69E-04 5.88E-08 1.57E-04 7.23E-04 1.92E-03 5.14E-03

1.63E+02 0.00E+00 7.73E-03 1.50E-04 5.35E-08 1.42E-04 6.41E-04 1.76E-03 4.74E-03

1.73E+02 0.00E+00 7.73E-03 1.28E-04 4.25E-08 1.31E-04 5.40E-04 1.61E-03 3.32E-03

1.83E+02 0.00E+00 7.73E-03 1.17E-04 4.15E-08 1.31E-04 5.17E-04 1.44E-03 3.28E-03

1.94E+02 0.00E+00 7.72E-03 1.14E-04 3.17E-08 1.21E-04 4.88E-04 1.40E-03 3.28E-03

2.05E+02 0.00E+00 6.69E-03 9.55E-05 2.75E-08 8.97E-05 4.04E-04 1.16E-03 2.32E-03

2.17E+02 0.00E+00 6.68E-03 9.04E-05 1.39E-08 8.64E-05 2.62E-04 9.71E-04 2.32E-03

2.29E+02 0.00E+00 6.67E-03 8.36E-05 1.00E-08 8.16E-05 2.49E-04 8.94E-04 2.04E-03

2.43E+02 0.00E+00 5.28E-03 6.92E-05 7.30E-09 5.68E-05 2.29E-04 8.02E-04 1.81E-03

2.57E+02	0.00E+00	5.29E-03	7.53E-05	5.60E-09	5.71E-05	2.35E-04	8.88E-04	2.04E-03
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2.72E+02	0.00E+00	5.31E-03	7.18E-05	4.14E-09	5.62E-05	2.35E-04	7.95E-04	2.04E-03
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2.88E+02 0.00E+00 5.20E-03 7.02E-05 2.67E-09 5.48E-05 2.30E-04 7.87E-04 2.05E-03

3.00E+02 0.00E+00 5.92E-03 7.76E-05 2.62E-09 5.00E-05 2.26E-04 7.86E-04 2.28E-03

3.05E+02 0.00E+00 5.96E-03 7.56E-05 2.11E-09 4.78E-05 2.24E-04 6.70E-04 2.28E-03

3.22E+02 0.00E+00 5.91E-03 6.95E-05 1.36E-09 4.63E-05 1.91E-04 6.69E-04 1.77E-03

3.41E+02 0.00E+00 5.89E-03 7.72E-05 1.29E-09 4.68E-05 2.25E-04 7.44E-04 2.27E-03

3.61E+02 0.00E+00 5.95E-03 7.23E-05 1.12E-09 4.50E-05 1.85E-04 5.81E-04 2.27E-03

3.82E+02	0.00E+00	5.86E-03	5.73E-05	7.46E-10	3.85E-05	1.68E-04	4.26E-04	1.44E-03
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4.04E+02 0.00E+00 5.15E-03 4.52E-05 6.70E-10 3.63E-05 1.67E-04 3.46E-04 1.26E-03

4.28E+02 0.00E+00 3.21E-03 3.42E-05 2.31E-10 3.16E-05 1.52E-04 2.67E-04 7.76E-04

4.53E+02 0.00E+00 3.21E-03 3.21E-05 0.00E+00 2.73E-05 1.33E-04 2.53E-04 7.03E-04

4.79E+02	0.00E+00	3.21E-03	3.07E-05	0.00E+00	2.69E-05	1.28E-04	2.46E-04	6.23E-04
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5.07E+02	0.00E+00	3.21E-03	2.73E-05	0.00E+00	2.53E-05	9.62E-05	2.25E-04	5.34E-04
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5.36E+02 0.00E+00 3.14E-03 2.61E-05 0.00E+00 2.50E-05 8.76E-05 2.20E-04 5.34E-04

