

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL UNCERTAINTY ANALYSIS\FCS SOIL UNCERTAINTY ANALYSIS EU-152.RAD

Table of Contents

Part VI: Uncertainty Analysis

RESRAD Uncertainty Analysis Results

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

[illegible]

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL UNCERTAINTY ANALYSIS\FCS SOIL UNCERTAINTY ANALYSIS EU-152.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
Eu-152										
Min	0.00E+00	2.15E+00	2.15E+00	8.42E-01	1.29E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	3.23E+00	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.78E-01	1.78E-02	5.42E-07	2.88E-15
Avg	0.00E+00	3.22E+00	3.22E+00	3.04E+00	2.71E+00	1.82E+00	6.14E-01	1.49E-02	3.35E-07	4.24E-16
Std	0.00E+00	5.50E-02	5.50E-02	1.32E-01	2.08E-01	3.12E-01	1.61E-01	5.48E-03	2.30E-07	6.69E-16
ΣALL										
Min	0.00E+00	2.15E+00	2.15E+00	8.42E-01	1.29E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	3.23E+00	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.78E-01	1.78E-02	5.42E-07	2.88E-15
Avg	0.00E+00	3.22E+00	3.22E+00	3.04E+00	2.71E+00	1.82E+00	6.14E-01	1.49E-02	3.35E-07	4.24E-16
Std	0.00E+00	5.50E-02	5.50E-02	1.32E-01	2.08E-01	3.12E-01	1.61E-01	5.48E-03	2.30E-07	6.69E-16

ΣALL 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
Eu-152									
Min		7.51E-05	2.95E-05	4.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		7.53E-05	7.14E-05	6.44E-05	4.47E-05	1.58E-05	4.15E-07	1.26E-11	1.79E-20
Avg		7.52E-05	7.09E-05	6.33E-05	4.26E-05	1.43E-05	3.47E-07	7.81E-12	2.82E-21
Std		4.24E-08	2.28E-06	4.43E-06	7.10E-06	3.73E-06	1.28E-07	5.35E-12	4.53E-21
ALL									
Min		7.51E-05	2.95E-05	4.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		7.53E-05	7.14E-05	6.44E-05	4.47E-05	1.58E-05	4.15E-07	1.26E-11	1.79E-20
Avg		7.52E-05	7.09E-05	6.33E-05	4.26E-05	1.43E-05	3.47E-07	7.81E-12	2.82E-21
Std		4.24E-08	2.28E-06	4.43E-06	7.10E-06	3.73E-06	1.28E-07	5.35E-12	4.53E-21

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
Eu-152									
Min		2.15E+00	8.41E-01	1.29E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		3.22E+00	3.06E+00	2.76E+00	1.92E+00	6.77E-01	1.78E-02	5.41E-07	8.42E-23
Avg		3.21E+00	3.03E+00	2.71E+00	1.82E+00	6.13E-01	1.49E-02	3.35E-07	1.94E-23
Std		5.49E-02	1.32E-01	2.07E-01	3.11E-01	1.61E-01	5.47E-03	2.29E-07	3.19E-23
ΣALL									
Min		2.15E+00	8.41E-01	1.29E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		3.22E+00	3.06E+00	2.76E+00	1.92E+00	6.77E-01	1.78E-02	5.41E-07	8.42E-23
Avg		3.21E+00	3.03E+00	2.71E+00	1.82E+00	6.13E-01	1.49E-02	3.35E-07	1.94E-23
Std		5.49E-02	1.32E-01	2.07E-01	3.11E-01	1.61E-01	5.47E-03	2.29E-07	3.19E-23

ΣALL 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
Eu-152									
Min		8.20E-09	7.79E-09	7.02E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.82E-05	1.73E-05	1.56E-05	1.08E-05	3.82E-06	1.00E-07	3.05E-12	6.31E-16
Avg		2.92E-06	2.76E-06	2.47E-06	1.66E-06	5.58E-07	1.36E-08	2.96E-13	3.03E-17
Std		1.78E-06	1.69E-06	1.52E-06	1.07E-06	3.83E-07	1.02E-08	3.15E-13	5.68E-17
ΣALL									
Min		8.20E-09	7.79E-09	7.02E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.82E-05	1.73E-05	1.56E-05	1.08E-05	3.82E-06	1.00E-07	3.05E-12	6.31E-16
Avg		2.92E-06	2.76E-06	2.47E-06	1.66E-06	5.58E-07	1.36E-08	2.96E-13	3.03E-17
Std		1.78E-06	1.69E-06	1.52E-06	1.07E-06	3.83E-07	1.02E-08	3.15E-13	5.68E-17

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
Eu-152									
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

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
Eu-152									
Min		8.37E-04	5.21E-04	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		3.55E-03	3.37E-03	3.04E-03	2.11E-03	7.46E-04	1.96E-05	5.96E-10	1.83E-15
Avg		1.99E-03	1.88E-03	1.67E-03	1.11E-03	3.66E-04	8.04E-06	1.47E-10	2.10E-16
Std		9.63E-04	9.15E-04	8.30E-04	5.93E-04	2.15E-04	5.66E-06	1.64E-10	4.11E-16
ΣALL									
Min		8.37E-04	5.21E-04	1.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		3.55E-03	3.37E-03	3.04E-03	2.11E-03	7.46E-04	1.96E-05	5.96E-10	1.83E-15
Avg		1.99E-03	1.88E-03	1.67E-03	1.11E-03	3.66E-04	8.04E-06	1.47E-10	2.10E-16
Std		9.63E-04	9.15E-04	8.30E-04	5.93E-04	2.15E-04	5.66E-06	1.64E-10	4.11E-16

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
Eu-152									
Min		9.43E-04	3.75E-04	5.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.35E-03	1.28E-03	1.15E-03	8.00E-04	2.83E-04	7.43E-06	2.26E-10	5.48E-16
Avg		1.26E-03	1.19E-03	1.06E-03	7.13E-04	2.40E-04	5.76E-06	1.24E-10	1.35E-16
Std		5.49E-05	7.02E-05	9.21E-05	1.27E-04	6.40E-05	2.14E-06	8.93E-11	2.01E-16
ΣALL									
Min		9.43E-04	3.75E-04	5.75E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.35E-03	1.28E-03	1.15E-03	8.00E-04	2.83E-04	7.43E-06	2.26E-10	5.48E-16
Avg		1.26E-03	1.19E-03	1.06E-03	7.13E-04	2.40E-04	5.76E-06	1.24E-10	1.35E-16
Std		5.49E-05	7.02E-05	9.21E-05	1.27E-04	6.40E-05	2.14E-06	8.93E-11	2.01E-16

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 EU-152.RAD

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
<hr/>									
Eu-152									
Min		1.02E-04	4.30E-05	6.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.59E-04	1.51E-04	1.36E-04	9.48E-05	3.35E-05	8.80E-07	2.68E-11	2.19E-17
Avg		1.40E-04	1.32E-04	1.18E-04	7.90E-05	2.65E-05	6.32E-07	1.34E-11	5.10E-18
Std		1.22E-05	1.27E-05	1.36E-05	1.54E-05	7.37E-06	2.41E-07	9.77E-12	7.64E-18
<hr/>									
ΣALL									
Min		1.02E-04	4.30E-05	6.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.59E-04	1.51E-04	1.36E-04	9.48E-05	3.35E-05	8.80E-07	2.68E-11	2.19E-17
Avg		1.40E-04	1.32E-04	1.18E-04	7.90E-05	2.65E-05	6.32E-07	1.34E-11	5.10E-18
Std		1.22E-05	1.27E-05	1.36E-05	1.54E-05	7.37E-06	2.41E-07	9.77E-12	7.64E-18
<hr/>									

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 EU-152.RAD

Probabilistic Dose vs Pathway(i): Soil Ingestion

Nuclide		DOSE(i,j,t), mrem/yr							
(j)	t=	0.00E+00	1.00E+00	3.00E+00	1.00E+01	3.00E+01	1.00E+02	3.00E+02	1.00E+03
<hr/>									
Eu-152									
Min		6.00E-05	2.35E-05	3.61E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		9.01E-05	8.56E-05	7.71E-05	5.36E-05	1.89E-05	4.97E-07	1.51E-11	7.87E-17
Avg		8.99E-05	8.48E-05	7.58E-05	5.09E-05	1.71E-05	4.16E-07	9.07E-12	2.03E-17
Std		1.54E-06	3.68E-06	5.81E-06	8.83E-06	4.52E-06	1.53E-07	6.48E-12	3.02E-17
<hr/>									
ΣALL									
Min		6.00E-05	2.35E-05	3.61E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		9.01E-05	8.56E-05	7.71E-05	5.36E-05	1.89E-05	4.97E-07	1.51E-11	7.87E-17
Avg		8.99E-05	8.48E-05	7.58E-05	5.09E-05	1.71E-05	4.16E-07	9.07E-12	2.03E-17
Std		1.54E-06	3.68E-06	5.81E-06	8.83E-06	4.52E-06	1.53E-07	6.48E-12	3.02E-17
<hr/>									

