

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

Probabilistic Input

Number of Sample Runs: 1500

Number	Name	Distribution	Parameters																
1	VCZ	CONTINUOUS LOGARITHMIC4	5.E-8	0	.0007	.22	.005	.95	.2	1									
2	BCZ	BOUNDED LOGNORMAL-N	1.28	.334	1.28	10.1													
3	EVAPTR	UNIFORM	.5	.99															
4	WIND	UNIFORM	2.8	4.7															
5	RUNOFF	UNIFORM	.1	.8															
6	BUZ(1)	BOUNDED LOGNORMAL-N	1.28	.334	1.28	10.1													
7	MLINH	CONTINUOUS LINEAR	8	0	0	.000008	.0151	.000016	.1365	.00003	.8119	.00004	.9495	.00006	.9937	.000076	.9983	.0001	1
8	SHF3	UNIFORM	.15	.95															
9	DM	TRIANGULAR	0	.15	.6														
10	DROOT	UNIFORM	.3	4															
11	YV(1)	TRUNCATED LOGNORMAL-N	.56	.48	.001	.999													
12	WLAM	TRIANGULAR	5.1	18	84														
13	RWET(2)	TRIANGULAR	.06	.67	.95														
14	HUMID	TRUNCATED LOGNORMAL-N	1.98	.334	.001	.999													
15	VCV	CONTINUOUS LOGARITHMIC4	5.E-8	0	.0007	.22	.005	.95	.2	1									
16	DCACTC(1)	LOGNORMAL-N	6.27	1.79															
17	DCACTS(1)	LOGNORMAL-N	6.27	1.79															
18	DWIBWT	CONTINUOUS LINEAR	6	5	0	24	.29	43	.66	53	.68	76	.95	89	1				

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\BP INSITU UA\FCS BURIED PIPE INSITU UA CS-134.RAD

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
Cs-134										
Min	0.00E+00	4.39E-07	4.39E-07	3.16E-07	1.64E-07	1.64E-08	1.23E-11	5.00E-22	0.00E+00	0.00E+00
Max	2.46E+01	1.71E-01	3.60E-02	2.02E-02	1.05E-02	4.00E-02	4.93E-05	2.71E-15	0.00E+00	0.00E+00
Avg	2.12E-01	8.23E-03	7.42E-03	5.15E-03	2.54E-03	5.25E-04	5.59E-07	2.47E-17	0.00E+00	0.00E+00
Std	1.58E+00	1.01E-02	4.93E-03	3.40E-03	1.73E-03	3.05E-03	3.21E-06	1.54E-16	0.00E+00	0.00E+00
ALL										
Min	0.00E+00	4.39E-07	4.39E-07	3.16E-07	1.64E-07	1.64E-08	1.23E-11	5.00E-22	0.00E+00	0.00E+00
Max	2.46E+01	1.71E-01	3.60E-02	2.02E-02	1.05E-02	4.00E-02	4.93E-05	2.71E-15	0.00E+00	0.00E+00
Avg	2.12E-01	8.23E-03	7.42E-03	5.15E-03	2.54E-03	5.25E-04	5.59E-07	2.47E-17	0.00E+00	0.00E+00
Std	1.58E+00	1.01E-02	4.93E-03	3.40E-03	1.73E-03	3.05E-03	3.21E-06	1.54E-16	0.00E+00	0.00E+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
Cs-134									
Min		1.05E-11	7.53E-12	3.90E-12	3.88E-13	2.61E-16	1.06E-26	0.00E+00	0.00E+00
Max		8.68E-07	4.90E-07	2.52E-07	1.08E-06	1.30E-09	7.16E-20	0.00E+00	0.00E+00
Avg		1.86E-07	1.28E-07	6.31E-08	1.30E-08	1.42E-11	6.37E-22	0.00E+00	0.00E+00
Std		1.26E-07	8.49E-08	4.29E-08	7.77E-08	8.31E-11	4.10E-21	0.00E+00	0.00E+00
ALL									
Min		1.05E-11	7.53E-12	3.90E-12	3.88E-13	2.61E-16	1.06E-26	0.00E+00	0.00E+00
Max		8.68E-07	4.90E-07	2.52E-07	1.08E-06	1.30E-09	7.16E-20	0.00E+00	0.00E+00
Avg		1.86E-07	1.28E-07	6.31E-08	1.30E-08	1.42E-11	6.37E-22	0.00E+00	0.00E+00
Std		1.26E-07	8.49E-08	4.29E-08	7.77E-08	8.31E-11	4.10E-21	0.00E+00	0.00E+00

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/>									
Cs-134									
Min		2.32E-08	1.75E-13	9.94E-24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.08E-06	1.10E-05	1.14E-03	3.91E-02	4.82E-05	2.64E-15	0.00E+00	0.00E+00
Avg		2.38E-07	2.13E-07	2.38E-06	3.05E-04	3.31E-07	1.39E-17	0.00E+00	0.00E+00
Std		5.44E-08	5.01E-07	3.81E-05	3.02E-03	3.18E-06	1.52E-16	0.00E+00	0.00E+00
ALL									
Min		2.32E-08	1.75E-13	9.94E-24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.08E-06	1.10E-05	1.14E-03	3.91E-02	4.82E-05	2.64E-15	0.00E+00	0.00E+00
Avg		2.38E-07	2.13E-07	2.38E-06	3.05E-04	3.31E-07	1.39E-17	0.00E+00	0.00E+00
Std		5.44E-08	5.01E-07	3.81E-05	3.02E-03	3.18E-06	1.52E-16	0.00E+00	0.00E+00
<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/>									
Cs-134									
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	2.65E-11	2.79E-09	2.75E-12	9.29E-22	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	1.77E-14	1.07E-11	1.10E-14	1.21E-24	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	6.83E-13	1.27E-10	1.36E-13	2.52E-23	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	2.65E-11	2.79E-09	2.75E-12	9.29E-22	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	1.77E-14	1.07E-11	1.10E-14	1.21E-24	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	6.83E-13	1.27E-10	1.36E-13	2.52E-23	0.00E+00	0.00E+00
<hr/>									

ALL 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
Cs-134									
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

ALL 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
Cs-134									
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		1.47E-02	1.05E-02	7.84E-03	6.80E-04	1.34E-06	5.35E-17	0.00E+00	0.00E+00
Avg		5.64E-03	3.94E-03	1.95E-03	1.68E-04	1.72E-07	8.01E-18	0.00E+00	0.00E+00
Std		3.82E-03	2.69E-03	1.38E-03	1.29E-04	1.56E-07	9.33E-18	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		1.47E-02	1.05E-02	7.84E-03	6.80E-04	1.34E-06	5.35E-17	0.00E+00	0.00E+00
Avg		5.64E-03	3.94E-03	1.95E-03	1.68E-04	1.72E-07	8.01E-18	0.00E+00	0.00E+00
Std		3.82E-03	2.69E-03	1.38E-03	1.29E-04	1.56E-07	9.33E-18	0.00E+00	0.00E+00

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
Cs-134									
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		1.39E-03	9.91E-04	7.44E-04	1.73E-04	2.40E-07	3.20E-17	0.00E+00	0.00E+00
Avg		5.36E-04	3.74E-04	1.85E-04	1.65E-05	1.70E-08	8.06E-19	0.00E+00	0.00E+00
Std		3.62E-04	2.55E-04	1.30E-04	1.43E-05	1.76E-08	1.26E-18	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		1.39E-03	9.91E-04	7.44E-04	1.73E-04	2.40E-07	3.20E-17	0.00E+00	0.00E+00
Avg		5.36E-04	3.74E-04	1.85E-04	1.65E-05	1.70E-08	8.06E-19	0.00E+00	0.00E+00
Std		3.62E-04	2.55E-04	1.30E-04	1.43E-05	1.76E-08	1.26E-18	0.00E+00	0.00E+00

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
Cs-134									
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		2.42E-03	1.73E-03	1.30E-03	1.87E-04	2.80E-07	2.59E-17	0.00E+00	0.00E+00
Avg		9.33E-04	6.51E-04	3.21E-04	2.82E-05	2.89E-08	1.36E-18	0.00E+00	0.00E+00
Std		6.31E-04	4.44E-04	2.27E-04	2.23E-05	2.71E-08	1.70E-18	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		2.42E-03	1.73E-03	1.30E-03	1.87E-04	2.80E-07	2.59E-17	0.00E+00	0.00E+00
Avg		9.33E-04	6.51E-04	3.21E-04	2.82E-05	2.89E-08	1.36E-18	0.00E+00	0.00E+00
Std		6.31E-04	4.44E-04	2.27E-04	2.23E-05	2.71E-08	1.70E-18	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
Cs-134									
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	7.28E-08	5.84E-06	6.13E-09	1.32E-18	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	4.85E-11	2.77E-08	3.30E-11	2.13E-21	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	1.88E-09	2.77E-07	3.55E-10	3.71E-20	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	7.28E-08	5.84E-06	6.13E-09	1.32E-18	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	4.85E-11	2.77E-08	3.30E-11	2.13E-21	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	1.88E-09	2.77E-07	3.55E-10	3.71E-20	0.00E+00	0.00E+00

ALL 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
Cs-134									
Min		9.82E-08	7.08E-08	3.68E-08	3.70E-09	5.17E-12	4.00E-22	0.00E+00	0.00E+00
Max		2.52E-02	1.42E-02	4.50E-03	3.06E-04	4.72E-07	9.82E-18	0.00E+00	0.00E+00
Avg		2.46E-04	1.49E-04	6.66E-05	5.98E-06	7.92E-09	4.60E-19	0.00E+00	0.00E+00
Std		9.80E-04	4.94E-04	1.76E-04	1.52E-05	2.37E-08	9.66E-19	0.00E+00	0.00E+00
ALL									
Min		9.82E-08	7.08E-08	3.68E-08	3.70E-09	5.17E-12	4.00E-22	0.00E+00	0.00E+00
Max		2.52E-02	1.42E-02	4.50E-03	3.06E-04	4.72E-07	9.82E-18	0.00E+00	0.00E+00
Avg		2.46E-04	1.49E-04	6.66E-05	5.98E-06	7.92E-09	4.60E-19	0.00E+00	0.00E+00
Std		9.80E-04	4.94E-04	1.76E-04	1.52E-05	2.37E-08	9.66E-19	0.00E+00	0.00E+00

ALL is total pathway dose summed for all nuclides.