5.68E+02 0.00E+00 1.24E-03 1.63E-05 0.00E+00 2.13E-05 8.27E-05 1.74E-04 3.90E-04

6.01E+02 0.00E+00 1.24E-03 1.56E-05 0.00E+00 1.92E-05 7.28E-05 1.71E-04 3.90E-04

6.36E+02 0.00E+00 1.62E-03 1.77E-05 0.00E+00 1.85E-05 5.40E-05 1.70E-04 3.91E-04

6.73E+02	0.00E+00	1.61E-03	1.73E-05	0.00E+00	1.79E-05	5.30E-05	1.66E-04	3.81E-04
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7.12E+02	0.00E+00	4.09E-03	2.22E-05	0.00E+00	1.78E-05	5.39E-05	1.65E-04	3.80E-04
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7.53E+02	0.00E+00	4.09E-03	2.08E-05	0.00E+00	1.77E-05	5.38E-05	1.61E-04	2.68E-04
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7.97E+02	0.00E+00	4.06E-03	2.00E-05	0.00E+00	1.75E-05	5.22E-05	1.58E-04	2.45E-04
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8.44E+02 0.00E+00 1.20E-03 1.16E-05 0.00E+00 1.67E-05 4.49E-05 1.51E-04 2.31E-04

8.93E+02	0.00E+00	1.19E-03	1.07E-05	0.00E+00	1.50E-05	4.23E-05	1.33E-04	2.18E-04
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9.45E+02	0.00E+00	1.19E-03	1.07E-05	0.00E+00	1.50E-05	4.21E-05	1.32E-04	2.17E-04
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1.00E+03 0.00E+00 1.18E-03 1.03E-05 0.00E+00 1.47E-05 3.81E-05 1.32E-04 2.09E-04

2.01E+01 0.00E+00 4.61E-02 6.56E-04 7.13E-07 6.01E-04 2.47E-03 7.01E-03 2.01E-02

2.13E+01	0.00E+00	4.61E-02	6.16E-04	8.03E-07	5.78E-04	2.25E-03	5.32E-03	2.01E-02
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2.25E+01 0.00E+00 4.61E-02 5.49E-04 7.90E-07 5.06E-04 1.99E-03 4.59E-03 1.90E-02

2.38E+01 0.00E+00 4.62E-02 5.03E-04 5.51E-07 4.40E-04 2.00E-03 4.58E-03 1.67E-02

2.52E+01	0.00E+00	4.60E-02	4.44E-04	5.28E-07	4.15E-04	1.66E-03	3.93E-03	1.38E-02
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2.67E+01 0.00E+00 2.19E-02 3.38E-04 4.76E-07 3.68E-04 1.28E-03 2.86E-03 7.27E-03

2.82E+01 0.00E+00 2.19E-02 3.26E-04 4.24E-07 3.33E-04 1.15E-03 2.80E-03 7.29E-03

2.99E+01 0.00E+00 2.20E-02 3.19E-04 4.48E-07 2.96E-04 1.07E-03 2.68E-03 7.32E-03

3.00E+01	0.00E+00	2.20E-02	3.18E-04	4.52E-07	2.96E-04	1.07E-03	2.68E-03	7.32E-03
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3.16E+01	0.00E+00	2.20E-02	3.17E-04	4.22E-07	2.98E-04	1.07E-03	2.69E-03	7.18E-03
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3.35E+01 0.00E+00 2.21E-02 3.17E-04 4.53E-07 2.96E-04 1.07E-03 2.70E-03 7.18E-03

3.54E+01 0.00E+00 2.21E-02 3.33E-04 5.17E-07 3.37E-04 1.15E-03 2.81E-03 7.69E-03

3.75E+01	0.00E+00	2.22E-02	3.32E-04	5.09E-07	3.31E-04	1.13E-03	2.80E-03	7.75E-03
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3.97E+01 0.00E+00 2.21E-02 3.29E-04 5.08E-07 2.96E-04 1.13E-03 2.78E-03 7.72E-03

4.20E+01	0.00E+00	2.19E-02	3.24E-04	5.08E-07	2.98E-04	9.50E-04	2.73E-03	7.81E-03
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4.44E+01 0.00E+00 2.00E-02 3.32E-04 4.97E-07 3.08E-04 1.04E-03 2.85E-03 1.18E-02