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 EU-152.RAD

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
<hr/>									
Eu-152									
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		1.88E-05	3.31E-04	9.46E-04	1.59E-03	1.63E-02	2.75E-04	1.49E-08	9.13E-16
Avg		2.89E-08	3.62E-07	1.27E-06	5.44E-06	1.87E-05	8.44E-07	5.53E-11	2.11E-17
Std		5.65E-07	8.93E-06	2.60E-05	6.30E-05	4.34E-04	1.02E-05	5.32E-10	5.18E-17
<hr/>									
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		1.88E-05	3.31E-04	9.46E-04	1.59E-03	1.63E-02	2.75E-04	1.49E-08	9.13E-16
Avg		2.89E-08	3.62E-07	1.27E-06	5.44E-06	1.87E-05	8.44E-07	5.53E-11	2.11E-17
Std		5.65E-07	8.93E-06	2.60E-05	6.30E-05	4.34E-04	1.02E-05	5.32E-10	5.18E-17
<hr/>									

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 EU-152.RAD

Probabilistic Dose vs Pathway(i): Fish Ingestion

Nuclide	DOSE(i,j,t), mrem/yr							
(j)	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	3.00E+01	1.00E+02	3.00E+02	1.00E+03
<hr/>								
Eu-152								
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ALL								
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<hr/>								

ALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL UNCERTAINTY ANALYSIS\FCS SOIL UNCERTAINTY ANALYSIS EU-152.RAD

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

Nuclide		DOSE(i,j,t), mrem/yr							
(j)	t=	0.00E+00	1.00E+00	3.00E+00	1.00E+01	3.00E+01	1.00E+02	3.00E+02	1.00E+03
<hr/>									
Eu-152									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ALL									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<hr/>									

ALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL UNCERTAINTY ANALYSIS\FCS SOIL UNCERTAINTY ANALYSIS EU-152.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/>									
Eu-152									
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		1.10E-06	2.02E-05	5.87E-05	1.79E-04	5.03E-03	8.53E-05	3.34E-09	5.77E-17
Avg		2.25E-09	2.78E-08	9.65E-08	5.09E-07	4.17E-06	1.18E-07	6.51E-12	1.85E-18
Std		4.13E-08	6.05E-07	1.78E-06	6.17E-06	1.31E-04	2.31E-06	9.38E-11	4.44E-18
<hr/>									
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		1.10E-06	2.02E-05	5.87E-05	1.79E-04	5.03E-03	8.53E-05	3.34E-09	5.77E-17
Avg		2.25E-09	2.78E-08	9.65E-08	5.09E-07	4.17E-06	1.18E-07	6.51E-12	1.85E-18
Std		4.13E-08	6.05E-07	1.78E-06	6.17E-06	1.31E-04	2.31E-06	9.38E-11	4.44E-18
<hr/>									

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 EU-152.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/>									
Eu-152									
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		3.90E-07	1.28E-05	4.05E-05	7.00E-05	9.48E-04	1.62E-05	7.63E-10	1.67E-17
Avg		7.44E-10	1.42E-08	5.33E-08	2.29E-07	9.88E-07	4.00E-08	2.50E-12	4.50E-19
Std		1.32E-08	3.49E-07	1.12E-06	2.64E-06	2.50E-05	5.29E-07	2.53E-11	1.06E-18
<hr/>									
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		3.90E-07	1.28E-05	4.05E-05	7.00E-05	9.48E-04	1.62E-05	7.63E-10	1.67E-17
Avg		7.44E-10	1.42E-08	5.33E-08	2.29E-07	9.88E-07	4.00E-08	2.50E-12	4.50E-19
Std		1.32E-08	3.49E-07	1.12E-06	2.64E-06	2.50E-05	5.29E-07	2.53E-11	1.06E-18
<hr/>									

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 EU-152.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/>									
Eu-152									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		8.33E-08	2.15E-06	6.59E-06	1.13E-05	1.69E-04	2.88E-06	1.30E-10	8.78E-19
Avg		1.46E-10	2.40E-09	8.65E-09	3.76E-08	1.71E-07	6.63E-09	4.06E-13	2.56E-20
Std		2.71E-09	5.88E-08	1.82E-07	4.42E-07	4.46E-06	9.12E-08	4.22E-12	5.96E-20
<hr/>									
ΣALL									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		8.33E-08	2.15E-06	6.59E-06	1.13E-05	1.69E-04	2.88E-06	1.30E-10	8.78E-19
Avg		1.46E-10	2.40E-09	8.65E-09	3.76E-08	1.71E-07	6.63E-09	4.06E-13	2.56E-20
Std		2.71E-09	5.88E-08	1.82E-07	4.42E-07	4.46E-06	9.12E-08	4.22E-12	5.96E-20
<hr/>									

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 EU-152.RAD

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	3.13E+00	2.79E+00	2.23E+00	5.69E-01	1.74E-06	0.00E+00	0.00E+00	0.00E+00
0.050	3.19E+00	2.95E+00	2.54E+00	1.36E+00	1.04E-01	1.63E-07	0.00E+00	0.00E+00
0.075	3.21E+00	3.01E+00	2.65E+00	1.64E+00	3.27E-01	3.41E-04	8.91E-19	3.64E-27
0.100	3.22E+00	3.03E+00	2.70E+00	1.75E+00	4.81E-01	3.23E-03	1.25E-17	1.59E-19
0.125	3.22E+00	3.04E+00	2.72E+00	1.82E+00	5.60E-01	7.13E-03	8.59E-16	7.14E-19
0.150	3.22E+00	3.05E+00	2.73E+00	1.85E+00	5.97E-01	1.05E-02	4.63E-14	1.33E-18
0.175	3.22E+00	3.05E+00	2.74E+00	1.87E+00	6.23E-01	1.24E-02	6.30E-13	1.77E-18
0.200	3.22E+00	3.06E+00	2.74E+00	1.88E+00	6.37E-01	1.40E-02	1.15E-11	2.22E-18
0.225	3.22E+00	3.06E+00	2.75E+00	1.89E+00	6.48E-01	1.50E-02	2.28E-10	2.78E-18
0.250	3.22E+00	3.06E+00	2.75E+00	1.90E+00	6.56E-01	1.57E-02	7.63E-09	3.43E-18
0.275	3.22E+00	3.06E+00	2.75E+00	1.90E+00	6.61E-01	1.62E-02	5.69E-08	3.77E-18
0.300	3.22E+00	3.06E+00	2.75E+00	1.91E+00	6.64E-01	1.66E-02	1.20E-07	4.53E-18
0.325	3.22E+00	3.06E+00	2.76E+00	1.91E+00	6.67E-01	1.68E-02	1.97E-07	5.57E-18
0.350	3.22E+00	3.06E+00	2.76E+00	1.91E+00	6.69E-01	1.70E-02	2.63E-07	6.40E-18
0.375	3.22E+00	3.06E+00	2.76E+00	1.91E+00	6.71E-01	1.71E-02	3.33E-07	7.46E-18
0.400	3.22E+00	3.06E+00	2.76E+00	1.91E+00	6.72E-01	1.73E-02	3.72E-07	8.94E-18
0.425	3.22E+00	3.06E+00	2.76E+00	1.91E+00	6.73E-01	1.74E-02	4.12E-07	1.04E-17
0.450	3.22E+00	3.06E+00	2.76E+00	1.91E+00	6.74E-01	1.75E-02	4.36E-07	1.18E-17
0.475	3.22E+00	3.06E+00	2.76E+00	1.92E+00	6.75E-01	1.75E-02	4.53E-07	1.38E-17
0.500	3.22E+00	3.06E+00	2.76E+00	1.92E+00	6.76E-01	1.76E-02	4.68E-07	1.63E-17
0.525	3.22E+00	3.06E+00	2.76E+00	1.92E+00	6.76E-01	1.76E-02	4.80E-07	2.02E-17
0.550	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.76E-01	1.77E-02	4.93E-07	2.53E-17
0.575	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.77E-01	1.77E-02	5.04E-07	3.36E-17
0.600	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.77E-01	1.77E-02	5.10E-07	4.65E-17
0.625	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.77E-01	1.77E-02	5.19E-07	7.41E-17
0.650	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.77E-01	1.77E-02	5.25E-07	1.48E-16
0.675	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.77E-01	1.77E-02	5.29E-07	3.04E-16
0.700	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.77E-01	1.78E-02	5.32E-07	4.59E-16
0.725	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.77E-01	1.78E-02	5.34E-07	6.63E-16
0.750	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.78E-01	1.78E-02	5.36E-07	8.07E-16
0.775	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.78E-01	1.78E-02	5.37E-07	9.34E-16
0.800	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.78E-01	1.78E-02	5.38E-07	1.06E-15
0.825	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.78E-01	1.78E-02	5.39E-07	1.14E-15
0.850	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.78E-01	1.78E-02	5.40E-07	1.22E-15
0.875	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.78E-01	1.78E-02	5.41E-07	1.31E-15
0.900	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.78E-01	1.78E-02	5.41E-07	1.43E-15
0.925	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.78E-01	1.78E-02	5.41E-07	1.68E-15
0.950	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.78E-01	1.78E-02	5.41E-07	1.96E-15
0.975	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.78E-01	1.78E-02	5.42E-07	2.24E-15
1.000	3.23E+00	3.06E+00	2.76E+00	1.92E+00	6.78E-01	1.78E-02	5.42E-07	2.88E-15

Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL UNCERTAINTY ANALYSIS\FCS SOIL UNCERTAINTY ANALYSIS EU-152.RAD

Summary of dose at graphical times, reptition 1								
Time	Dose statistics at graphical times, mrem/yr							
Years	Minimum	Maximum	Mean	Median	90%	95%	97.5%	99%
0.00E+00	2.49E+00	3.23E+00	3.22E+00	3.22E+00	3.23E+00	3.23E+00	3.23E+00	3.23E+00
1.00E+00	1.38E+00	3.06E+00	3.04E+00	3.06E+00	3.06E+00	3.06E+00	3.06E+00	3.06E+00
1.06E+00	1.33E+00	3.05E+00	3.03E+00	3.05E+00	3.05E+00	3.05E+00	3.05E+00	3.05E+00
1.12E+00	1.28E+00	3.04E+00	3.02E+00	3.04E+00	3.04E+00	3.04E+00	3.04E+00	3.04E+00
1.19E+00	1.23E+00	3.03E+00	3.00E+00	3.03E+00	3.03E+00	3.03E+00	3.03E+00	3.03E+00
1.25E+00	1.18E+00	3.02E+00	2.99E+00	3.02E+00	3.02E+00	3.02E+00	3.02E+00	3.02E+00
1.33E+00	1.13E+00	3.01E+00	2.98E+00	3.01E+00	3.01E+00	3.01E+00	3.01E+00	3.01E+00
1.40E+00	1.08E+00	3.00E+00	2.97E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00
1.49E+00	1.03E+00	2.99E+00	2.95E+00	2.98E+00	2.99E+00	2.99E+00	2.99E+00	2.99E+00
1.57E+00	9.78E-01	2.97E+00	2.94E+00	2.97E+00	2.97E+00	2.97E+00	2.97E+00	2.97E+00
1.66E+00	9.26E-01	2.96E+00	2.92E+00	2.96E+00	2.96E+00	2.96E+00	2.96E+00	2.96E+00
1.76E+00	8.74E-01	2.94E+00	2.91E+00	2.94E+00	2.94E+00	2.94E+00	2.94E+00	2.94E+00
1.86E+00	8.22E-01	2.93E+00	2.89E+00	2.93E+00	2.93E+00	2.93E+00	2.93E+00	2.93E+00
1.97E+00	7.71E-01	2.91E+00	2.87E+00	2.91E+00	2.91E+00	2.91E+00	2.91E+00	2.91E+00
2.09E+00	7.20E-01	2.90E+00	2.85E+00	2.89E+00	2.89E+00	2.90E+00	2.90E+00	2.90E+00
2.21E+00	6.69E-01	2.88E+00	2.84E+00	2.87E+00	2.88E+00	2.88E+00	2.88E+00	2.88E+00
2.34E+00	6.20E-01	2.86E+00	2.81E+00	2.86E+00	2.86E+00	2.86E+00	2.86E+00	2.86E+00
2.47E+00	5.72E-01	2.84E+00	2.79E+00	2.84E+00	2.84E+00	2.84E+00	2.84E+00	2.84E+00
2.62E+00	5.25E-01	2.82E+00	2.77E+00	2.81E+00	2.82E+00	2.82E+00	2.82E+00	2.82E+00
2.77E+00	4.79E-01	2.79E+00	2.75E+00	2.79E+00	2.79E+00	2.79E+00	2.79E+00	2.79E+00
2.93E+00	4.35E-01	2.77E+00	2.72E+00	2.77E+00	2.77E+00	2.77E+00	2.77E+00	2.77E+00
3.00E+00	4.18E-01	2.76E+00	2.71E+00	2.76E+00	2.76E+00	2.76E+00	2.76E+00	2.76E+00
3.310E+00	3.93E-01	2.75E+00	2.70E+00	2.74E+00	2.75E+00	2.75E+00	2.75E+00	2.75E+00
3.328E+00	3.53E-01	2.72E+00	2.67E+00	2.72E+00	2.72E+00	2.72E+00	2.72E+00	2.72E+00
3.48E+00	3.15E-01	2.69E+00	2.64E+00	2.69E+00	2.69E+00	2.69E+00	2.69E+00	2.69E+00
3.68E+00	2.79E-01	2.67E+00	2.61E+00	2.66E+00	2.67E+00	2.67E+00	2.67E+00	2.67E+00
3.89E+00	2.46E-01	2.64E+00	2.58E+00	2.63E+00	2.64E+00	2.64E+00	2.64E+00	2.64E+00
4.12E+00	2.15E-01	2.61E+00	2.55E+00	2.60E+00	2.60E+00	2.61E+00	2.61E+00	2.61E+00
4.36E+00	1.86E-01	2.57E+00	2.51E+00	2.57E+00	2.57E+00	2.57E+00	2.57E+00	2.57E+00
4.61E+00	1.60E-01	2.54E+00	2.48E+00	2.54E+00	2.54E+00	2.54E+00	2.54E+00	2.54E+00
4.88E+00	1.36E-01	2.50E+00	2.44E+00	2.50E+00	2.50E+00	2.50E+00	2.50E+00	2.50E+00
5.17E+00	1.15E-01	2.47E+00	2.40E+00	2.46E+00	2.47E+00	2.47E+00	2.47E+00	2.47E+00
5.47E+00	9.63E-02	2.43E+00	2.36E+00	2.43E+00	2.43E+00	2.43E+00	2.43E+00	2.43E+00
5.78E+00	4.10E-05	2.39E+00	2.31E+00	2.39E+00	2.39E+00	2.39E+00	2.39E+00	2.39E+00
6.12E+00	4.02E-05	2.35E+00	2.27E+00	2.34E+00	2.35E+00	2.35E+00	2.35E+00	2.35E+00
6.48E+00	0.00E+00	2.30E+00	2.22E+00	2.30E+00	2.30E+00	2.30E+00	2.30E+00	2.30E+00
6.86E+00	0.00E+00	2.26E+00	2.18E+00	2.26E+00	2.26E+00	2.26E+00	2.26E+00	2.26E+00
7.26E+00	0.00E+00	2.21E+00	2.13E+00	2.21E+00	2.21E+00	2.21E+00	2.21E+00	2.21E+00
7.68E+00	0.00E+00	2.17E+00	2.08E+00	2.16E+00	2.16E+00	2.16E+00	2.16E+00	2.17E+00
8.13E+00	0.00E+00	2.12E+00	2.02E+00	2.11E+00	2.11E+00	2.12E+00	2.12E+00	2.12E+00
8.60E+00	0.00E+00	2.06E+00	1.97E+00	2.06E+00	2.06E+00	2.06E+00	2.06E+00	2.06E+00
9.10E+00	0.00E+00	2.01E+00	1.92E+00	2.01E+00	2.01E+00	2.01E+00	2.01E+00	2.01E+00
9.63E+00	0.00E+00	1.96E+00	1.86E+00	1.95E+00	1.96E+00	1.96E+00	1.96E+00	1.96E+00
1.00E+01	0.00E+00	1.92E+00	1.82E+00	1.92E+00	1.92E+00	1.92E+00	1.92E+00	1.92E+00
1.02E+01	0.00E+00	1.90E+00	1.80E+00	1.90E+00	1.90E+00	1.90E+00	1.90E+00	1.90E+00
1.08E+01	0.00E+00	1.84E+00	1.74E+00	1.84E+00	1.84E+00	1.84E+00	1.84E+00	1.84E+00
1.14E+01	0.00E+00	1.78E+00	1.68E+00	1.78E+00	1.78E+00	1.78E+00	1.78E+00	1.78E+00
1.21E+01	0.00E+00	1.72E+00	1.62E+00	1.72E+00	1.72E+00	1.72E+00	1.72E+00	1.72E+00
1.28E+01	0.00E+00	1.66E+00	1.56E+00	1.66E+00	1.66E+00	1.66E+00	1.66E+00	1.66E+00
1.35E+01	0.00E+00	1.60E+00	1.50E+00	1.59E+00	1.60E+00	1.60E+00	1.60E+00	1.60E+00
1.43E+01	0.00E+00	1.53E+00	1.44E+00	1.53E+00	1.53E+00	1.53E+00	1.53E+00	1.53E+00
1.51E+01	0.00E+00	1.47E+00	1.37E+00	1.47E+00	1.47E+00	1.47E+00	1.47E+00	1.47E+00
1.60E+01	0.00E+00	1.40E+00	1.31E+00	1.40E+00	1.40E+00	1.40E+00	1.40E+00	1.40E+00
1.70E+01	0.00E+00	1.34E+00	1.24E+00	1.33E+00	1.34E+00	1.34E+00	1.34E+00	1.34E+00
1.80E+01	0.00E+00	1.27E+00	1.18E+00	1.27E+00	1.27E+00	1.27E+00	1.27E+00	1.27E+00
1.90E+01	0.00E+00	1.20E+00	1.11E+00	1.20E+00	1.20E+00	1.20E+00	1.20E+00	1.20E+00