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
Cs-134									
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

ALL 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
Cs-134									
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

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\BP INSITU UA\FCS BURIED PIPE INSITU UA CS-134.RAD

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
<hr/>									
Cs-134									
Min		7.96E-09	6.98E-09	3.73E-09	3.94E-10	6.05E-13	1.95E-23	0.00E+00	0.00E+00
Max		9.41E-04	5.29E-04	1.87E-04	3.26E-05	5.04E-08	1.43E-18	0.00E+00	0.00E+00
Avg		2.07E-05	1.29E-05	5.95E-06	5.47E-07	7.26E-10	4.24E-20	0.00E+00	0.00E+00
Std		6.00E-05	3.21E-05	1.36E-05	1.46E-06	2.32E-09	9.79E-20	0.00E+00	0.00E+00
ALL									
Min		7.96E-09	6.98E-09	3.73E-09	3.94E-10	6.05E-13	1.95E-23	0.00E+00	0.00E+00
Max		9.41E-04	5.29E-04	1.87E-04	3.26E-05	5.04E-08	1.43E-18	0.00E+00	0.00E+00
Avg		2.07E-05	1.29E-05	5.95E-06	5.47E-07	7.26E-10	4.24E-20	0.00E+00	0.00E+00
Std		6.00E-05	3.21E-05	1.36E-05	1.46E-06	2.32E-09	9.79E-20	0.00E+00	0.00E+00
<hr/>									

ALL 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
Cs-134									
Min		9.93E-09	7.16E-09	3.72E-09	3.75E-10	5.23E-13	2.95E-23	0.00E+00	0.00E+00
Max		1.64E-03	9.23E-04	2.93E-04	2.54E-05	3.96E-08	8.23E-19	0.00E+00	0.00E+00
Avg		1.90E-05	1.15E-05	5.12E-06	4.60E-07	6.11E-10	3.55E-20	0.00E+00	0.00E+00
Std		7.07E-05	3.49E-05	1.27E-05	1.18E-06	1.85E-09	7.51E-20	0.00E+00	0.00E+00
ALL									
Min		9.93E-09	7.16E-09	3.72E-09	3.75E-10	5.23E-13	2.95E-23	0.00E+00	0.00E+00
Max		1.64E-03	9.23E-04	2.93E-04	2.54E-05	3.96E-08	8.23E-19	0.00E+00	0.00E+00
Avg		1.90E-05	1.15E-05	5.12E-06	4.60E-07	6.11E-10	3.55E-20	0.00E+00	0.00E+00
Std		7.07E-05	3.49E-05	1.27E-05	1.18E-06	1.85E-09	7.51E-20	0.00E+00	0.00E+00

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\BP INSITU UA\FCS BURIED PIPE INSITU UA CS-134.RAD

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
<hr/>									
Cs-134									
Min		1.18E-08	8.56E-09	4.51E-09	4.75E-10	6.56E-13	3.12E-23	0.00E+00	0.00E+00
Max		1.76E-03	9.90E-04	3.14E-04	3.15E-05	4.90E-08	1.06E-18	0.00E+00	0.00E+00
Avg		2.23E-05	1.36E-05	6.09E-06	5.50E-07	7.30E-10	4.25E-20	0.00E+00	0.00E+00
Std		7.93E-05	3.95E-05	1.48E-05	1.42E-06	2.24E-09	9.08E-20	0.00E+00	0.00E+00
ALL									
Min		1.18E-08	8.56E-09	4.51E-09	4.75E-10	6.56E-13	3.12E-23	0.00E+00	0.00E+00
Max		1.76E-03	9.90E-04	3.14E-04	3.15E-05	4.90E-08	1.06E-18	0.00E+00	0.00E+00
Avg		2.23E-05	1.36E-05	6.09E-06	5.50E-07	7.30E-10	4.25E-20	0.00E+00	0.00E+00
Std		7.93E-05	3.95E-05	1.48E-05	1.42E-06	2.24E-09	9.08E-20	0.00E+00	0.00E+00
<hr/>									

ALL is total pathway dose summed for all nuclides.

Cumulative Probability Summary for: Total Dose Over Pathways								
Cumulative Probability	Dose(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
0.025	5.52E-06	4.05E-06	2.13E-06	2.36E-07	2.60E-10	1.67E-20	0.00E+00	0.00E+00
0.050	1.52E-05	1.16E-05	6.37E-06	6.87E-07	7.66E-10	4.23E-20	0.00E+00	0.00E+00
0.075	2.65E-05	2.17E-05	1.25E-05	1.27E-06	1.39E-09	7.24E-20	0.00E+00	0.00E+00
0.100	4.83E-05	3.57E-05	1.98E-05	2.27E-06	2.25E-09	1.08E-19	0.00E+00	0.00E+00
0.125	9.22E-05	6.95E-05	4.14E-05	3.69E-06	3.76E-09	1.47E-19	0.00E+00	0.00E+00
0.150	1.74E-04	1.29E-04	6.79E-05	5.19E-06	5.26E-09	2.05E-19	0.00E+00	0.00E+00
0.175	3.40E-04	2.53E-04	1.27E-04	8.52E-06	8.58E-09	2.94E-19	0.00E+00	0.00E+00
0.200	8.21E-04	5.72E-04	2.59E-04	1.46E-05	1.26E-08	4.14E-19	0.00E+00	0.00E+00
0.225	5.27E-03	3.65E-03	1.36E-03	3.46E-05	1.94E-08	5.63E-19	0.00E+00	0.00E+00
0.250	5.44E-03	3.81E-03	1.82E-03	9.74E-05	3.27E-08	7.04E-19	0.00E+00	0.00E+00
0.275	5.57E-03	3.93E-03	1.92E-03	1.24E-04	5.28E-08	9.72E-19	0.00E+00	0.00E+00
0.300	5.79E-03	4.05E-03	1.97E-03	1.55E-04	8.29E-08	1.29E-18	0.00E+00	0.00E+00
0.325	5.95E-03	4.16E-03	2.03E-03	1.70E-04	1.09E-07	1.71E-18	0.00E+00	0.00E+00
0.350	6.08E-03	4.25E-03	2.08E-03	1.78E-04	1.34E-07	2.46E-18	0.00E+00	0.00E+00
0.375	6.24E-03	4.33E-03	2.13E-03	1.83E-04	1.57E-07	3.09E-18	0.00E+00	0.00E+00
0.400	6.46E-03	4.51E-03	2.18E-03	1.90E-04	1.79E-07	3.95E-18	0.00E+00	0.00E+00
0.425	6.65E-03	4.63E-03	2.25E-03	1.96E-04	1.97E-07	4.94E-18	0.00E+00	0.00E+00
0.450	6.83E-03	4.77E-03	2.30E-03	2.02E-04	2.10E-07	5.97E-18	0.00E+00	0.00E+00
0.475	7.02E-03	4.88E-03	2.39E-03	2.07E-04	2.18E-07	6.93E-18	0.00E+00	0.00E+00
0.500	7.19E-03	5.03E-03	2.47E-03	2.14E-04	2.26E-07	7.97E-18	0.00E+00	0.00E+00
0.525	7.46E-03	5.13E-03	2.53E-03	2.21E-04	2.31E-07	9.08E-18	0.00E+00	0.00E+00
0.550	7.76E-03	5.33E-03	2.60E-03	2.30E-04	2.40E-07	1.02E-17	0.00E+00	0.00E+00
0.575	7.98E-03	5.54E-03	2.70E-03	2.38E-04	2.49E-07	1.11E-17	0.00E+00	0.00E+00
0.600	8.26E-03	5.73E-03	2.82E-03	2.46E-04	2.60E-07	1.20E-17	0.00E+00	0.00E+00
0.625	8.52E-03	5.94E-03	2.91E-03	2.56E-04	2.70E-07	1.27E-17	0.00E+00	0.00E+00
0.650	8.89E-03	6.15E-03	3.03E-03	2.66E-04	2.80E-07	1.33E-17	0.00E+00	0.00E+00
0.675	9.17E-03	6.34E-03	3.15E-03	2.77E-04	2.92E-07	1.41E-17	0.00E+00	0.00E+00
0.700	9.58E-03	6.61E-03	3.27E-03	2.91E-04	3.05E-07	1.47E-17	0.00E+00	0.00E+00
0.725	9.98E-03	6.90E-03	3.39E-03	3.04E-04	3.23E-07	1.54E-17	0.00E+00	0.00E+00
0.750	1.04E-02	7.22E-03	3.54E-03	3.16E-04	3.45E-07	1.66E-17	0.00E+00	0.00E+00
0.775	1.09E-02	7.55E-03	3.70E-03	3.33E-04	3.64E-07	1.74E-17	0.00E+00	0.00E+00
0.800	1.14E-02	7.91E-03	3.90E-03	3.52E-04	3.82E-07	1.87E-17	0.00E+00	0.00E+00
0.825	1.19E-02	8.31E-03	4.12E-03	3.76E-04	4.09E-07	2.06E-17	0.00E+00	0.00E+00
0.850	1.26E-02	8.72E-03	4.31E-03	3.96E-04	4.36E-07	2.32E-17	0.00E+00	0.00E+00
0.875	1.33E-02	9.26E-03	4.62E-03	4.27E-04	4.72E-07	2.61E-17	0.00E+00	0.00E+00
0.900	1.42E-02	9.92E-03	4.95E-03	4.61E-04	5.23E-07	2.87E-17	0.00E+00	0.00E+00
0.925	1.51E-02	1.05E-02	5.22E-03	4.89E-04	5.71E-07	3.26E-17	0.00E+00	0.00E+00
0.950	1.62E-02	1.12E-02	5.63E-03	5.47E-04	6.35E-07	3.75E-17	0.00E+00	0.00E+00
0.975	1.74E-02	1.21E-02	6.22E-03	6.10E-04	7.32E-07	4.82E-17	0.00E+00	0.00E+00
1.000	3.60E-02	2.02E-02	1.05E-02	4.00E-02	4.93E-05	2.71E-15	0.00E+00	0.00E+00