4.70E+01 0.00E+00 2.48E-02 3.22E-04 3.37E-07 2.85E-04 8.91E-04 2.73E-03 7.74E-03

4.97E+01 0.00E+00 2.48E-02 3.16E-04 2.55E-07 2.38E-04 8.79E-04 2.74E-03 7.81E-03

5.26E+01 0.00E+00 2.51E-02 3.29E-04 2.66E-07 2.38E-04 9.48E-04 2.86E-03 7.70E-03

5.57E+01 0.00E+00 2.48E-02 3.16E-04 3.07E-07 2.75E-04 8.82E-04 2.75E-03 7.71E-03

5.90E+01 0.00E+00 2.49E-02 3.19E-04 3.15E-07 2.75E-04 8.90E-04 2.74E-03 7.72E-03

6.24E+01	0.00E+00	2.92E-02	3.78E-04	3.23E-07	2.87E-04	9.63E-04	2.87E-03	1.39E-02
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6.60E+01	0.00E+00	2.92E-02	3.39E-04	3.24E-07	2.82E-04	9.64E-04	2.87E-03	7.81E-03
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6.99E+01 0.00E+00 2.92E-02 3.35E-04 3.17E-07 2.82E-04 9.67E-04 2.86E-03 7.68E-03

7.39E+01	0.00E+00	2.94E-02	3.01E-04	2.54E-07	2.22E-04	8.88E-04	2.72E-03	7.14E-03
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7.82E+01	0.00E+00	2.91E-02	2.89E-04	2.02E-07	2.07E-04	8.74E-04	2.63E-03	7.14E-03
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8.28E+01 0.00E+00 2.92E-02 2.86E-04 1.66E-07 1.97E-04 8.27E-04 2.64E-03 7.15E-03

8.76E+01 0.00E+00 2.93E-02 3.22E-04 1.66E-07 2.05E-04 8.74E-04 2.83E-03 7.71E-03

9.27E+01	0.00E+00	5.70E-02	3.51E-04	1.54E-07	1.96E-04	7.73E-04	2.53E-03	7.15E-03
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9.81E+01	0.00E+00	5.74E-02	2.76E-04	1.06E-07	1.76E-04	6.89E-04	2.13E-03	5.33E-03
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1.00E+02 0.00E+00 5.69E-02 2.74E-04 1.10E-07 1.73E-04 6.84E-04 2.13E-03 5.36E-03

1.04E+02 0.00E+00 5.73E-02 2.76E-04 1.06E-07 1.77E-04 6.90E-04 2.13E-03 5.29E-03

1.10E+02 0.00E+00 5.68E-02 2.63E-04 9.91E-08 1.50E-04 6.86E-04 1.96E-03 4.52E-03

1.16E+02 0.00E+00 5.71E-02 2.64E-04 9.72E-08 1.50E-04 6.89E-04 1.96E-03 4.52E-03

1.23E+02 0.00E+00 5.73E-02 2.66E-04 9.93E-08 1.73E-04 6.92E-04 1.97E-03 4.54E-03

1.30E+02 0.00E+00 5.67E-02 2.62E-04 9.75E-08 1.71E-04 6.80E-04 1.97E-03 4.55E-03

1.38E+02	0.00E+00	1.34E-02	1.50E-04	7.85E-08	1.71E-04	6.80E-04	1.89E-03	3.32E-03
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1.46E+02 0.00E+00 1.35E-02 1.49E-04 7.03E-08 1.51E-04 6.80E-04 1.88E-03 3.34E-03