2.01E+01 0.00E+00 1.13E+00 1.05E+00 1.13E+00 1.13E+00 1.13E+00 1.13E+00 1.13E+00

2.13E+01 0.00E+00 1.07E+00 9.81E-01 1.06E+00 1.07E+00 1.07E+00 1.07E+00 1.07E+00

2.25E+01	0.00E+00	1.00E+00	9.18E-01	9.98E-01	1.00E+00	1.00E+00	1.00E+00	1.00E+00
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.38E+01    0.00E+00    9.35E-01    8.54E-01    9.32E-01    9.34E-01    9.35E-01    9.35E-01    9.35E-01

2.52E+01 0.00E+00 8.70E-01 7.93E-01 8.67E-01 8.69E-01 8.70E-01 8.70E-01 8.70E-01



2.67E+01 0.00E+00 8.06E-01 7.33E-01 8.03E-01 8.05E-01 8.06E-01 8.06E-01 8.06E-01

2.82E+01 0.00E+00 7.43E-01 6.74E-01 7.41E-01 7.43E-01 7.43E-01 7.43E-01 7.43E-01

2.99E+01 0.00E+00 6.82E-01 6.17E-01 6.80E-01 6.82E-01 6.82E-01 6.82E-01 6.82E-01

3.00E+01	0.00E+00	6.78E-01	6.13E-01	6.76E-01	6.78E-01	6.78E-01	6.78E-01	6.78E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------

3.16E+01 0.00E+00 6.23E-01 5.62E-01 6.21E-01 6.23E-01 6.23E-01 6.23E-01 6.23E-01

3.35E+01 0.00E+00 5.66E-01 5.08E-01 5.64E-01 5.66E-01 5.66E-01 5.66E-01 5.66E-01 5.66E-01

3.54E+01	0.00E+00	5.12E-01	4.58E-01	5.09E-01	5.12E-01	5.12E-01	5.12E-01	5.12E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------

3.75E+01 0.00E+00 4.60E-01 4.10E-01 4.58E-01 4.59E-01 4.60E-01 4.60E-01 4.60E-01



3.97E+01 0.00E+00 4.10E-01 3.65E-01 4.08E-01 4.10E-01 4.10E-01 4.10E-01 4.10E-01

4.20E+01	0.00E+00	3.64E-01	3.22E-01	3.62E-01	3.64E-01	3.64E-01	3.64E-01	3.64E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------

4.44E+01	0.00E+00	3.20E-01	2.83E-01	3.19E-01	3.20E-01	3.20E-01	3.20E-01	3.20E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------

4.70E+01 0.00E+00 2.80E-01 2.46E-01 2.78E-01 2.80E-01 2.80E-01 2.80E-01 2.80E-01

4.97E+01 0.00E+00 2.43E-01 2.13E-01 2.41E-01 2.43E-01 2.43E-01 2.43E-01 2.43E-01

5.26E+01	0.00E+00	2.09E-01	1.82E-01	2.08E-01	2.09E-01	2.09E-01	2.09E-01	2.09E-01	2.09E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

5.57E+01 0.00E+00 1.78E-01 1.55E-01 1.77E-01 1.78E-01 1.78E-01 1.78E-01 1.78E-01 1.78E-01

5.90E+01 0.00E+00 1.51E-01 1.30E-01 1.49E-01 1.50E-01 1.50E-01 1.50E-01 1.50E-01



6.24E+01	0.00E+00	1.26E-01	1.09E-01	1.25E-01	1.26E-01	1.26E-01	1.26E-01	1.26E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------

6.60E+01	0.00E+00	1.04E-01	8.96E-02	1.03E-01	1.04E-01	1.04E-01	1.04E-01	1.04E-01	1.04E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

6.99E+01 0.00E+00 8.53E-02 7.31E-02 8.46E-02 8.53E-02 8.53E-02 8.53E-02 8.53E-02

7.39E+01 0.00E+00 6.91E-02 5.89E-02 6.84E-02 6.90E-02 6.90E-02 6.90E-02 6.90E-02

7.82E+01 0.00E+00 5.52E-02 4.69E-02 5.47E-02 5.52E-02 5.52E-02 5.52E-02 5.52E-02

8.28E+01	0.00E+00	4.35E-02	3.68E-02	4.31E-02	4.35E-02	4.35E-02	4.35E-02	4.35E-02	4.35E-02
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

8.76E+01	0.00E+00	3.39E-02	2.85E-02	3.35E-02	3.39E-02	3.39E-02	3.39E-02	3.39E-02	3.39E-02
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

9.27E+01 0.00E+00 2.60E-02 2.18E-02 2.57E-02 2.60E-02 2.60E-02 2.60E-02 2.60E-02



9.81E+01 0.00E+00 1.96E-02 1.64E-02 1.94E-02 1.96E-02 1.96E-02 1.96E-02 1.96E-02

1.00E+02 0.00E+00 1.78E-02 1.48E-02 1.76E-02 1.78E-02 1.78E-02 1.78E-02 1.78E-02

1.04E+02 0.00E+00 1.46E-02 1.21E-02 1.44E-02 1.46E-02 1.46E-02 1.46E-02 1.46E-02

1.10E+02 0.00E+00 1.06E-02 8.81E-03 1.05E-02 1.06E-02 1.06E-02 1.06E-02 1.06E-02

1.16E+02 0.00E+00 7.63E-03 6.28E-03 7.51E-03 7.62E-03 7.62E-03 7.63E-03 7.63E-03

1.23E+02 0.00E+00 5.36E-03 4.40E-03 5.28E-03 5.36E-03 5.36E-03 5.36E-03 5.36E-03

1.30E+02 0.00E+00 3.69E-03 3.01E-03 3.63E-03 3.69E-03 3.69E-03 3.69E-03 3.69E-03

1.38E+02    0.00E+00    2.49E-03    2.02E-03    2.44E-03    2.49E-03    2.49E-03    2.49E-03    2.49E-03



1.46E+02 0.00E+00 1.64E-03 1.32E-03 1.61E-03 1.64E-03 1.64E-03 1.64E-03 1.64E-03

1.54E+02    0.00E+00    1.05E-03    8.46E-04    1.03E-03    1.05E-03    1.05E-03    1.05E-03    1.05E-03

1.63E+02 0.00E+00 6.61E-04 5.26E-04 6.42E-04 6.60E-04 6.60E-04 6.60E-04 6.61E-04

1.73E+02	0.00E+00	4.03E-04	3.18E-04	3.90E-04	4.02E-04	4.02E-04	4.03E-04	4.03E-04
----------	----------	----------	----------	----------	----------	----------	----------	----------

1.83E+02	0.00E+00	2.39E-04	1.87E-04	2.30E-04	2.38E-04	2.38E-04	2.38E-04	2.39E-04
----------	----------	----------	----------	----------	----------	----------	----------	----------

1.94E+02	0.00E+00	1.37E-04	1.06E-04	1.31E-04	1.37E-04	1.37E-04	1.37E-04	1.37E-04
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.05E+02	0.00E+00	7.63E-05	5.73E-05	7.27E-05	7.62E-05	7.62E-05	7.62E-05	7.62E-05
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.17E+02 0.00E+00 4.10E-05 2.99E-05 3.87E-05 4.09E-05 4.10E-05 4.10E-05 4.10E-05



2.29E+02 0.00E+00 2.13E-05 1.51E-05 1.99E-05 2.12E-05 2.12E-05 2.12E-05 2.13E-05

2.43E+02	0.00E+00	1.06E-05	7.30E-06	9.78E-06	1.06E-05	1.06E-05	1.06E-05	1.06E-05
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.57E+02	0.00E+00	5.09E-06	3.40E-06	4.62E-06	5.08E-06	5.08E-06	5.08E-06	5.08E-06
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.72E+02    0.00E+00    2.34E-06    1.51E-06    2.08E-06    2.33E-06    2.33E-06    2.33E-06    2.33E-06