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	5.17E-07	1.85E-02	7.40E-03	7.24E-03	1.41E-02	1.63E-02	1.73E-02	1.81E-02
1.00E+00	3.83E-07	1.32E-02	5.13E-03	5.05E-03	9.83E-03	1.11E-02	1.21E-02	1.29E-02
1.06E+00	3.77E-07	1.30E-02	5.02E-03	4.92E-03	9.63E-03	1.09E-02	1.19E-02	1.27E-02
1.12E+00	3.70E-07	1.27E-02	4.91E-03	4.81E-03	9.43E-03	1.06E-02	1.17E-02	1.24E-02
1.19E+00	3.63E-07	1.24E-02	4.80E-03	4.69E-03	9.22E-03	1.04E-02	1.14E-02	1.22E-02
1.25E+00	3.55E-07	1.21E-02	4.68E-03	4.57E-03	9.00E-03	1.02E-02	1.11E-02	1.19E-02
1.33E+00	3.48E-07	1.18E-02	4.56E-03	4.46E-03	8.78E-03	9.93E-03	1.08E-02	1.16E-02
1.40E+00	3.40E-07	1.15E-02	4.44E-03	4.33E-03	8.55E-03	9.68E-03	1.05E-02	1.13E-02
1.49E+00	3.31E-07	1.12E-02	4.31E-03	4.20E-03	8.32E-03	9.41E-03	1.02E-02	1.10E-02
1.57E+00	3.23E-07	1.09E-02	4.18E-03	4.06E-03	8.07E-03	9.13E-03	1.00E-02	1.07E-02
1.66E+00	3.14E-07	1.06E-02	4.04E-03	3.93E-03	7.83E-03	8.83E-03	9.70E-03	1.03E-02
1.76E+00	3.05E-07	1.02E-02	3.90E-03	3.79E-03	7.57E-03	8.55E-03	9.39E-03	1.00E-02
1.86E+00	2.96E-07	9.87E-03	3.76E-03	3.65E-03	7.26E-03	8.25E-03	9.07E-03	9.67E-03
1.97E+00	2.86E-07	9.52E-03	3.62E-03	3.52E-03	6.90E-03	7.93E-03	8.74E-03	9.32E-03
2.09E+00	2.77E-07	9.16E-03	3.47E-03	3.37E-03	6.76E-03	7.60E-03	8.41E-03	8.97E-03
2.21E+00	2.67E-07	8.79E-03	3.33E-03	3.23E-03	6.46E-03	7.29E-03	8.07E-03	8.61E-03
2.34E+00	2.57E-07	8.47E-03	3.18E-03	3.09E-03	6.16E-03	6.98E-03	7.72E-03	8.25E-03
2.47E+00	2.47E-07	8.12E-03	3.03E-03	2.93E-03	5.83E-03	6.67E-03	7.38E-03	7.88E-03
2.62E+00	2.36E-07	7.74E-03	2.88E-03	2.78E-03	5.54E-03	6.40E-03	7.03E-03	7.50E-03
2.77E+00	2.26E-07	7.35E-03	2.73E-03	2.64E-03	5.24E-03	6.08E-03	6.67E-03	7.13E-03
2.93E+00	2.15E-07	6.97E-03	2.58E-03	2.49E-03	4.96E-03	5.76E-03	6.32E-03	6.75E-03
3.00E+00	2.11E-07	6.81E-03	2.51E-03	2.43E-03	4.84E-03	5.63E-03	6.21E-03	6.60E-03
3.10E+00	2.04E-07	6.58E-03	2.43E-03	2.35E-03	4.68E-03	5.43E-03	6.06E-03	6.37E-03
3.28E+00	1.93E-07	6.19E-03	2.28E-03	2.21E-03	4.40E-03	5.10E-03	5.71E-03	6.00E-03
3.48E+00	1.83E-07	9.55E-03	2.14E-03	2.06E-03	4.13E-03	4.76E-03	5.42E-03	5.64E-03
3.68E+00	1.72E-07	1.47E-02	2.01E-03	1.91E-03	3.85E-03	4.48E-03	5.06E-03	5.27E-03
3.89E+00	1.61E-07	2.12E-02	1.88E-03	1.78E-03	3.58E-03	4.17E-03	4.71E-03	4.90E-03
4.12E+00	1.51E-07	3.00E-02	1.76E-03	1.65E-03	3.32E-03	3.86E-03	4.36E-03	4.54E-03
4.36E+00	1.40E-07	4.08E-02	1.64E-03	1.52E-03	3.06E-03	3.56E-03	4.02E-03	4.26E-03
4.61E+00	1.30E-07	6.14E-02	1.55E-03	1.39E-03	2.81E-03	3.28E-03	3.70E-03	3.95E-03
4.88E+00	1.20E-07	1.01E-01	1.51E-03	1.27E-03	2.56E-03	3.00E-03	3.38E-03	3.60E-03
5.17E+00	1.10E-07	1.38E-01	1.47E-03	1.15E-03	2.33E-03	2.73E-03	3.07E-03	3.27E-03
5.47E+00	1.01E-07	1.66E-01	1.43E-03	1.04E-03	2.10E-03	2.46E-03	2.77E-03	2.95E-03
5.78E+00	9.14E-08	1.64E-01	1.34E-03	9.24E-04	1.89E-03	2.21E-03	2.49E-03	2.65E-03
6.12E+00	8.26E-08	1.41E-01	1.25E-03	8.21E-04	1.69E-03	1.98E-03	2.23E-03	2.38E-03
6.48E+00	7.42E-08	1.20E-01	1.20E-03	7.23E-04	1.50E-03	1.81E-03	1.98E-03	2.11E-03
6.86E+00	6.63E-08	1.02E-01	1.16E-03	6.34E-04	1.32E-03	1.59E-03	1.77E-03	2.13E-03
7.26E+00	5.88E-08	8.62E-02	1.09E-03	5.48E-04	1.15E-03	1.39E-03	1.54E-03	2.76E-03
7.68E+00	5.18E-08	8.81E-02	9.73E-04	4.70E-04	9.98E-04	1.20E-03	1.34E-03	3.99E-03
8.13E+00	4.53E-08	7.44E-02	8.47E-04	4.03E-04	8.59E-04	1.03E-03	1.15E-03	6.14E-03
8.60E+00	3.93E-08	6.22E-02	7.52E-04	3.43E-04	7.32E-04	8.83E-04	9.94E-04	9.91E-03
9.10E+00	3.38E-08	5.13E-02	6.66E-04	2.89E-04	6.19E-04	7.43E-04	8.39E-04	1.69E-02
9.63E+00	2.88E-08	4.19E-02	5.79E-04	2.38E-04	5.17E-04	6.22E-04	7.06E-04	2.56E-02
1.00E+01	2.58E-08	3.64E-02	5.20E-04	2.10E-04	4.56E-04	5.48E-04	6.23E-04	2.07E-02
1.02E+01	2.44E-08	3.38E-02	4.88E-04	1.95E-04	4.28E-04	5.14E-04	5.84E-04	1.85E-02
1.08E+01	2.04E-08	2.69E-02	3.93E-04	1.59E-04	3.53E-04	4.20E-04	4.78E-04	1.29E-02
1.14E+01	1.69E-08	2.11E-02	3.17E-04	1.28E-04	2.85E-04	3.39E-04	3.87E-04	8.44E-03
1.21E+01	1.39E-08	1.63E-02	2.60E-04	1.02E-04	2.27E-04	2.70E-04	3.09E-04	1.06E-02
1.28E+01	1.12E-08	1.24E-02	1.97E-04	7.98E-05	1.79E-04	2.13E-04	2.44E-04	7.44E-03
1.35E+01	8.98E-09	9.21E-03	1.42E-04	6.17E-05	1.39E-04	1.66E-04	1.90E-04	4.95E-03
1.43E+01	7.09E-09	9.41E-03	1.12E-04	4.69E-05	1.06E-04	1.26E-04	1.45E-04	3.15E-03
1.51E+01	5.53E-09	6.94E-03	8.33E-05	3.51E-05	8.01E-05	9.51E-05	1.10E-04	1.88E-03
1.60E+01	4.24E-09	4.98E-03	6.25E-05	2.61E-05	5.95E-05	7.04E-05	8.17E-05	2.25E-03
1.70E+01	3.21E-09	3.54E-03	4.63E-05	1.89E-05	4.34E-05	5.13E-05	5.96E-05	1.31E-03
1.80E+01	2.39E-09	2.41E-03	3.14E-05	1.35E-05	3.11E-05	3.68E-05	4.26E-05	6.88E-04
1.90E+01	1.75E-09	1.62E-03	2.13E-05	9.36E-06	2.19E-05	2.57E-05	3.00E-05	4.16E-04