1.54E+02 0.00E+00 1.33E-02 1.48E-04 6.98E-08 1.51E-04 6.80E-04 1.88E-03 3.31E-03

1.63E+02 0.00E+00 7.09E-03 1.24E-04 5.83E-08 1.32E-04 6.81E-04 1.88E-03 2.81E-03

1.73E+02 0.00E+00 7.08E-03 1.19E-04 4.32E-08 1.31E-04 6.38E-04 1.47E-03 2.81E-03

1.83E+02 0.00E+00 7.09E-03 1.14E-04 4.19E-08 1.22E-04 5.36E-04 1.11E-03 2.80E-03

1.94E+02 0.00E+00 7.09E-03 1.19E-04 3.54E-08 1.22E-04 5.34E-04 1.48E-03 3.34E-03

2.05E+02 0.00E+00 7.09E-03 1.19E-04 3.12E-08 1.17E-04 5.34E-04 1.46E-03 3.28E-03

2.17E+02 0.00E+00 7.10E-03 1.19E-04 3.12E-08 1.17E-04 5.34E-04 1.46E-03 3.28E-03

2.29E+02 0.00E+00 5.90E-03 1.05E-04 2.61E-08 1.02E-04 3.91E-04 1.07E-03 3.29E-03

2.43E+02 0.00E+00 5.89E-03 9.21E-05 1.76E-08 7.87E-05 3.26E-04 9.57E-04 2.81E-03

2.57E+02 0.00E+00 5.88E-03 8.25E-05 1.54E-08 6.97E-05 2.19E-04 7.94E-04 2.58E-03

2.72E+02 0.00E+00 5.87E-03 6.77E-05 9.56E-09 6.10E-05 2.14E-04 6.96E-04 2.39E-03

2.88E+02 0.00E+00 5.86E-03 6.74E-05 8.48E-09 6.12E-05 2.14E-04 6.90E-04 2.38E-03

3.00E+02 0.00E+00 5.85E-03 6.69E-05 8.80E-09 5.99E-05 2.15E-04 6.85E-04 2.38E-03

3.05E+02 0.00E+00 5.85E-03 6.69E-05 9.38E-09 5.98E-05 2.15E-04 6.85E-04 2.38E-03

3.22E+02 0.00E+00 3.25E-03 5.51E-05 7.62E-09 4.86E-05 2.08E-04 6.74E-04 1.11E-03

3.41E+02 0.00E+00 3.25E-03 4.84E-05 2.91E-09 4.69E-05 1.99E-04 5.95E-04 1.07E-03

3.61E+02 0.00E+00 3.26E-03 5.15E-05 2.59E-09 4.69E-05 2.01E-04 6.44E-04 1.11E-03

3.82E+02 0.00E+00 3.27E-03 4.40E-05 2.39E-09 4.46E-05 1.77E-04 5.45E-04 1.06E-03

4.04E+02 0.00E+00 3.21E-03 4.33E-05 2.38E-09 4.18E-05 1.68E-04 5.44E-04 1.06E-03

4.28E+02 0.00E+00 3.20E-03 4.30E-05 1.20E-09 3.90E-05 1.68E-04 5.43E-04 1.06E-03

4.53E+02 0.00E+00 3.19E-03 4.47E-05 1.12E-10 3.98E-05 1.76E-04 5.87E-04 1.06E-03

4.79E+02 0.00E+00 3.19E-03 4.35E-05 0.00E+00 3.79E-05 1.68E-04 5.85E-04 1.06E-03

5.07E+02	0.00E+00	3.18E-03	4.33E-05	0.00E+00	3.75E-05	1.67E-04	5.83E-04	1.06E-03
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5.36E+02	0.00E+00	3.77E-03	5.06E-05	0.00E+00	3.75E-05	1.76E-04	6.34E-04	1.10E-03
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5.68E+02 0.00E+00 3.17E-03 4.08E-05 0.00E+00 2.87E-05 1.65E-04 5.32E-04 1.06E-03

6.01E+02 0.00E+00 3.15E-03 3.63E-05 0.00E+00 2.80E-05 1.45E-04 3.60E-04 1.00E-03

6.36E+02 0.00E+00 3.14E-03 3.90E-05 0.00E+00 2.45E-05 1.42E-04 4.39E-04 1.03E-03

6.73E+02	0.00E+00	3.13E-03	3.56E-05	0.00E+00	2.22E-05	1.38E-04	3.57E-04	9.84E-04
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7.12E+02	0.00E+00	3.11E-03	2.94E-05	0.00E+00	2.11E-05	1.24E-04	3.55E-04	7.33E-04
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7.53E+02 0.00E+00 3.10E-03 2.75E-05 0.00E+00 1.88E-05 1.06E-04 2.31E-04 7.38E-04

7.97E+02	0.00E+00	1.01E-03	1.97E-05	0.00E+00	1.73E-05	7.35E-05	1.98E-04	6.30E-04
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8.44E+02 0.00E+00 9.68E-04 1.70E-05 0.00E+00 1.70E-05 4.57E-05 1.88E-04 5.91E-04

8.93E+02	0.00E+00	9.63E-04	1.67E-05	0.00E+00	1.45E-05	4.54E-05	1.87E-04	5.87E-04
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9.45E+02	0.00E+00	9.59E-04	1.75E-05	0.00E+00	1.52E-05	6.35E-05	1.95E-04	5.84E-04
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1.00E+03	0.00E+00	1.38E-02	4.34E-05	0.00E+00	1.51E-05	4.73E-05	1.84E-04	6.19E-04
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2.01E+01 0.00E+00 9.49E-02 7.47E-04 5.86E-07 7.86E-04 2.01E-03 7.69E-03 2.15E-02