2.88E+02 0.00E+00 1.02E-06 6.40E-07 8.98E-07 1.02E-06 1.02E-06 1.02E-06 1.02E-06

3.00E+02 0.00E+00 5.42E-07 3.30E-07 4.65E-07 5.41E-07 5.41E-07 5.42E-07 5.42E-07

3.05E+02    0.00E+00    4.29E-07    2.58E-07    3.66E-07    4.28E-07    4.28E-07    4.28E-07    4.28E-07

3.22E+02 0.00E+00 1.70E-07 9.91E-08 1.40E-07 1.70E-07 1.70E-07 1.70E-07 1.70E-07



3.41E+02 0.00E+00 6.42E-08 3.60E-08 5.07E-08 6.41E-08 6.41E-08 6.41E-08 6.42E-08

3.61E+02 0.00E+00 2.28E-08 1.23E-08 1.71E-08 2.28E-08 2.28E-08 2.28E-08 2.28E-08

3.82E+02 0.00E+00 7.66E-09 3.98E-09 5.40E-09 7.64E-09 7.65E-09 7.65E-09 7.65E-09

4.04E+02 0.00E+00 2.41E-09 1.21E-09 1.57E-09 2.40E-09 2.40E-09 2.41E-09 2.41E-09

4.28E+02 0.00E+00 7.08E-10 3.43E-10 3.87E-10 7.06E-10 7.07E-10 7.07E-10 7.07E-10

4.53E+02 0.00E+00 1.94E-10 9.04E-11 8.48E-11 1.93E-10 1.93E-10 1.94E-10 1.94E-10

4.79E+02	0.00E+00	4.92E-11	2.21E-11	1.55E-11	4.90E-11	4.91E-11	4.91E-11	4.91E-11
----------	----------	----------	----------	----------	----------	----------	----------	----------

5.07E+02	0.00E+00	1.15E-11	4.96E-12	2.14E-12	1.15E-11	1.15E-11	1.15E-11	1.15E-11
----------	----------	----------	----------	----------	----------	----------	----------	----------



5.36E+02	0.00E+00	2.48E-12	1.02E-12	2.18E-13	2.47E-12	2.48E-12	2.48E-12	2.48E-12
----------	----------	----------	----------	----------	----------	----------	----------	----------

5.68E+02	0.00E+00	4.91E-13	1.95E-13	1.20E-14	4.88E-13	4.89E-13	4.90E-13	4.91E-13
----------	----------	----------	----------	----------	----------	----------	----------	----------

6.01E+02	0.00E+00	9.01E-14	3.41E-14	1.21E-15	8.84E-14	8.89E-14	8.94E-14	8.98E-14
----------	----------	----------	----------	----------	----------	----------	----------	----------

6.36E+02	0.00E+00	1.68E-14	5.80E-15	6.61E-16	1.54E-14	1.60E-14	1.63E-14	1.66E-14
----------	----------	----------	----------	----------	----------	----------	----------	----------

6.73E+02	0.00E+00	4.68E-15	1.32E-15	2.18E-16	3.54E-15	3.99E-15	4.34E-15	4.56E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

7.12E+02    0.00E+00    2.88E-15    6.62E-16    6.89E-17    1.92E-15    2.32E-15    2.61E-15    2.76E-15

7.53E+02    0.00E+00    2.64E-15    5.57E-16    4.13E-17    1.73E-15    2.14E-15    2.34E-15    2.51E-15

7.97E+02	0.00E+00	2.60E-15	5.22E-16	3.24E-17	1.68E-15	2.10E-15	2.29E-15	2.48E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------



8.44E+02	0.00E+00	2.60E-15	4.97E-16	2.59E-17	1.63E-15	2.05E-15	2.27E-15	2.47E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

8.93E+02	0.00E+00	2.59E-15	4.72E-16	2.33E-17	1.56E-15	2.04E-15	2.26E-15	2.46E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

9.45E+02    0.00E+00    2.59E-15    4.49E-16    2.00E-17    1.50E-15    2.01E-15    2.25E-15    2.45E-15

1.00E+03    0.00E+00    2.58E-15    4.27E-16    1.66E-17    1.50E-15    1.96E-15    2.24E-15    2.44E-15

-----



Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL UNCERTAINTY ANALYSIS\FCS SOIL UNCERTAINTY ANALYSIS EU-152.RAD

Summary of dose at graphical times, reptition 2								
Time	Dose statistics at graphical times, mrem/yr							
Years	Minimum	Maximum	Mean	Median	90%	95%	97.5%	99%
0.00E+00	2.15E+00	3.23E+00	3.21E+00	3.22E+00	3.23E+00	3.23E+00	3.23E+00	3.23E+00
1.00E+00	8.42E-01	3.06E+00	3.03E+00	3.06E+00	3.06E+00	3.06E+00	3.06E+00	3.06E+00
1.06E+00	7.98E-01	3.05E+00	3.02E+00	3.05E+00	3.05E+00	3.05E+00	3.05E+00	3.05E+00
1.12E+00	7.53E-01	3.04E+00	3.01E+00	3.04E+00	3.04E+00	3.04E+00	3.04E+00	3.04E+00
1.19E+00	7.08E-01	3.03E+00	3.00E+00	3.03E+00	3.03E+00	3.03E+00	3.03E+00	3.03E+00
1.25E+00	6.64E-01	3.02E+00	2.99E+00	3.02E+00	3.02E+00	3.02E+00	3.02E+00	3.02E+00
1.33E+00	6.20E-01	3.01E+00	2.98E+00	3.01E+00	3.01E+00	3.01E+00	3.01E+00	3.01E+00
1.40E+00	5.77E-01	3.00E+00	2.96E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00
1.49E+00	5.34E-01	2.99E+00	2.95E+00	2.98E+00	2.99E+00	2.99E+00	2.99E+00	2.99E+00
1.57E+00	4.92E-01	2.97E+00	2.93E+00	2.97E+00	2.97E+00	2.97E+00	2.97E+00	2.97E+00
1.66E+00	4.52E-01	2.96E+00	2.92E+00	2.96E+00	2.96E+00	2.96E+00	2.96E+00	2.96E+00
1.76E+00	4.13E-01	2.94E+00	2.90E+00	2.94E+00	2.94E+00	2.94E+00	2.94E+00	2.94E+00
1.86E+00	3.75E-01	2.93E+00	2.89E+00	2.93E+00	2.93E+00	2.93E+00	2.93E+00	2.93E+00
1.97E+00	3.39E-01	2.91E+00	2.87E+00	2.91E+00	2.91E+00	2.91E+00	2.91E+00	2.91E+00
2.09E+00	3.04E-01	2.90E+00	2.85E+00	2.89E+00	2.89E+00	2.90E+00	2.90E+00	2.90E+00
2.21E+00	2.71E-01	2.88E+00	2.83E+00	2.87E+00	2.88E+00	2.88E+00	2.88E+00	2.88E+00
2.34E+00	2.40E-01	2.86E+00	2.81E+00	2.86E+00	2.86E+00	2.86E+00	2.86E+00	2.86E+00
2.47E+00	2.12E-01	2.84E+00	2.79E+00	2.84E+00	2.84E+00	2.84E+00	2.84E+00	2.84E+00
2.62E+00	1.85E-01	2.82E+00	2.77E+00	2.81E+00	2.82E+00	2.82E+00	2.82E+00	2.82E+00
2.77E+00	1.60E-01	2.79E+00	2.74E+00	2.79E+00	2.79E+00	2.79E+00	2.79E+00	2.79E+00
2.93E+00	1.38E-01	2.77E+00	2.72E+00	2.77E+00	2.77E+00	2.77E+00	2.77E+00	2.77E+00
3.00E+00	1.29E-01	2.76E+00	2.71E+00	2.76E+00	2.76E+00	2.76E+00	2.76E+00	2.76E+00
3.10E+00	1.17E-01	2.75E+00	2.69E+00	2.74E+00	2.75E+00	2.75E+00	2.75E+00	2.75E+00
3.28E+00	9.91E-02	2.72E+00	2.66E+00	2.72E+00	2.72E+00	2.72E+00	2.72E+00	2.72E+00
3.48E+00	8.28E-02	2.69E+00	2.64E+00	2.69E+00	2.69E+00	2.69E+00	2.69E+00	2.69E+00
3.68E+00	6.85E-02	2.67E+00	2.61E+00	2.66E+00	2.66E+00	2.67E+00	2.67E+00	2.67E+00
3.89E+00	5.61E-02	2.64E+00	2.58E+00	2.63E+00	2.64E+00	2.64E+00	2.64E+00	2.64E+00
4.12E+00	4.53E-02	2.61E+00	2.54E+00	2.60E+00	2.60E+00	2.61E+00	2.61E+00	2.61E+00
4.36E+00	3.62E-02	2.57E+00	2.51E+00	2.57E+00	2.57E+00	2.57E+00	2.57E+00	2.57E+00
4.61E+00	2.85E-02	2.54E+00	2.47E+00	2.54E+00	2.54E+00	2.54E+00	2.54E+00	2.54E+00
4.88E+00	2.22E-02	2.50E+00	2.43E+00	2.50E+00	2.50E+00	2.50E+00	2.50E+00	2.50E+00
5.17E+00	1.70E-02	2.47E+00	2.39E+00	2.46E+00	2.47E+00	2.47E+00	2.47E+00	2.47E+00
5.47E+00	5.60E-03	2.43E+00	2.35E+00	2.43E+00	2.43E+00	2.43E+00	2.43E+00	2.43E+00
5.78E+00	0.00E+00	2.39E+00	2.31E+00	2.39E+00	2.39E+00	2.39E+00	2.39E+00	2.39E+00
6.12E+00	0.00E+00	2.35E+00	2.27E+00	2.34E+00	2.35E+00	2.35E+00	2.35E+00	2.35E+00
6.48E+00	0.00E+00	2.30E+00	2.22E+00	2.30E+00	2.30E+00	2.30E+00	2.30E+00	2.30E+00
6.86E+00	0.00E+00	2.26E+00	2.17E+00	2.26E+00	2.26E+00	2.26E+00	2.26E+00	2.26E+00
7.26E+00	0.00E+00	2.21E+00	2.12E+00	2.21E+00	2.21E+00	2.21E+00	2.21E+00	2.21E+00
7.68E+00	0.00E+00	2.17E+00	2.07E+00	2.16E+00	2.16E+00	2.16E+00	2.16E+00	2.17E+00
8.13E+00	0.00E+00	2.12E+00	2.02E+00	2.11E+00	2.11E+00	2.12E+00	2.12E+00	2.12E+00
8.60E+00	0.00E+00	2.06E+00	1.97E+00	2.06E+00	2.06E+00	2.06E+00	2.06E+00	2.06E+00
9.10E+00	0.00E+00	2.01E+00	1.92E+00	2.01E+00	2.01E+00	2.01E+00	2.01E+00	2.01E+00
9.63E+00	0.00E+00	1.96E+00	1.86E+00	1.95E+00	1.96E+00	1.96E+00	1.96E+00	1.96E+00
1.00E+01	0.00E+00	1.92E+00	1.82E+00	1.92E+00	1.92E+00	1.92E+00	1.92E+00	1.92E+00
1.02E+01	0.00E+00	1.90E+00	1.80E+00	1.90E+00	1.90E+00	1.90E+00	1.90E+00	1.90E+00
1.08E+01	0.00E+00	1.84E+00	1.74E+00	1.84E+00	1.84E+00	1.84E+00	1.84E+00	1.84E+00
1.14E+01	0.00E+00	1.78E+00	1.69E+00	1.78E+00	1.78E+00	1.78E+00	1.78E+00	1.78E+00
1.21E+01	0.00E+00	1.72E+00	1.63E+00	1.72E+00	1.72E+00	1.72E+00	1.72E+00	1.72E+00
1.28E+01	0.00E+00	1.66E+00	1.56E+00	1.66E+00	1.66E+00	1.66E+00	1.66E+00	1.66E+00
1.35E+01	0.00E+00	1.60E+00	1.50E+00	1.59E+00	1.60E+00	1.60E+00	1.60E+00	1.60E+00
1.43E+01	0.00E+00	1.53E+00	1.44E+00	1.53E+00	1.53E+00	1.53E+00	1.53E+00	1.53E+00
1.51E+01	0.00E+00	1.47E+00	1.37E+00	1.47E+00	1.47E+00	1.47E+00	1.47E+00	1.47E+00
1.60E+01	0.00E+00	1.40E+00	1.31E+00	1.40E+00	1.40E+00	1.40E+00	1.40E+00	1.40E+00
1.70E+01	0.00E+00	1.34E+00	1.24E+00	1.33E+00	1.34E+00	1.34E+00	1.34E+00	1.34E+00
1.80E+01	0.00E+00	1.27E+00	1.18E+00	1.27E+00	1.27E+00	1.27E+00	1.27E+00	1.27E+00
1.90E+01	0.00E+00	1.20E+00	1.11E+00	1.20E+00	1.20E+00	1.20E+00	1.20E+00	1.20E+00