2.01E+01 1.26E-09 1.06E-03 1.46E-05 6.42E-06 1.51E-05 1.82E-05 2.07E-05 5.34E-04

2.13E+01 4.57E-10 8.50E-04 1.02E-05 4.32E-06 1.01E-05 1.20E-05 1.40E-05 2.99E-04

2.25E+01 3.01E-10 5.62E-04 6.25E-06 2.84E-06 6.66E-06 7.91E-06 9.18E-06 1.39E-04

2.38E+01	1.94E-10	3.32E-04	3.69E-06	1.82E-06	4.27E-06	5.08E-06	5.89E-06	6.25E-05
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.52E+01	1.22E-10	1.88E-04	2.22E-06	1.13E-06	2.68E-06	3.16E-06	3.69E-06	3.57E-05
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.67E+01 7.43E-11 1.01E-04 1.34E-06 6.88E-07 1.63E-06 1.93E-06 2.23E-06 2.00E-05

2.82E+01	2.23E-11	5.00E-05	7.91E-07	4.05E-07	9.68E-07	1.14E-06	1.33E-06	2.21E-05
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.99E+01 1.28E-11 2.76E-05 4.58E-07 2.31E-07 5.63E-07 6.61E-07 7.62E-07 1.68E-05

3.00E+01 1.23E-11 2.81E-05 4.42E-07 2.22E-07 5.40E-07 6.35E-07 7.32E-07 1.59E-05

3.16E+01 7.13E-12 2.48E-05 2.62E-07 1.27E-07 3.16E-07 3.78E-07 4.31E-07 6.98E-06

3.35E+01 3.84E-12 1.18E-05 1.34E-07 6.75E-08 1.74E-07 2.09E-07 2.38E-07 2.08E-06

3.54E+01 1.99E-12 5.22E-06 6.26E-08 3.43E-08 8.76E-08 1.04E-07 1.21E-07 6.54E-07

3.75E+01 9.97E-13 2.05E-06 2.95E-08 1.69E-08 4.35E-08 5.12E-08 5.95E-08 1.98E-07

3.97E+01 4.78E-13 9.14E-07 1.38E-08 7.92E-09 2.08E-08 2.46E-08 2.84E-08 3.33E-08

4.20E+01 2.20E-13 6.39E-07 6.54E-09 3.59E-09 9.52E-09 1.13E-08 1.30E-08 1.53E-08

4.44E+01 9.67E-14 2.57E-07 2.64E-09 1.53E-09 4.14E-09 4.90E-09 5.70E-09 6.47E-09

4.70E+01 4.05E-14 9.75E-08 1.07E-09 6.24E-10 1.75E-09 2.07E-09 2.38E-09 2.71E-09

4.97E+01 1.61E-14 3.45E-08 4.08E-10 2.44E-10 6.93E-10 8.23E-10 9.49E-10 1.12E-09

5.26E+01	6.10E-15	1.13E-08	1.48E-10	9.04E-11	2.59E-10	3.10E-10	3.57E-10	4.22E-10
----------	----------	----------	----------	----------	----------	----------	----------	----------

5.57E+01 2.17E-15 3.30E-09 5.12E-11 3.17E-11 9.12E-11 1.11E-10 1.33E-10 1.50E-10

5.90E+01 7.31E-16 9.15E-10 1.67E-11 1.04E-11 3.11E-11 3.70E-11 4.31E-11 6.24E-11

6.24E+01	2.30E-16	2.90E-10	5.34E-12	3.18E-12	9.73E-12	1.17E-11	1.40E-11	2.92E-11
----------	----------	----------	----------	----------	----------	----------	----------	----------

6.60E+01 6.79E-17 7.96E-11 1.48E-12 9.02E-13 2.84E-12 3.51E-12 4.21E-12 1.28E-11

6.99E+01 1.86E-17 1.83E-11 3.84E-13 2.38E-13 7.59E-13 9.44E-13 1.15E-12 1.69E-12

7.39E+01 4.74E-18 4.27E-12 9.86E-14 5.92E-14 1.94E-13 2.41E-13 2.94E-13 3.32E-13

7.82E+01	1.12E-18	1.91E-12	2.47E-14	1.36E-14	4.47E-14	5.61E-14	6.83E-14	9.22E-14
----------	----------	----------	----------	----------	----------	----------	----------	----------

8.28E+01	2.41E-19	9.46E-13	6.39E-15	2.81E-15	1.00E-14	1.20E-14	1.47E-14	1.99E-14
----------	----------	----------	----------	----------	----------	----------	----------	----------

8.76E+01 4.76E-20 1.66E-13 1.26E-15 5.36E-16 1.99E-15 2.42E-15 3.03E-15 4.01E-15

9.27E+01 8.56E-21 2.56E-14 2.29E-16 9.17E-17 3.56E-16 4.43E-16 5.42E-16 7.19E-16

9.81E+01 1.39E-21 3.33E-15 3.45E-17 1.42E-17 5.73E-17 7.18E-17 8.97E-17 1.36E-16

1.00E+02 7.43E-22 1.60E-15 1.80E-17 7.46E-18 3.03E-17 3.83E-17 4.78E-17 8.29E-17

1.04E+02 2.04E-22 3.41E-16 4.71E-18 2.04E-18 8.29E-18 1.05E-17 1.31E-17 3.07E-17

1.10E+02 2.67E-23 3.07E-17 5.86E-19 2.57E-19 1.10E-18 1.48E-18 1.75E-18 6.94E-18

1.16E+02 3.10E-24 5.06E-18 6.45E-20 2.93E-20 1.25E-19 1.71E-19 2.03E-19 3.13E-19

1.23E+02 3.18E-25 4.92E-19 6.59E-21 2.88E-21 1.31E-20 1.73E-20 2.13E-20 3.21E-20

1.30E+02 2.86E-26 6.51E-20 6.58E-22 2.42E-22 1.15E-21 1.51E-21 1.87E-21 3.79E-21

1.38E+02 2.23E-27 8.62E-21 6.00E-23 1.81E-23 9.22E-23 1.19E-22 1.53E-22 4.66E-22

1.46E+02 1.60E-29 5.78E-22 4.30E-24 1.14E-24 6.32E-24 8.07E-24 1.03E-23 2.59E-23

1.54E+02 0.00E+00 3.31E-23 2.27E-25 6.22E-26 3.64E-25 4.61E-25 5.86E-25 1.02E-24

1.63E+02 0.00E+00 1.60E-24 1.20E-26 2.89E-27 1.81E-26 2.31E-26 3.15E-26 4.70E-26

1.73E+02 0.00E+00 6.52E-26 4.96E-28 1.03E-28 7.44E-28 1.06E-27 1.48E-27 2.90E-27

1.83E+02 0.00E+00 2.20E-27 1.60E-29 2.26E-30 2.61E-29 3.82E-29 6.17E-29 1.56E-28

1.94E+02 0.00E+00 6.03E-29 2.66E-31 0.00E+00 0.00E+00 0.00E+00 2.20E-30 4.66E-30

2.05E+02	0.00E+00	1.35E-30	2.71E-33	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
----------	----------	----------	----------	----------	----------	----------	----------	----------


```

2.29E+02      0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00

```

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

```
3.61E+02      0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00
```