2.13E+01	0.00E+00	7.03E-02	6.75E-04	5.93E-07	7.33E-04	1.99E-03	6.78E-03	2.16E-02
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2.25E+01 0.00E+00 3.68E-02 4.89E-04 4.87E-07 6.59E-04 1.86E-03 5.48E-03 1.03E-02

2.38E+01 0.00E+00 3.68E-02 4.77E-04 4.89E-07 6.56E-04 1.62E-03 4.49E-03 1.04E-02

2.52E+01	0.00E+00	3.69E-02	4.78E-04	5.16E-07	6.43E-04	1.62E-03	4.49E-03	1.04E-02
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2.67E+01 0.00E+00 3.70E-02 4.75E-04 5.12E-07 6.07E-04 1.62E-03 4.50E-03 1.04E-02

2.82E+01 0.00E+00 3.71E-02 4.50E-04 5.51E-07 6.07E-04 1.63E-03 4.51E-03 1.02E-02

2.99E+01 0.00E+00 3.73E-02 4.54E-04 5.13E-07 5.82E-04 1.61E-03 4.52E-03 1.04E-02

3.00E+01	0.00E+00	3.72E-02	4.54E-04	4.87E-07	5.82E-04	1.61E-03	4.52E-03	1.04E-02
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3.16E+01 0.00E+00 3.67E-02 4.36E-04 5.14E-07 5.50E-04 1.55E-03 3.82E-03 1.05E-02

3.35E+01 0.00E+00 3.67E-02 4.63E-04 4.89E-07 5.47E-04 1.56E-03 3.38E-03 1.31E-02

3.54E+01	0.00E+00	3.67E-02	4.15E-04	4.69E-07	5.18E-04	1.47E-03	3.13E-03	1.03E-02
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3.75E+01 0.00E+00 3.68E-02 4.02E-04 4.02E-07 5.14E-04 1.47E-03 3.14E-03 9.00E-03

3.97E+01	0.00E+00	3.67E-02	3.95E-04	3.87E-07	5.15E-04	1.42E-03	2.92E-03	9.01E-03
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4.20E+01	0.00E+00	3.04E-02	3.95E-04	3.87E-07	5.15E-04	1.47E-03	3.14E-03	9.01E-03
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4.44E+01 0.00E+00 6.49E-02 4.64E-04 3.73E-07 5.00E-04 1.46E-03 3.13E-03 9.01E-03

4.70E+01 0.00E+00 6.49E-02 4.85E-04 3.73E-07 5.00E-04 1.51E-03 3.14E-03 1.29E-02

4.97E+01 0.00E+00 6.57E-02 4.56E-04 3.44E-07 4.69E-04 1.38E-03 2.88E-03 7.73E-03

5.26E+01 0.00E+00 6.49E-02 4.60E-04 3.45E-07 5.00E-04 1.46E-03 2.94E-03 7.75E-03

5.57E+01 0.00E+00 6.52E-02 4.55E-04 3.45E-07 4.72E-04 1.38E-03 2.70E-03 7.81E-03

5.90E+01 0.00E+00 3.06E-02 3.18E-04 3.53E-07 4.51E-04 1.31E-03 2.19E-03 7.33E-03

6.24E+01	0.00E+00	2.01E-02	2.53E-04	2.84E-07	4.22E-04	1.14E-03	2.15E-03	6.19E-03
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6.60E+01	0.00E+00	1.98E-02	2.50E-04	2.29E-07	3.88E-04	1.14E-03	2.13E-03	6.21E-03
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6.99E+01 0.00E+00 1.99E-02 2.43E-04 2.30E-07 3.82E-04 1.11E-03 2.05E-03 6.10E-03

7.39E+01 0.00E+00 1.99E-02 2.41E-04 2.42E-07 3.83E-04 1.11E-03 2.05E-03 6.10E-03

7.82E+01 0.00E+00 2.01E-02 2.24E-04 3.28E-07 3.60E-04 1.08E-03 1.93E-03 5.36E-03

8.28E+01 0.00E+00 1.98E-02 2.33E-04 2.42E-07 3.77E-04 1.09E-03 2.06E-03 5.38E-03

8.76E+01 0.00E+00 1.98E-02 2.24E-04 2.35E-07 3.75E-04 1.04E-03 1.91E-03 5.43E-03

9.27E+01	0.00E+00	1.98E-02	2.24E-04	2.23E-07	3.62E-04	1.04E-03	1.91E-03	5.34E-03
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9.81E+01 0.00E+00 1.98E-02 2.19E-04 2.35E-07 3.75E-04 1.04E-03 1.86E-03 4.38E-03