2.01E+01 0.00E+00 1.13E+00 1.05E+00 1.13E+00 1.13E+00 1.13E+00 1.13E+00 1.13E+00



2.13E+01 0.00E+00 1.07E+00 9.83E-01 1.06E+00 1.07E+00 1.07E+00 1.07E+00 1.07E+00

2.25E+01	0.00E+00	1.00E+00	9.19E-01	9.98E-01	1.00E+00	1.00E+00	1.00E+00	1.00E+00
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.38E+01	0.00E+00	9.35E-01	8.56E-01	9.32E-01	9.34E-01	9.35E-01	9.35E-01	9.35E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.52E+01 0.00E+00 8.70E-01 7.94E-01 8.67E-01 8.69E-01 8.70E-01 8.70E-01 8.70E-01

2.67E+01 0.00E+00 8.06E-01 7.34E-01 8.03E-01 8.05E-01 8.06E-01 8.06E-01 8.06E-01

2.82E+01 0.00E+00 7.43E-01 6.75E-01 7.41E-01 7.43E-01 7.43E-01 7.43E-01 7.43E-01

2.99E+01 0.00E+00 6.82E-01 6.18E-01 6.80E-01 6.82E-01 6.82E-01 6.82E-01 6.82E-01

3.00E+01 0.00E+00 6.78E-01 6.14E-01 6.76E-01 6.78E-01 6.78E-01 6.78E-01 6.78E-01



3.16E+01 0.00E+00 6.23E-01 5.63E-01 6.21E-01 6.23E-01 6.23E-01 6.23E-01 6.23E-01

3.35E+01 0.00E+00 5.66E-01 5.10E-01 5.64E-01 5.66E-01 5.66E-01 5.66E-01 5.66E-01

3.54E+01	0.00E+00	5.12E-01	4.60E-01	5.10E-01	5.11E-01	5.12E-01	5.12E-01	5.12E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------

3.75E+01 0.00E+00 4.60E-01 4.11E-01 4.58E-01 4.59E-01 4.60E-01 4.60E-01 4.60E-01

3.97E+01	0.00E+00	4.10E-01	3.66E-01	4.08E-01	4.10E-01	4.10E-01	4.10E-01	4.10E-01	4.10E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

4.20E+01 0.00E+00 3.64E-01 3.23E-01 3.62E-01 3.64E-01 3.64E-01 3.64E-01 3.64E-01

4.44E+01	0.00E+00	3.20E-01	2.84E-01	3.19E-01	3.20E-01	3.20E-01	3.20E-01	3.20E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------

4.70E+01 0.00E+00 2.80E-01 2.48E-01 2.79E-01 2.80E-01 2.80E-01 2.80E-01 2.80E-01



4.97E+01	0.00E+00	2.43E-01	2.14E-01	2.42E-01	2.43E-01	2.43E-01	2.43E-01	2.43E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------

5.26E+01	0.00E+00	2.09E-01	1.83E-01	2.08E-01	2.09E-01	2.09E-01	2.09E-01	2.09E-01	2.09E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

5.57E+01 0.00E+00 1.78E-01 1.56E-01 1.77E-01 1.78E-01 1.78E-01 1.78E-01 1.78E-01

5.90E+01 0.00E+00 1.51E-01 1.31E-01 1.49E-01 1.50E-01 1.50E-01 1.50E-01 1.51E-01

6.24E+01	0.00E+00	1.26E-01	1.09E-01	1.25E-01	1.26E-01	1.26E-01	1.26E-01	1.26E-01	1.26E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

6.60E+01 0.00E+00 1.04E-01 9.00E-02 1.03E-01 1.04E-01 1.04E-01 1.04E-01 1.04E-01

6.99E+01 0.00E+00 8.53E-02 7.34E-02 8.46E-02 8.53E-02 8.53E-02 8.53E-02 8.53E-02

7.39E+01 0.00E+00 6.91E-02 5.92E-02 6.85E-02 6.90E-02 6.90E-02 6.90E-02 6.90E-02



7.82E+01	0.00E+00	5.52E-02	4.71E-02	5.47E-02	5.52E-02	5.52E-02	5.52E-02	5.52E-02
----------	----------	----------	----------	----------	----------	----------	----------	----------

8.28E+01	0.00E+00	4.35E-02	3.70E-02	4.31E-02	4.35E-02	4.35E-02	4.35E-02	4.35E-02	4.35E-02
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

8.76E+01	0.00E+00	3.39E-02	2.87E-02	3.36E-02	3.39E-02	3.39E-02	3.39E-02	3.39E-02	3.39E-02
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