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\BP INSITU UA\FCS BURIED PIPE INSITU UA CS-134.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	9.18E-07	2.37E-02	7.40E-03	7.19E-03	1.42E-02	1.62E-02	1.77E-02	1.85E-02
1.00E+00	6.61E-07	1.31E-02	5.12E-03	5.03E-03	9.87E-03	1.10E-02	1.22E-02	1.28E-02
1.06E+00	6.49E-07	1.29E-02	5.01E-03	4.93E-03	9.68E-03	1.08E-02	1.20E-02	1.25E-02
1.12E+00	6.36E-07	1.26E-02	4.91E-03	4.82E-03	9.47E-03	1.06E-02	1.17E-02	1.23E-02
1.19E+00	6.22E-07	1.23E-02	4.79E-03	4.71E-03	9.27E-03	1.03E-02	1.15E-02	1.20E-02
1.25E+00	6.08E-07	1.20E-02	4.68E-03	4.59E-03	9.05E-03	1.01E-02	1.12E-02	1.17E-02
1.33E+00	5.94E-07	1.17E-02	4.56E-03	4.47E-03	8.83E-03	9.83E-03	1.09E-02	1.14E-02
1.40E+00	5.79E-07	1.14E-02	4.43E-03	4.36E-03	8.57E-03	9.57E-03	1.06E-02	1.11E-02
1.49E+00	5.64E-07	1.11E-02	4.31E-03	4.22E-03	8.33E-03	9.30E-03	1.04E-02	1.08E-02
1.57E+00	5.48E-07	1.08E-02	4.18E-03	4.08E-03	8.07E-03	9.02E-03	1.01E-02	1.05E-02
1.66E+00	5.32E-07	1.05E-02	4.05E-03	3.95E-03	7.84E-03	8.74E-03	9.76E-03	1.02E-02
1.76E+00	5.15E-07	1.01E-02	3.91E-03	3.82E-03	7.59E-03	8.45E-03	9.48E-03	9.97E-03
1.86E+00	4.98E-07	1.11E-02	3.77E-03	3.69E-03	7.31E-03	8.16E-03	9.15E-03	9.66E-03
1.97E+00	4.81E-07	1.17E-02	3.63E-03	3.55E-03	6.99E-03	7.86E-03	8.81E-03	9.31E-03
2.09E+00	4.63E-07	1.17E-02	3.49E-03	3.41E-03	6.72E-03	7.56E-03	8.46E-03	8.95E-03
2.21E+00	4.45E-07	1.12E-02	3.34E-03	3.27E-03	6.45E-03	7.26E-03	8.11E-03	8.59E-03
2.34E+00	4.26E-07	1.08E-02	3.19E-03	3.09E-03	6.17E-03	6.95E-03	7.76E-03	8.22E-03
2.47E+00	4.08E-07	1.03E-02	3.04E-03	2.95E-03	5.90E-03	6.63E-03	7.42E-03	7.83E-03
2.62E+00	3.89E-07	9.81E-03	2.89E-03	2.83E-03	5.62E-03	6.31E-03	7.06E-03	7.44E-03
2.77E+00	3.70E-07	9.32E-03	2.74E-03	2.68E-03	5.33E-03	6.00E-03	6.71E-03	7.05E-03
2.93E+00	3.51E-07	8.84E-03	2.59E-03	2.53E-03	5.05E-03	5.68E-03	6.35E-03	6.66E-03
3.00E+00	3.43E-07	8.64E-03	2.52E-03	2.47E-03	4.94E-03	5.55E-03	6.21E-03	6.51E-03
3.310E+00	3.32E-07	8.35E-03	2.43E-03	2.39E-03	4.77E-03	5.36E-03	6.01E-03	6.29E-03
3.328E+00	3.13E-07	7.87E-03	2.29E-03	2.23E-03	4.49E-03	5.04E-03	5.68E-03	5.92E-03
3.48E+00	2.94E-07	7.40E-03	2.14E-03	2.09E-03	4.20E-03	4.73E-03	5.32E-03	5.55E-03
3.68E+00	2.75E-07	6.94E-03	2.00E-03	1.95E-03	3.92E-03	4.42E-03	4.96E-03	5.18E-03
3.89E+00	2.56E-07	6.49E-03	1.86E-03	1.81E-03	3.66E-03	4.24E-03	4.63E-03	4.87E-03
4.12E+00	2.38E-07	6.67E-03	1.72E-03	1.67E-03	3.40E-03	3.92E-03	4.30E-03	4.51E-03
4.36E+00	2.20E-07	9.64E-03	1.60E-03	1.53E-03	3.14E-03	3.62E-03	3.96E-03	4.17E-03
4.61E+00	2.02E-07	1.48E-02	1.49E-03	1.41E-03	2.87E-03	3.32E-03	3.63E-03	3.83E-03
4.88E+00	1.85E-07	2.42E-02	1.40E-03	1.28E-03	2.63E-03	3.07E-03	3.31E-03	3.50E-03
5.17E+00	1.69E-07	4.21E-02	1.35E-03	1.16E-03	2.39E-03	2.77E-03	3.03E-03	3.18E-03
5.47E+00	1.53E-07	7.73E-02	1.37E-03	1.04E-03	2.16E-03	2.49E-03	2.73E-03	2.87E-03
5.78E+00	1.38E-07	1.15E-01	1.41E-03	9.36E-04	1.94E-03	2.23E-03	2.45E-03	2.58E-03
6.12E+00	1.23E-07	1.38E-01	1.42E-03	8.29E-04	1.73E-03	2.01E-03	2.19E-03	2.31E-03
6.48E+00	1.10E-07	1.33E-01	1.33E-03	7.32E-04	1.53E-03	1.78E-03	1.97E-03	2.11E-03
6.86E+00	9.69E-08	1.15E-01	1.20E-03	6.43E-04	1.35E-03	1.58E-03	1.73E-03	1.91E-03
7.26E+00	8.50E-08	9.87E-02	1.11E-03	5.58E-04	1.18E-03	1.41E-03	1.53E-03	1.87E-03
7.68E+00	7.40E-08	8.38E-02	1.03E-03	4.83E-04	1.02E-03	1.21E-03	1.33E-03	2.31E-03
8.13E+00	6.39E-08	7.26E-02	9.29E-04	4.12E-04	8.79E-04	1.04E-03	1.15E-03	3.14E-03
8.60E+00	5.47E-08	6.02E-02	8.31E-04	3.50E-04	7.49E-04	8.86E-04	9.80E-04	4.65E-03
9.10E+00	4.64E-08	5.59E-02	7.20E-04	2.94E-04	6.31E-04	7.54E-04	8.27E-04	7.42E-03
9.63E+00	3.90E-08	4.59E-02	6.08E-04	2.46E-04	5.28E-04	6.25E-04	6.91E-04	1.25E-02
1.00E+01	3.46E-08	4.00E-02	5.49E-04	2.17E-04	4.65E-04	5.60E-04	6.13E-04	1.85E-02
1.02E+01	3.25E-08	3.72E-02	5.24E-04	2.03E-04	4.36E-04	5.25E-04	5.75E-04	2.21E-02
1.08E+01	2.67E-08	2.98E-02	4.52E-04	1.66E-04	3.58E-04	4.30E-04	4.70E-04	2.44E-02
1.14E+01	2.18E-08	2.35E-02	3.80E-04	1.34E-04	2.88E-04	3.49E-04	3.80E-04	1.90E-02
1.21E+01	1.75E-08	1.90E-02	3.09E-04	1.07E-04	2.30E-04	2.79E-04	3.07E-04	1.47E-02
1.28E+01	1.39E-08	1.40E-02	2.39E-04	8.41E-05	1.81E-04	2.20E-04	2.43E-04	1.10E-02
1.35E+01	1.09E-08	1.06E-02	1.85E-04	6.54E-05	1.41E-04	1.72E-04	1.91E-04	7.98E-03
1.43E+01	8.40E-09	8.05E-03	1.45E-04	5.00E-05	1.08E-04	1.32E-04	1.48E-04	5.70E-03
1.51E+01	6.39E-09	7.09E-03	1.08E-04	3.76E-05	8.13E-05	9.98E-05	1.12E-04	3.90E-03
1.60E+01	4.78E-09	5.24E-03	7.81E-05	2.77E-05	6.03E-05	7.41E-05	8.28E-05	2.58E-03
1.70E+01	3.52E-09	3.80E-03	5.67E-05	2.01E-05	4.40E-05	5.49E-05	6.26E-05	1.64E-03
1.80E+01	2.55E-09	2.71E-03	3.85E-05	1.44E-05	3.15E-05	3.91E-05	4.52E-05	9.88E-04
1.90E+01	1.81E-09	1.89E-03	2.63E-05	1.01E-05	2.20E-05	2.73E-05	3.20E-05	9.64E-04

2.01E+01 1.26E-09 1.29E-03 1.69E-05 6.89E-06 1.52E-05 1.91E-05 2.26E-05 4.82E-04

2.13E+01 8.55E-10 8.65E-04 1.04E-05 4.61E-06 1.01E-05 1.29E-05 1.75E-05 1.88E-04

2.25E+01 5.69E-10 5.66E-04 6.24E-06 3.00E-06 6.53E-06 8.23E-06 9.15E-06 6.86E-05

2.38E+01 2.55E-10 3.60E-04 3.98E-06 1.91E-06 4.17E-06 5.23E-06 5.86E-06 9.02E-05

2.52E+01	1.60E-10	2.24E-04	2.54E-06	1.19E-06	2.59E-06	3.31E-06	3.68E-06	7.24E-05
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.67E+01	9.76E-11	1.35E-04	1.54E-06	7.21E-07	1.57E-06	2.03E-06	2.24E-06	3.10E-05
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.82E+01 5.79E-11 7.93E-05 8.82E-07 4.24E-07 9.48E-07 1.21E-06 1.36E-06 2.63E-05