1.00E+02 0.00E+00 1.29E-02 1.77E-04 2.26E-07 3.68E-04 9.25E-04 1.55E-03 4.11E-03

1.04E+02 0.00E+00 1.29E-02 1.75E-04 2.06E-07 3.62E-04 8.80E-04 1.55E-03 4.11E-03

1.10E+02 0.00E+00 1.29E-02 1.59E-04 2.02E-07 3.34E-04 8.64E-04 1.48E-03 3.40E-03

1.16E+02 0.00E+00 4.09E-02 2.39E-04 1.76E-07 3.25E-04 8.69E-04 1.55E-03 4.13E-03

1.23E+02 0.00E+00 4.04E-02 2.26E-04 1.70E-07 2.93E-04 8.63E-04 1.48E-03 4.14E-03

1.30E+02 0.00E+00 4.04E-02 2.04E-04 1.58E-07 2.31E-04 7.90E-04 1.42E-03 3.43E-03

1.38E+02	0.00E+00	5.33E-03	1.21E-04	1.45E-07	2.27E-04	5.82E-04	1.38E-03	2.67E-03
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1.46E+02 0.00E+00 1.31E-02 1.45E-04 1.24E-07 2.18E-04 7.21E-04 1.42E-03 3.36E-03

1.54E+02 0.00E+00 1.35E-02 1.61E-04 1.07E-07 2.03E-04 5.73E-04 1.41E-03 3.36E-03

1.63E+02 0.00E+00 1.34E-02 1.58E-04 7.82E-08 2.03E-04 5.37E-04 1.41E-03 3.35E-03

1.73E+02 0.00E+00 1.34E-02 1.57E-04 5.86E-08 1.81E-04 5.37E-04 1.41E-03 3.35E-03

1.83E+02 0.00E+00 5.39E-03 1.02E-04 3.63E-08 1.42E-04 5.11E-04 1.14E-03 2.19E-03

1.94E+02 0.00E+00 5.28E-03 9.93E-05 2.79E-08 1.21E-04 5.11E-04 1.14E-03 2.19E-03

2.05E+02 0.00E+00 5.28E-03 9.39E-05 2.79E-08 1.18E-04 5.05E-04 1.09E-03 2.09E-03

2.17E+02 0.00E+00 5.28E-03 9.43E-05 2.79E-08 1.21E-04 5.05E-04 1.09E-03 2.09E-03

2.29E+02	0.00E+00	5.27E-03	9.39E-05	3.13E-08	1.17E-04	5.06E-04	1.09E-03	2.10E-03
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2.43E+02 0.00E+00 5.27E-03 9.10E-05 2.24E-08 1.08E-04 4.65E-04 1.05E-03 2.10E-03

2.57E+02 0.00E+00 5.27E-03 9.10E-05 2.24E-08 1.08E-04 4.65E-04 1.05E-03 2.11E-03

2.72E+02	0.00E+00	5.28E-03	8.92E-05	2.38E-08	1.09E-04	4.64E-04	1.05E-03	2.10E-03
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2.88E+02 0.00E+00 5.29E-03 8.83E-05 1.84E-08 1.09E-04 4.63E-04 1.04E-03 2.06E-03

3.00E+02 0.00E+00 5.30E-03 8.24E-05 1.57E-08 9.62E-05 4.34E-04 9.98E-04 2.05E-03

3.05E+02	0.00E+00	5.31E-03	8.28E-05	1.49E-08	9.63E-05	4.34E-04	9.97E-04	2.05E-03
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3.22E+02 0.00E+00 5.20E-03 8.13E-05 1.33E-08 8.51E-05 4.04E-04 9.43E-04 2.06E-03