9.27E+01 0.00E+00 2.60E-02 2.19E-02 2.57E-02 2.60E-02 2.60E-02 2.60E-02 2.60E-02

9.81E+01 0.00E+00 1.96E-02 1.65E-02 1.94E-02 1.96E-02 1.96E-02 1.96E-02 1.96E-02

1.00E+02 0.00E+00 1.78E-02 1.49E-02 1.76E-02 1.78E-02 1.78E-02 1.78E-02 1.78E-02

1.04E+02 0.00E+00 1.46E-02 1.22E-02 1.44E-02 1.46E-02 1.46E-02 1.46E-02 1.46E-02

1.10E+02 0.00E+00 1.06E-02 8.85E-03 1.05E-02 1.06E-02 1.06E-02 1.06E-02 1.06E-02



1.16E+02    0.00E+00    7.63E-03    6.32E-03    7.53E-03    7.62E-03    7.62E-03    7.63E-03    7.63E-03

1.23E+02 0.00E+00 5.36E-03 4.42E-03 5.29E-03 5.36E-03 5.36E-03 5.36E-03 5.36E-03

1.30E+02    0.00E+00    3.69E-03    3.03E-03    3.64E-03    3.69E-03    3.69E-03    3.69E-03    3.69E-03

1.38E+02    0.00E+00    2.49E-03    2.03E-03    2.45E-03    2.49E-03    2.49E-03    2.49E-03    2.49E-03

1.46E+02 0.00E+00 1.64E-03 1.33E-03 1.61E-03 1.64E-03 1.64E-03 1.64E-03 1.64E-03

1.54E+02    0.00E+00    1.05E-03    8.50E-04    1.03E-03    1.05E-03    1.05E-03    1.05E-03    1.05E-03

1.63E+02 0.00E+00 6.61E-04 5.29E-04 6.43E-04 6.60E-04 6.60E-04 6.60E-04 6.61E-04

1.73E+02    0.00E+00    4.03E-04    3.20E-04    3.91E-04    4.02E-04    4.02E-04    4.03E-04    4.03E-04



1.83E+02    0.00E+00    2.39E-04    1.88E-04    2.31E-04    2.38E-04    2.38E-04    2.38E-04    2.39E-04

1.94E+02	0.00E+00	1.37E-04	1.06E-04	1.32E-04	1.37E-04	1.37E-04	1.37E-04	1.37E-04
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.05E+02	0.00E+00	7.63E-05	5.78E-05	7.29E-05	7.62E-05	7.62E-05	7.62E-05	7.63E-05
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.17E+02    0.00E+00    4.10E-05    3.03E-05    3.88E-05    4.09E-05    4.10E-05    4.10E-05    4.10E-05

2.29E+02	0.00E+00	2.13E-05	1.53E-05	2.00E-05	2.12E-05	2.12E-05	2.12E-05	2.13E-05
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.43E+02	0.00E+00	1.06E-05	7.43E-06	9.85E-06	1.06E-05	1.06E-05	1.06E-05	1.06E-05
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.57E+02	0.00E+00	5.09E-06	3.47E-06	4.64E-06	5.08E-06	5.08E-06	5.08E-06	5.08E-06
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.72E+02	0.00E+00	2.34E-06	1.54E-06	2.09E-06	2.33E-06	2.33E-06	2.33E-06	2.33E-06
----------	----------	----------	----------	----------	----------	----------	----------	----------



2.88E+02 0.00E+00 1.02E-06 6.57E-07 9.05E-07 1.02E-06 1.02E-06 1.02E-06 1.02E-06

3.00E+02 0.00E+00 5.42E-07 3.39E-07 4.70E-07 5.41E-07 5.41E-07 5.42E-07 5.42E-07

3.05E+02    0.00E+00    4.29E-07    2.66E-07    3.68E-07    4.28E-07    4.28E-07    4.28E-07    4.28E-07

3.22E+02 0.00E+00 1.70E-07 1.02E-07 1.42E-07 1.70E-07 1.70E-07 1.70E-07 1.70E-07

3.41E+02    0.00E+00    6.42E-08    3.74E-08    5.22E-08    6.40E-08    6.41E-08    6.41E-08    6.42E-08

3.61E+02 0.00E+00 2.28E-08 1.29E-08 1.80E-08 2.28E-08 2.28E-08 2.28E-08 2.28E-08

3.82E+02 0.00E+00 7.66E-09 4.16E-09 5.74E-09 7.63E-09 7.65E-09 7.65E-09 7.65E-09

4.04E+02 0.00E+00 2.41E-09 1.27E-09 1.73E-09 2.40E-09 2.40E-09 2.41E-09 2.41E-09



4.28E+02 0.00E+00 7.08E-10 3.59E-10 4.78E-10 7.05E-10 7.06E-10 7.07E-10 7.07E-10

4.53E+02 0.00E+00 1.94E-10 9.45E-11 1.17E-10 1.93E-10 1.93E-10 1.94E-10 1.94E-10

4.79E+02	0.00E+00	4.92E-11	2.30E-11	2.67E-11	4.90E-11	4.91E-11	4.91E-11	4.92E-11
----------	----------	----------	----------	----------	----------	----------	----------	----------

5.07E+02	0.00E+00	1.15E-11	5.15E-12	4.50E-12	1.15E-11	1.15E-11	1.15E-11	1.15E-11
----------	----------	----------	----------	----------	----------	----------	----------	----------

5.36E+02	0.00E+00	2.48E-12	1.06E-12	6.40E-13	2.47E-12	2.48E-12	2.48E-12	2.48E-12
----------	----------	----------	----------	----------	----------	----------	----------	----------

5.68E+02	0.00E+00	4.91E-13	2.00E-13	4.05E-14	4.86E-13	4.89E-13	4.90E-13	4.90E-13
----------	----------	----------	----------	----------	----------	----------	----------	----------

6.01E+02	0.00E+00	9.02E-14	3.48E-14	2.01E-15	8.80E-14	8.85E-14	8.93E-14	8.98E-14
----------	----------	----------	----------	----------	----------	----------	----------	----------

6.36E+02	0.00E+00	1.71E-14	5.88E-15	8.11E-16	1.53E-14	1.58E-14	1.63E-14	1.67E-14
----------	----------	----------	----------	----------	----------	----------	----------	----------



6.73E+02	0.00E+00	5.04E-15	1.33E-15	2.28E-16	3.47E-15	3.95E-15	4.49E-15	4.58E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

7.12E+02	0.00E+00	3.24E-15	6.68E-16	8.34E-17	1.85E-15	2.44E-15	2.70E-15	2.80E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

7.53E+02	0.00E+00	2.99E-15	5.61E-16	3.89E-17	1.59E-15	2.28E-15	2.47E-15	2.56E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

7.97E+02	0.00E+00	2.95E-15	5.24E-16	2.94E-17	1.54E-15	2.20E-15	2.42E-15	2.51E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

8.44E+02	0.00E+00	2.93E-15	4.98E-16	2.38E-17	1.52E-15	2.15E-15	2.39E-15	2.50E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

8.93E+02	0.00E+00	2.92E-15	4.73E-16	1.94E-17	1.50E-15	2.12E-15	2.38E-15	2.49E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

9.45E+02	0.00E+00	2.90E-15	4.52E-16	1.58E-17	1.47E-15	2.05E-15	2.37E-15	2.49E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