2.99E+01 3.33E-11 4.51E-05 5.07E-07 2.39E-07 5.27E-07 6.85E-07 7.63E-07 1.48E-05

3.00E+01 3.20E-11 4.33E-05 4.90E-07 2.29E-07 5.06E-07 6.58E-07 7.33E-07 1.40E-05

3.16E+01 1.85E-11 2.65E-05 2.88E-07 1.31E-07 2.91E-07 3.76E-07 4.22E-07 5.97E-06

3.35E+01	9.98E-12	1.32E-05	1.48E-07	6.99E-08	1.63E-07	2.01E-07	2.27E-07	2.43E-06
----------	----------	----------	----------	----------	----------	----------	----------	----------

3.54E+01 5.18E-12 6.73E-06 7.56E-08 3.58E-08 8.01E-08 1.03E-07 1.18E-07 1.18E-06

3.75E+01 2.59E-12 3.31E-06 3.59E-08 1.76E-08 3.96E-08 5.08E-08 5.83E-08 3.30E-07

3.97E+01	1.24E-12	1.56E-06	1.45E-08	8.34E-09	1.87E-08	2.38E-08	2.80E-08	4.16E-08
----------	----------	----------	----------	----------	----------	----------	----------	----------

4.20E+01 5.72E-13 7.07E-07 6.35E-09 3.79E-09 8.46E-09 1.07E-08 1.24E-08 2.00E-08

4.44E+01 2.52E-13 3.05E-07 2.73E-09 1.64E-09 3.69E-09 4.66E-09 5.45E-09 9.52E-09

4.70E+01 1.05E-13 1.30E-07 1.21E-09 6.80E-10 1.53E-09 1.94E-09 2.26E-09 2.57E-09

4.97E+01 4.20E-14 4.88E-08 4.45E-10 2.68E-10 6.09E-10 7.67E-10 9.00E-10 1.02E-09

5.26E+01 1.59E-14 1.80E-08 1.50E-10 9.91E-11 2.29E-10 2.88E-10 3.35E-10 3.63E-10

5.57E+01 5.65E-15 6.26E-09 6.00E-11 3.44E-11 8.13E-11 1.03E-10 1.21E-10 1.36E-10

5.90E+01	1.90E-15	2.06E-09	2.08E-11	1.13E-11	2.77E-11	3.45E-11	4.15E-11	5.71E-11
----------	----------	----------	----------	----------	----------	----------	----------	----------

6.24E+01 5.99E-16 6.27E-10 6.43E-12 3.48E-12 8.69E-12 1.12E-11 1.31E-11 2.89E-11

6.60E+01 1.76E-16 1.79E-10 1.92E-12 9.75E-13 2.56E-12 3.29E-12 3.94E-12 1.51E-11

6.99E+01	4.84E-17	7.05E-11	5.46E-13	2.60E-13	6.95E-13	8.98E-13	1.08E-12	1.42E-12
----------	----------	----------	----------	----------	----------	----------	----------	----------

7.39E+01	1.23E-17	1.64E-11	1.39E-13	6.32E-14	1.78E-13	2.27E-13	2.75E-13	3.74E-13
----------	----------	----------	----------	----------	----------	----------	----------	----------

7.82E+01 2.90E-18 3.47E-12 3.40E-14 1.41E-14 4.19E-14 5.28E-14 6.48E-14 1.22E-13

8.28E+01 6.26E-19 6.58E-13 7.38E-15 2.98E-15 8.94E-15 1.15E-14 1.40E-14 3.95E-14

8.76E+01 1.24E-19 1.07E-13 1.35E-15 5.61E-16 1.77E-15 2.27E-15 2.76E-15 6.57E-15

9.27E+01 2.23E-20 1.73E-14 2.22E-16 9.60E-17 3.13E-16 4.15E-16 4.97E-16 9.71E-16

9.81E+01 3.62E-21 2.64E-15 3.32E-17 1.49E-17 5.03E-17 6.74E-17 8.06E-17 1.76E-16

1.00E+02 1.93E-21 1.37E-15 1.73E-17 7.83E-18 2.67E-17 3.59E-17 4.30E-17 1.15E-16

1.04E+02 5.30E-22 4.85E-16 4.76E-18 2.03E-18 7.25E-18 9.56E-18 1.17E-17 1.59E-17

1.10E+02 6.94E-23 4.33E-17 4.82E-19 2.54E-19 9.34E-19 1.27E-18 1.53E-18 1.82E-18

1.16E+02 8.06E-24 4.59E-18 5.44E-20 2.80E-20 1.07E-19 1.44E-19 1.77E-19 2.32E-19

1.23E+02 8.27E-25 4.24E-19 5.34E-21 2.73E-21 1.08E-20 1.46E-20 1.80E-20 2.44E-20

1.30E+02 7.43E-26 3.37E-20 4.60E-22 2.34E-22 9.49E-22 1.31E-21 1.61E-21 2.18E-21

1.38E+02 5.80E-27 2.27E-21 3.58E-23 1.78E-23 7.67E-23 1.03E-22 1.25E-22 1.70E-22

1.46E+02 3.90E-28 1.28E-22 2.46E-24 1.13E-24 5.10E-24 7.10E-24 8.41E-24 1.18E-23

1.54E+02 1.32E-29 1.35E-23 1.55E-25 6.53E-26 2.99E-25 4.11E-25 4.92E-25 8.10E-25

1.63E+02 0.00E+00 6.21E-25 7.66E-27 3.28E-27 1.55E-26 2.17E-26 2.78E-26 5.53E-26

1.73E+02 0.00E+00 2.39E-26 3.20E-28 1.35E-28 7.13E-28 9.54E-28 1.43E-27 3.69E-27

1.83E+02 0.00E+00 7.60E-28 1.09E-29 3.14E-30 2.41E-29 3.61E-29 5.25E-29 1.12E-28

1.94E+02 0.00E+00 1.95E-29 1.65E-31 0.00E+00 0.00E+00 0.00E+00 1.60E-30 5.67E-30

```
2.05E+02      0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00
```


[illegible]

[illegible]

```
2.57E+02      0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00
```

```

2.72E+02      0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00