3.41E+02 0.00E+00 5.19E-03 7.82E-05 7.88E-09 7.72E-05 3.61E-04 8.83E-04 2.05E-03

3.61E+02 0.00E+00 5.18E-03 7.49E-05 3.74E-09 7.31E-05 2.87E-04 8.06E-04 2.05E-03

3.82E+02 0.00E+00 4.23E-03 6.45E-05 2.18E-09 7.22E-05 2.84E-04 7.33E-04 2.04E-03

4.04E+02 0.00E+00 3.27E-03 5.27E-05 9.57E-10 6.61E-05 2.23E-04 5.40E-04 1.45E-03

4.28E+02 0.00E+00 2.34E-03 4.47E-05 4.05E-10 6.17E-05 1.98E-04 5.23E-04 1.14E-03

4.53E+02 0.00E+00 3.00E-03 5.04E-05 7.64E-11 6.16E-05 2.12E-04 5.39E-04 1.45E-03

4.79E+02 0.00E+00 3.00E-03 4.50E-05 0.00E+00 5.73E-05 1.96E-04 5.22E-04 1.14E-03

5.07E+02	0.00E+00	2.98E-03	4.17E-05	0.00E+00	4.77E-05	1.60E-04	4.39E-04	1.13E-03
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5.36E+02	0.00E+00	2.98E-03	4.16E-05	0.00E+00	4.75E-05	1.60E-04	4.37E-04	1.13E-03
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5.68E+02	0.00E+00	3.01E-03	3.96E-05	0.00E+00	4.20E-05	1.55E-04	4.12E-04	1.12E-03
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6.01E+02	0.00E+00	2.95E-03	3.88E-05	0.00E+00	3.80E-05	1.18E-04	4.06E-04	1.12E-03
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6.36E+02	0.00E+00	2.95E-03	3.86E-05	0.00E+00	3.79E-05	1.18E-04	4.04E-04	1.11E-03
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6.73E+02	0.00E+00	2.95E-03	3.68E-05	0.00E+00	3.47E-05	1.14E-04	3.69E-04	1.11E-03
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7.12E+02	0.00E+00	2.97E-03	3.26E-05	0.00E+00	2.61E-05	1.10E-04	3.10E-04	8.20E-04
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7.53E+02	0.00E+00	3.56E-03	3.56E-05	0.00E+00	2.60E-05	1.10E-04	3.09E-04	8.16E-04
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7.97E+02	0.00E+00	1.39E-03	2.25E-05	0.00E+00	2.15E-05	9.91E-05	2.64E-04	6.74E-04
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8.44E+02	0.00E+00	2.31E-03	2.45E-05	0.00E+00	1.93E-05	7.28E-05	2.07E-04	7.19E-04
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8.93E+02	0.00E+00	2.29E-03	2.27E-05	0.00E+00	1.71E-05	6.97E-05	1.94E-04	6.69E-04
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9.45E+02 0.00E+00 2.30E-03 2.04E-05 0.00E+00 1.35E-05 6.85E-05 1.75E-04 5.25E-04

1.00E+03 0.00E+00 1.07E-03 1.28E-05 0.00E+00 1.22E-05 6.16E-05 1.39E-04 3.40E-04

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL UNCERTAINTY ANALYSIS\FCS SOIL UNCERTAINTY ANALYSIS C-14.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	2.163E+00
2	0.000E+00	2.164E+00
3	0.000E+00	2.165E+00

Title : RESRAD Default Parameters
Input File : FCS SOIL UNCERTAINTY ANALYSIS C-14.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	4	-0.12	4	-0.02	15	-0.02	15	0.00
Contaminated zone b parameter	13	0.03	13	0.01	18	0.00	18	0.00
Evapotranspiration coefficient	3	0.14	3	0.03	3	0.27	3	0.03
Wind Speed	1	-0.98	1	-0.98	1	-1.00	1	-0.99
Runoff coefficient	6	0.06	7	0.01	5	0.19	5	0.02
Well pump intake depth	11	0.04	11	0.01	9	0.05	9	0.01
b Parameter of Unsaturated zone 1	8	-0.05	9	-0.01	10	-0.05	10	0.00
Mass loading for inhalation	18	0.00	18	0.00	14	0.02	14	0.00
Indoor dust filtration factor	14	0.03	14	0.01	12	0.04	12	0.00
Depth of soil mixing layer	17	0.01	17	0.00	16	0.02	16	0.00
Depth of roots	2	-0.16	2	-0.03	4	-0.22	4	-0.02
Wet weight crop yield of fruit, grain and non-leafy vegetables	7	-0.06	6	-0.01	7	-0.08	7	-0.01
Weathering removal constant of all vegetation	16	0.01	16	0.00	13	0.03	13	0.00
Wet foliar interception fraction of leafy vegetables	5	-0.08	5	-0.01	6	-0.10	6	-0.01
Humidity in air	15	0.02	15	0.00	11	0.04	11	0.00
Kd of C-14 in Contaminated Zone	10	0.05	10	0.01	2	0.64	2	0.08
Kd of C-14 in Unsaturated Zone 1	12	0.04	12	0.01	8	0.06	8	0.01
Kd of C-14 in Saturated Zone	9	0.05	8	0.01	17	0.00	17	0.00
R-SQUARE		0.97		0.97		0.99		0.99