```


[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

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	4.39E-07	3.60E-02	7.46E-03	7.18E-03	1.42E-02	1.62E-02	1.73E-02	1.81E-02
1.00E+00	3.16E-07	2.02E-02	5.20E-03	5.02E-03	1.01E-02	1.12E-02	1.22E-02	1.29E-02
1.06E+00	3.10E-07	1.96E-02	5.09E-03	4.91E-03	9.88E-03	1.10E-02	1.20E-02	1.26E-02
1.12E+00	3.04E-07	1.89E-02	4.98E-03	4.81E-03	9.65E-03	1.08E-02	1.17E-02	1.23E-02
1.19E+00	2.97E-07	1.82E-02	4.87E-03	4.71E-03	9.42E-03	1.05E-02	1.15E-02	1.21E-02
1.25E+00	2.91E-07	1.75E-02	4.75E-03	4.60E-03	9.20E-03	1.03E-02	1.13E-02	1.18E-02
1.33E+00	2.84E-07	1.68E-02	4.63E-03	4.49E-03	8.97E-03	1.00E-02	1.11E-02	1.15E-02
1.40E+00	2.77E-07	1.60E-02	4.51E-03	4.37E-03	8.73E-03	9.77E-03	1.08E-02	1.11E-02
1.49E+00	2.69E-07	1.53E-02	4.38E-03	4.24E-03	8.49E-03	9.49E-03	1.05E-02	1.09E-02
1.57E+00	2.62E-07	1.45E-02	4.25E-03	4.12E-03	8.23E-03	9.23E-03	1.02E-02	1.06E-02
1.66E+00	2.54E-07	1.38E-02	4.12E-03	3.98E-03	7.98E-03	8.95E-03	9.97E-03	1.04E-02
1.76E+00	2.46E-07	1.31E-02	3.98E-03	3.85E-03	7.71E-03	8.66E-03	9.62E-03	1.01E-02
1.86E+00	2.38E-07	1.23E-02	3.84E-03	3.71E-03	7.50E-03	8.37E-03	9.25E-03	9.71E-03
1.97E+00	2.30E-07	1.16E-02	3.70E-03	3.56E-03	7.23E-03	8.12E-03	8.99E-03	9.46E-03
2.09E+00	2.21E-07	1.11E-02	3.56E-03	3.42E-03	6.95E-03	7.81E-03	8.64E-03	9.10E-03
2.21E+00	2.13E-07	1.23E-02	3.41E-03	3.27E-03	6.67E-03	7.49E-03	8.28E-03	8.72E-03
2.34E+00	2.04E-07	1.26E-02	3.26E-03	3.14E-03	6.39E-03	7.17E-03	7.92E-03	8.35E-03
2.47E+00	1.95E-07	1.22E-02	3.10E-03	2.99E-03	6.10E-03	6.85E-03	7.56E-03	7.96E-03
2.62E+00	1.86E-07	1.16E-02	2.95E-03	2.85E-03	5.78E-03	6.53E-03	7.19E-03	7.58E-03
2.77E+00	1.77E-07	1.11E-02	2.79E-03	2.70E-03	5.44E-03	6.20E-03	6.80E-03	7.19E-03
2.93E+00	1.68E-07	1.07E-02	2.64E-03	2.56E-03	5.14E-03	5.87E-03	6.42E-03	6.72E-03
3.00E+00	1.64E-07	1.05E-02	2.57E-03	2.50E-03	5.02E-03	5.74E-03	6.27E-03	6.57E-03
3.10E+00	1.58E-07	1.04E-02	2.48E-03	2.41E-03	4.85E-03	5.53E-03	6.04E-03	6.34E-03
3.28E+00	1.49E-07	1.03E-02	2.33E-03	2.26E-03	4.56E-03	5.18E-03	5.65E-03	5.96E-03
3.48E+00	1.40E-07	1.04E-02	2.18E-03	2.12E-03	4.26E-03	4.88E-03	5.28E-03	5.59E-03
3.68E+00	1.31E-07	1.09E-02	2.03E-03	1.97E-03	3.98E-03	4.53E-03	4.92E-03	5.22E-03
3.89E+00	1.22E-07	1.20E-02	1.89E-03	1.83E-03	3.70E-03	4.21E-03	4.57E-03	4.86E-03
4.12E+00	1.14E-07	1.43E-02	1.75E-03	1.69E-03	3.42E-03	3.92E-03	4.23E-03	4.50E-03
4.36E+00	1.05E-07	1.85E-02	1.62E-03	1.55E-03	3.15E-03	3.62E-03	3.99E-03	4.17E-03
4.61E+00	9.65E-08	2.67E-02	1.50E-03	1.42E-03	2.89E-03	3.33E-03	3.67E-03	3.88E-03
4.88E+00	8.84E-08	4.24E-02	1.41E-03	1.30E-03	2.63E-03	3.04E-03	3.35E-03	3.54E-03
5.17E+00	8.05E-08	7.21E-02	1.36E-03	1.18E-03	2.38E-03	2.76E-03	3.04E-03	3.24E-03
5.47E+00	7.29E-08	1.09E-01	1.33E-03	1.06E-03	2.15E-03	2.49E-03	2.74E-03	2.96E-03
5.78E+00	6.57E-08	1.33E-01	1.29E-03	9.46E-04	1.92E-03	2.23E-03	2.46E-03	2.67E-03
6.12E+00	5.88E-08	1.35E-01	1.25E-03	8.39E-04	1.72E-03	1.99E-03	2.19E-03	2.38E-03
6.48E+00	5.23E-08	1.18E-01	1.20E-03	7.38E-04	1.52E-03	1.76E-03	1.96E-03	2.84E-03
6.86E+00	4.62E-08	1.02E-01	1.16E-03	6.46E-04	1.33E-03	1.55E-03	1.72E-03	3.51E-03
7.26E+00	4.05E-08	8.78E-02	1.09E-03	5.59E-04	1.16E-03	1.36E-03	1.50E-03	3.97E-03
7.68E+00	3.52E-08	7.95E-02	9.74E-04	4.78E-04	1.00E-03	1.18E-03	1.31E-03	4.98E-03
8.13E+00	3.04E-08	6.39E-02	8.48E-04	4.08E-04	8.63E-04	1.01E-03	1.13E-03	6.98E-03
8.60E+00	2.60E-08	5.31E-02	7.41E-04	3.47E-04	7.42E-04	8.65E-04	9.64E-04	1.09E-02
9.10E+00	2.21E-08	4.43E-02	6.42E-04	2.92E-04	6.22E-04	7.30E-04	8.12E-04	1.81E-02
9.63E+00	1.86E-08	3.65E-02	5.59E-04	2.43E-04	5.20E-04	6.11E-04	6.85E-04	2.05E-02
1.00E+01	1.64E-08	3.72E-02	5.08E-04	2.13E-04	4.59E-04	5.38E-04	6.03E-04	1.73E-02
1.02E+01	1.54E-08	3.81E-02	4.81E-04	2.00E-04	4.30E-04	5.05E-04	5.65E-04	1.58E-02
1.08E+01	1.27E-08	3.23E-02	4.00E-04	1.63E-04	3.55E-04	4.13E-04	4.60E-04	1.20E-02
1.14E+01	1.03E-08	2.61E-02	3.32E-04	1.32E-04	2.87E-04	3.35E-04	3.72E-04	8.91E-03
1.21E+01	8.30E-09	2.09E-02	2.62E-04	1.04E-04	2.28E-04	2.68E-04	3.00E-04	6.48E-03
1.28E+01	6.58E-09	1.65E-02	2.06E-04	8.18E-05	1.79E-04	2.11E-04	2.36E-04	5.21E-03
1.35E+01	5.15E-09	1.28E-02	1.67E-04	6.32E-05	1.38E-04	1.65E-04	1.83E-04	7.98E-03
1.43E+01	3.98E-09	9.82E-03	1.31E-04	4.80E-05	1.04E-04	1.26E-04	1.40E-04	5.90E-03
1.51E+01	3.02E-09	7.41E-03	9.91E-05	3.60E-05	7.80E-05	9.53E-05	1.09E-04	4.28E-03
1.60E+01	2.26E-09	5.50E-03	7.56E-05	2.67E-05	5.83E-05	7.08E-05	8.10E-05	3.05E-03
1.70E+01	1.66E-09	4.02E-03	5.93E-05	1.95E-05	4.36E-05	5.17E-05	5.91E-05	2.22E-03
1.80E+01	1.20E-09	2.88E-03	4.36E-05	1.39E-05	3.10E-05	3.75E-05	4.37E-05	1.65E-03
1.90E+01	8.51E-10	2.02E-03	3.03E-05	9.71E-06	2.17E-05	2.63E-05	3.15E-05	1.12E-03

2.01E+01 5.91E-10 1.39E-03 2.09E-05 6.64E-06 1.48E-05 1.80E-05 2.17E-05 7.48E-04

2.13E+01 4.02E-10 9.37E-04 1.46E-05 4.46E-06 9.87E-06 1.21E-05 1.46E-05 5.32E-04

2.25E+01 2.67E-10 6.17E-04 9.56E-06 2.93E-06 6.47E-06 7.98E-06 9.41E-06 3.39E-04

2.38E+01	1.73E-10	3.96E-04	6.00E-06	1.87E-06	4.13E-06	5.06E-06	6.05E-06	2.11E-04
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.52E+01	1.10E-10	2.48E-04	3.67E-06	1.16E-06	2.59E-06	3.15E-06	3.79E-06	1.27E-04
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.67E+01	6.76E-11	1.51E-04	2.20E-06	7.04E-07	1.57E-06	1.92E-06	2.31E-06	7.46E-05
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.82E+01 4.05E-11 8.94E-05 1.31E-06 4.13E-07 9.33E-07 1.13E-06 1.37E-06 4.24E-05

2.99E+01 2.36E-11 5.13E-05 7.74E-07 2.36E-07 5.39E-07 6.47E-07 7.89E-07 2.81E-05

3.00E+01 2.27E-11 4.93E-05 7.46E-07 2.26E-07 5.18E-07 6.22E-07 7.58E-07 2.87E-05

3.16E+01 1.33E-11 2.85E-05 4.47E-07 1.30E-07 3.00E-07 3.60E-07 4.50E-07 2.26E-05

3.35E+01 7.22E-12 1.53E-05 2.41E-07 6.90E-08 1.61E-07 1.93E-07 2.65E-07 1.20E-05

3.54E+01 3.80E-12 7.93E-06 1.26E-07 3.56E-08 8.34E-08 1.03E-07 1.81E-07 6.12E-06

3.75E+01 1.92E-12 3.95E-06 6.22E-08 1.77E-08 4.19E-08 5.12E-08 1.01E-07 3.01E-06

3.97E+01 9.35E-13 1.89E-06 2.99E-08 8.37E-09 2.01E-08 2.45E-08 4.27E-08 1.42E-06

4.20E+01 4.36E-13 8.68E-07 1.43E-08 3.81E-09 9.17E-09 1.11E-08 1.66E-08 6.42E-07

4.44E+01 1.94E-13 3.80E-07 6.51E-09 1.65E-09 4.01E-09 4.86E-09 8.62E-09 2.77E-07

4.70E+01 8.27E-14 1.59E-07 2.66E-09 6.90E-10 1.68E-09 2.05E-09 4.75E-09 1.14E-07

4.97E+01 3.35E-14 6.30E-08 1.05E-09 2.71E-10 6.70E-10 8.34E-10 2.84E-09 4.43E-08

5.26E+01 1.28E-14 2.37E-08 4.05E-10 9.89E-11 2.55E-10 3.18E-10 6.89E-10 1.95E-08

5.57E+01 4.66E-15 8.42E-09 1.27E-10 3.44E-11 8.92E-11 1.11E-10 1.47E-10 5.69E-09

5.90E+01 4.92E-16 2.81E-09 4.34E-11 1.14E-11 2.94E-11 3.77E-11 4.92E-11 1.87E-09

6.24E+01	1.55E-16	8.83E-10	1.29E-11	3.51E-12	9.25E-12	1.18E-11	1.56E-11	5.72E-10
----------	----------	----------	----------	----------	----------	----------	----------	----------

6.60E+01 4.57E-17 2.59E-10 3.53E-12 1.03E-12 2.70E-12 3.48E-12 4.59E-12 1.63E-10

6.99E+01 1.26E-17 7.07E-11 9.46E-13 2.69E-13 7.47E-13 9.37E-13 1.24E-12 4.35E-11

7.39E+01 3.20E-18 1.79E-11 2.40E-13 6.64E-14 1.90E-13 2.38E-13 3.08E-13 1.07E-11

7.82E+01 7.51E-19 4.18E-12 5.89E-14 1.52E-14 4.55E-14 5.59E-14 7.55E-14 3.11E-12

8.28E+01	1.62E-19	8.99E-13	1.29E-14	3.17E-15	9.82E-15	1.21E-14	1.63E-14	6.56E-13
----------	----------	----------	----------	----------	----------	----------	----------	----------

8.76E+01 3.21E-20 1.76E-13 2.50E-15 5.99E-16 1.94E-15 2.42E-15 3.21E-15 1.26E-13

9.27E+01	5.77E-21	3.15E-14	4.48E-16	1.04E-16	3.47E-16	4.34E-16	6.62E-16	2.21E-14
----------	----------	----------	----------	----------	----------	----------	----------	----------

9.81E+01	9.38E-22	5.09E-15	7.42E-17	1.60E-17	5.60E-17	7.61E-17	1.20E-16	3.49E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

1.00E+02 5.00E-22 2.71E-15 3.88E-17 8.57E-18 3.00E-17 4.05E-17 6.42E-17 1.85E-15

1.04E+02	1.37E-22	7.39E-16	1.01E-17	2.27E-18	8.37E-18	1.12E-17	1.76E-17	4.96E-16
----------	----------	----------	----------	----------	----------	----------	----------	----------

1.10E+02 1.80E-23 9.59E-17 1.28E-18 2.78E-19 1.09E-18 1.55E-18 2.30E-18 6.29E-17

1.16E+02 2.09E-24 1.10E-17 1.45E-19 3.14E-20 1.25E-19 1.84E-19 2.72E-19 7.06E-18

1.23E+02 2.14E-25 1.12E-18 1.46E-20 3.01E-21 1.28E-20 1.89E-20 2.73E-20 6.99E-19

1.30E+02	1.92E-26	9.98E-20	1.31E-21	2.59E-22	1.19E-21	1.70E-21	2.42E-21	6.04E-20
----------	----------	----------	----------	----------	----------	----------	----------	----------

1.38E+02 1.50E-27 7.71E-21 1.06E-22 1.96E-23 9.22E-23 1.33E-22 1.76E-22 4.54E-21

1.46E+02 1.01E-28 5.13E-22 7.20E-24 1.30E-24 6.26E-24 8.72E-24 1.22E-23 2.93E-22

1.54E+02 4.64E-30 2.91E-23 3.98E-25 7.42E-26 3.73E-25 5.11E-25 6.79E-25 1.61E-23

1.63E+02 0.00E+00 1.40E-24 1.81E-26 3.51E-27 1.81E-26 2.63E-26 3.43E-26 7.44E-25

1.73E+02 0.00E+00 5.64E-26 7.27E-28 1.27E-28 7.45E-28 1.09E-27 1.78E-27 2.89E-26

1.83E+02 0.00E+00 1.88E-27 2.48E-29 2.75E-30 2.53E-29 3.97E-29 8.10E-29 1.04E-27

1.94E+02	0.00E+00	5.05E-29	4.66E-31	0.00E+00	0.00E+00	0.00E+00	3.41E-30	2.33E-29
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.05E+02	0.00E+00	1.12E-30	2.24E-33	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
----------	----------	----------	----------	----------	----------	----------	----------	----------


```

2.29E+02      0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00

```

[illegible]

[illegible]

[illegible]

[illegible]

```

3.05E+02      0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00

```

[illegible]

[illegible]

```
3.61E+02      0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00
```

[illegible]

[illegible]

4.28E+02 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00

[illegible]

[illegible]

[illegible]


```
5.36E+02      0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.00E+00
```

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

```
8.93E+02      0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00
```

[illegible]

[illegible]

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\BP INSITU UA\FCS BURIED PIPE INSITU UA CS-134.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	7.397E-03
2	0.000E+00	7.403E-03
3	0.000E+00	7.455E-03

Title : RESRAD Default Parameters
Input File : FCS BURIED PIPE INSITU UA CS-134.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	9 -0.03	9 -0.02	6 -0.05	6 -0.05
Contaminated zone b parameter	8 0.04	8 0.02	15 0.01	15 0.01
Evapotranspiration coefficient	3 0.07	3 0.04	12 0.02	12 0.02
Wind Speed	7 0.04	7 0.03	3 0.07	3 0.07
Runoff coefficient	16 0.01	16 0.00	10 -0.02	10 -0.02
b Parameter of Unsaturated zone 1	2 -0.11	2 -0.07	1 -0.08	1 -0.08
Mass loading for inhalation	11 0.03	11 0.02	16 0.01	16 0.01
Indoor dust filtration factor	18 0.00	18 0.00	18 0.00	18 0.00
Depth of soil mixing layer	14 -0.02	14 -0.01	11 -0.02	11 -0.02
Depth of roots	6 0.05	6 0.03	9 0.03	9 0.03
Wet weight crop yield of fruit, grain and non-leafy vegetables	17 0.00	17 0.00	13 -0.01	13 -0.01
Weathering removal constant of all vegetation	13 -0.02	13 -0.01	17 0.00	17 0.00
Wet foliar interception fraction of leafy vegetables	15 0.01	15 0.01	7 -0.04	7 -0.04
Humidity in air	4 0.06	4 0.04	14 0.01	14 0.01
Cover erosion rate	1 0.76	1 0.76	8 0.04	8 0.04
Kd of Cs-134 in Contaminated Zone	5 -0.06	5 -0.04	5 -0.06	5 -0.06
Kd of Cs-134 in Saturated Zone	10 0.03	10 0.02	4 0.06	4 0.06
Well pump intake depth	12 -0.03	12 -0.02	2 -0.07	2 -0.07
R-SQUARE	0.58	0.58	0.03	0.03

-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 BURIED PIPE INSITU UA CS-134.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	14	0.01	14	0.01	11	-0.03	11	-0.03
Contaminated zone b parameter	10	-0.02	10	-0.01	15	-0.02	15	-0.02
Evapotranspiration coefficient	13	-0.01	13	-0.01	13	-0.03	13	-0.03
Wind Speed	4	-0.08	4	-0.05	18	0.00	18	0.00
Runoff coefficient	7	-0.04	7	-0.03	12	0.03	12	0.03
b Parameter of Unsaturated zone 1	11	-0.02	11	-0.01	10	0.04	10	0.04
Mass loading for inhalation	17	0.01	17	0.00	17	0.00	17	0.00
Indoor dust filtration factor	16	-0.01	16	-0.01	5	-0.06	5	-0.06
Depth of soil mixing layer	3	0.09	3	0.06	1	0.12	1	0.11
Depth of roots	2	0.12	2	0.08	4	0.06	4	0.06
Wet weight crop yield of fruit, grain and non-leafy vegetables	8	-0.04	8	-0.03	8	-0.05	8	-0.05
Weathering removal constant of all vegetation	12	-0.01	12	-0.01	9	-0.05	9	-0.04
Wet foliar interception fraction of leafy vegetables	6	0.05	6	0.03	2	0.08	2	0.08
Humidity in air	18	0.01	18	0.00	16	0.01	16	0.01
Cover erosion rate	1	0.76	1	0.75	3	0.08	3	0.08
Kd of Cs-134 in Contaminated Zone	9	0.03	9	0.02	7	-0.05	7	-0.05
Kd of Cs-134 in Saturated Zone	15	0.01	15	0.01	14	-0.03	14	-0.03
Well pump intake depth	5	-0.06	5	-0.04	6	-0.06	6	-0.05

R-SQUARE	0.59	0.59	0.05	0.05
----------	------	------	------	------

-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 BURIED PIPE INSITU UA CS-134.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	15	0.01	15	0.01	7	-0.03	7	-0.03
Contaminated zone b parameter	4	-0.06	4	-0.04	4	-0.03	4	-0.03
Evapotranspiration coefficient	12	0.02	12	0.01	9	0.02	9	0.02
Wind Speed	13	-0.02	13	-0.01	10	0.02	10	0.02
Runoff coefficient	16	-0.01	16	-0.01	2	-0.05	2	-0.05
b Parameter of Unsaturated zone 1	5	-0.03	5	-0.02	15	0.00	15	0.00
Mass loading for inhalation	14	-0.01	14	-0.01	12	-0.01	12	-0.01
Indoor dust filtration factor	8	0.03	8	0.02	17	0.00	17	0.00
Depth of soil mixing layer	18	0.01	18	0.00	14	0.00	14	0.00
Depth of roots	3	0.06	3	0.04	8	0.03	8	0.03
Wet weight crop yield of fruit, grain and non-leafy vegetables	17	-0.01	17	-0.01	18	0.00	18	0.00
Weathering removal constant of all vegetation	10	0.02	10	0.01	3	0.05	3	0.05
Wet foliar interception fraction of leafy vegetables	2	-0.09	2	-0.06	6	-0.03	6	-0.03
Humidity in air	11	-0.02	11	-0.01	5	0.03	5	0.03
Cover erosion rate	1	0.71	1	0.71	16	0.00	16	0.00
Kd of Cs-134 in Contaminated Zone	7	-0.03	7	-0.02	1	-0.14	1	-0.14
Kd of Cs-134 in Saturated Zone	9	0.02	9	0.02	11	0.02	11	0.02
Well pump intake depth	6	0.03	6	0.02	13	0.01	13	0.01

R-SQUARE	0.51	0.51	0.03	0.03
----------	------	------	------	------

-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.