-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 SOIL UNCERTAINTY ANALYSIS C-14.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	3	-0.14	3	-0.03	6	-0.11	6	-0.01
Contaminated zone b parameter	13	-0.03	13	-0.01	16	-0.01	16	0.00
Evapotranspiration coefficient	2	0.18	2	0.03	3	0.31	3	0.03
Wind Speed	1	-0.98	1	-0.98	1	-0.99	1	-0.99
Runoff coefficient	5	0.08	5	0.02	4	0.15	4	0.02
Well pump intake depth	8	0.06	7	0.01	7	0.09	7	0.01
b Parameter of Unsaturated zone 1	12	-0.03	12	-0.01	8	-0.07	8	-0.01
Mass loading for inhalation	18	-0.02	18	0.00	14	0.01	14	0.00
Indoor dust filtration factor	14	-0.03	14	0.00	10	-0.03	10	0.00
Depth of soil mixing layer	15	0.03	16	0.00	18	0.00	18	0.00
Depth of roots	4	-0.09	4	-0.02	5	-0.14	5	-0.01
Wet weight crop yield of fruit, grain and non-leafy vegetables	11	-0.03	11	-0.01	13	0.01	13	0.00
Weathering removal constant of all vegetation	17	-0.02	17	0.00	15	-0.01	15	0.00
Wet foliar interception fraction of leafy vegetables	16	0.03	15	0.00	9	0.03	9	0.00
Humidity in air	7	0.06	8	0.01	11	0.02	11	0.00
Kd of C-14 in Contaminated Zone	6	0.07	6	0.01	2	0.61	2	0.08
Kd of C-14 in Unsaturated Zone 1	10	-0.04	10	-0.01	17	0.01	17	0.00
Kd of C-14 in Saturated Zone	9	0.05	9	0.01	12	-0.02	12	0.00
R-SQUARE	0.97		0.97		0.99		0.99	

-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 SOIL UNCERTAINTY ANALYSIS C-14.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
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Contaminated zone erosion rate	4	-0.09	4	-0.02	7	-0.09	7	-0.01
Contaminated zone b parameter	3	-0.10	3	-0.02	11	-0.03	11	0.00
Evapotranspiration coefficient	2	0.19	2	0.03	3	0.28	3	0.03
Wind Speed	1	-0.98	1	-0.98	1	-1.00	1	-0.99
Runoff coefficient	6	0.07	6	0.01	5	0.10	5	0.01
Well pump intake depth	13	0.02	13	0.00	18	0.00	18	0.00
b Parameter of Unsaturated zone 1	10	-0.04	10	-0.01	17	0.02	17	0.00
Mass loading for inhalation	12	-0.03	12	-0.01	15	-0.03	15	0.00
Indoor dust filtration factor	15	0.01	15	0.00	8	0.06	8	0.01
Depth of soil mixing layer	18	-0.01	18	0.00	16	0.03	16	0.00
Depth of roots	5	-0.09	5	-0.02	4	-0.22	4	-0.02
Wet weight crop yield of fruit, grain and non-leafy vegetables	11	-0.03	11	-0.01	14	-0.03	14	0.00
Weathering removal constant of all vegetation	8	-0.06	8	-0.01	6	-0.09	6	-0.01
Wet foliar interception fraction of leafy vegetables	16	-0.01	16	0.00	10	-0.04	10	0.00
Humidity in air	14	0.02	14	0.00	13	0.03	13	0.00
Kd of C-14 in Contaminated Zone	17	-0.01	17	0.00	2	0.62	2	0.07
Kd of C-14 in Unsaturated Zone 1	9	-0.04	9	-0.01	12	-0.03	12	0.00
Kd of C-14 in Saturated Zone	7	0.06	7	0.01	9	0.05	9	0.01

R-SQUARE	0.97	0.97	0.99	0.99
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-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.