1.00E+03 0.00E+00 2.88E-15 4.29E-16 1.54E-17 1.43E-15 2.01E-15 2.36E-15 2.47E-15



-----



Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL UNCERTAINTY ANALYSIS\FCS SOIL UNCERTAINTY ANALYSIS EU-152.RAD

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	2.49E+00	3.23E+00	3.22E+00	3.22E+00	3.23E+00	3.23E+00	3.23E+00	3.23E+00
1.00E+00	1.37E+00	3.06E+00	3.04E+00	3.06E+00	3.06E+00	3.06E+00	3.06E+00	3.06E+00
1.06E+00	1.33E+00	3.05E+00	3.03E+00	3.05E+00	3.05E+00	3.05E+00	3.05E+00	3.05E+00
1.12E+00	1.28E+00	3.04E+00	3.02E+00	3.04E+00	3.04E+00	3.04E+00	3.04E+00	3.04E+00
1.19E+00	1.23E+00	3.03E+00	3.01E+00	3.03E+00	3.03E+00	3.03E+00	3.03E+00	3.03E+00
1.25E+00	1.18E+00	3.02E+00	3.00E+00	3.02E+00	3.02E+00	3.02E+00	3.02E+00	3.02E+00
1.33E+00	1.13E+00	3.01E+00	2.98E+00	3.01E+00	3.01E+00	3.01E+00	3.01E+00	3.01E+00
1.40E+00	1.08E+00	3.00E+00	2.97E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00	3.00E+00
1.49E+00	1.03E+00	2.99E+00	2.96E+00	2.98E+00	2.99E+00	2.99E+00	2.99E+00	2.99E+00
1.57E+00	9.76E-01	2.97E+00	2.94E+00	2.97E+00	2.97E+00	2.97E+00	2.97E+00	2.97E+00
1.66E+00	9.24E-01	2.96E+00	2.93E+00	2.96E+00	2.96E+00	2.96E+00	2.96E+00	2.96E+00
1.76E+00	8.72E-01	2.94E+00	2.91E+00	2.94E+00	2.94E+00	2.94E+00	2.94E+00	2.94E+00
1.86E+00	8.20E-01	2.93E+00	2.89E+00	2.93E+00	2.93E+00	2.93E+00	2.93E+00	2.93E+00
1.97E+00	7.69E-01	2.91E+00	2.88E+00	2.91E+00	2.91E+00	2.91E+00	2.91E+00	2.91E+00
2.09E+00	7.18E-01	2.90E+00	2.86E+00	2.89E+00	2.89E+00	2.90E+00	2.90E+00	2.90E+00
2.21E+00	6.68E-01	2.88E+00	2.84E+00	2.87E+00	2.88E+00	2.88E+00	2.88E+00	2.88E+00
2.34E+00	6.18E-01	2.86E+00	2.82E+00	2.86E+00	2.86E+00	2.86E+00	2.86E+00	2.86E+00
2.47E+00	5.70E-01	2.84E+00	2.80E+00	2.84E+00	2.84E+00	2.84E+00	2.84E+00	2.84E+00
2.62E+00	5.23E-01	2.82E+00	2.77E+00	2.81E+00	2.82E+00	2.82E+00	2.82E+00	2.82E+00
2.77E+00	4.78E-01	2.79E+00	2.75E+00	2.79E+00	2.79E+00	2.79E+00	2.79E+00	2.79E+00
2.93E+00	4.34E-01	2.77E+00	2.73E+00	2.77E+00	2.77E+00	2.77E+00	2.77E+00	2.77E+00
3.00E+00	4.17E-01	2.76E+00	2.72E+00	2.76E+00	2.76E+00	2.76E+00	2.76E+00	2.76E+00
3.310E+00	3.92E-01	2.75E+00	2.70E+00	2.74E+00	2.75E+00	2.75E+00	2.75E+00	2.75E+00
3.328E+00	3.52E-01	2.72E+00	2.67E+00	2.72E+00	2.72E+00	2.72E+00	2.72E+00	2.72E+00
3.48E+00	3.14E-01	2.69E+00	2.65E+00	2.69E+00	2.69E+00	2.69E+00	2.69E+00	2.69E+00
3.68E+00	2.78E-01	2.67E+00	2.62E+00	2.66E+00	2.66E+00	2.67E+00	2.67E+00	2.67E+00
3.89E+00	2.45E-01	2.64E+00	2.58E+00	2.63E+00	2.64E+00	2.64E+00	2.64E+00	2.64E+00
4.12E+00	2.14E-01	2.61E+00	2.55E+00	2.60E+00	2.60E+00	2.61E+00	2.61E+00	2.61E+00
4.36E+00	1.85E-01	2.57E+00	2.52E+00	2.57E+00	2.57E+00	2.57E+00	2.57E+00	2.57E+00
4.61E+00	1.59E-01	2.54E+00	2.48E+00	2.54E+00	2.54E+00	2.54E+00	2.54E+00	2.54E+00
4.88E+00	1.36E-01	2.50E+00	2.44E+00	2.50E+00	2.50E+00	2.50E+00	2.50E+00	2.50E+00
5.17E+00	1.15E-01	2.47E+00	2.40E+00	2.46E+00	2.47E+00	2.47E+00	2.47E+00	2.47E+00
5.47E+00	1.49E-07	2.43E+00	2.36E+00	2.43E+00	2.43E+00	2.43E+00	2.43E+00	2.43E+00
5.578E+00	0.00E+00	2.39E+00	2.32E+00	2.39E+00	2.39E+00	2.39E+00	2.39E+00	2.39E+00
6.12E+00	0.00E+00	2.35E+00	2.27E+00	2.34E+00	2.35E+00	2.35E+00	2.35E+00	2.35E+00
6.48E+00	0.00E+00	2.30E+00	2.23E+00	2.30E+00	2.30E+00	2.30E+00	2.30E+00	2.30E+00
6.86E+00	0.00E+00	2.26E+00	2.18E+00	2.26E+00	2.26E+00	2.26E+00	2.26E+00	2.26E+00
7.26E+00	0.00E+00	2.21E+00	2.13E+00	2.21E+00	2.21E+00	2.21E+00	2.21E+00	2.21E+00
7.68E+00	0.00E+00	2.17E+00	2.08E+00	2.16E+00	2.16E+00	2.16E+00	2.16E+00	2.17E+00
8.13E+00	0.00E+00	2.12E+00	2.03E+00	2.11E+00	2.11E+00	2.12E+00	2.12E+00	2.12E+00
8.60E+00	0.00E+00	2.06E+00	1.98E+00	2.06E+00	2.06E+00	2.06E+00	2.06E+00	2.06E+00
9.10E+00	0.00E+00	2.01E+00	1.92E+00	2.01E+00	2.01E+00	2.01E+00	2.01E+00	2.01E+00
9.63E+00	0.00E+00	1.96E+00	1.87E+00	1.95E+00	1.96E+00	1.96E+00	1.96E+00	1.96E+00
1.00E+01	0.00E+00	1.92E+00	1.83E+00	1.92E+00	1.92E+00	1.92E+00	1.92E+00	1.92E+00
1.02E+01	0.00E+00	1.90E+00	1.81E+00	1.90E+00	1.90E+00	1.90E+00	1.90E+00	1.90E+00
1.08E+01	0.00E+00	1.84E+00	1.75E+00	1.84E+00	1.84E+00	1.84E+00	1.84E+00	1.84E+00
1.14E+01	0.00E+00	1.78E+00	1.69E+00	1.78E+00	1.78E+00	1.78E+00	1.78E+00	1.78E+00
1.21E+01	0.00E+00	1.72E+00	1.63E+00	1.72E+00	1.72E+00	1.72E+00	1.72E+00	1.72E+00
1.28E+01	0.00E+00	1.66E+00	1.57E+00	1.66E+00	1.66E+00	1.66E+00	1.66E+00	1.66E+00
1.35E+01	0.00E+00	1.60E+00	1.51E+00	1.59E+00	1.60E+00	1.60E+00	1.60E+00	1.60E+00
1.43E+01	0.00E+00	1.53E+00	1.44E+00	1.53E+00	1.53E+00	1.53E+00	1.53E+00	1.53E+00
1.51E+01	0.00E+00	1.47E+00	1.38E+00	1.46E+00	1.47E+00	1.47E+00	1.47E+00	1.47E+00
1.60E+01	0.00E+00	1.40E+00	1.31E+00	1.40E+00	1.40E+00	1.40E+00	1.40E+00	1.40E+00
1.70E+01	0.00E+00	1.34E+00	1.25E+00	1.33E+00	1.34E+00	1.34E+00	1.34E+00	1.34E+00
1.80E+01	0.00E+00	1.27E+00	1.18E+00	1.27E+00	1.27E+00	1.27E+00	1.27E+00	1.27E+00
1.90E+01	0.00E+00	1.20E+00	1.12E+00	1.20E+00	1.20E+00	1.20E+00	1.20E+00	1.20E+00

2.01E+01 0.00E+00 1.13E+00 1.05E+00 1.13E+00 1.13E+00 1.13E+00 1.13E+00 1.13E+00

2.13E+01 0.00E+00 1.07E+00 9.86E-01 1.06E+00 1.07E+00 1.07E+00 1.07E+00 1.07E+00

2.25E+01	0.00E+00	1.00E+00	9.22E-01	9.98E-01	1.00E+00	1.00E+00	1.00E+00	1.00E+00
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.38E+01	0.00E+00	9.35E-01	8.58E-01	9.32E-01	9.34E-01	9.35E-01	9.35E-01	9.35E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.52E+01 0.00E+00 8.70E-01 7.96E-01 8.67E-01 8.69E-01 8.70E-01 8.70E-01 8.70E-01



2.67E+01 0.00E+00 8.06E-01 7.36E-01 8.03E-01 8.05E-01 8.06E-01 8.06E-01 8.06E-01

2.82E+01	0.00E+00	7.43E-01	6.77E-01	7.40E-01	7.43E-01	7.43E-01	7.43E-01	7.43E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.99E+01 0.00E+00 6.82E-01 6.19E-01 6.79E-01 6.82E-01 6.82E-01 6.82E-01 6.82E-01

3.00E+01 0.00E+00 6.78E-01 6.15E-01 6.75E-01 6.78E-01 6.78E-01 6.78E-01 6.78E-01

3.16E+01 0.00E+00 6.23E-01 5.64E-01 6.21E-01 6.23E-01 6.23E-01 6.23E-01 6.23E-01

3.35E+01 0.00E+00 5.66E-01 5.11E-01 5.64E-01 5.66E-01 5.66E-01 5.66E-01 5.66E-01 5.66E-01

3.54E+01	0.00E+00	5.12E-01	4.61E-01	5.09E-01	5.11E-01	5.12E-01	5.12E-01	5.12E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------

3.75E+01 0.00E+00 4.60E-01 4.12E-01 4.57E-01 4.59E-01 4.60E-01 4.60E-01 4.60E-01



3.97E+01 0.00E+00 4.10E-01 3.66E-01 4.08E-01 4.10E-01 4.10E-01 4.10E-01 4.10E-01 4.10E-01

4.20E+01 0.00E+00 3.64E-01 3.24E-01 3.62E-01 3.64E-01 3.64E-01 3.64E-01 3.64E-01

4.44E+01	0.00E+00	3.20E-01	2.84E-01	3.19E-01	3.20E-01	3.20E-01	3.20E-01	3.20E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------

4.70E+01 0.00E+00 2.80E-01 2.48E-01 2.78E-01 2.80E-01 2.80E-01 2.80E-01 2.80E-01

4.97E+01 0.00E+00 2.43E-01 2.14E-01 2.41E-01 2.43E-01 2.43E-01 2.43E-01 2.43E-01

5.26E+01	0.00E+00	2.09E-01	1.83E-01	2.07E-01	2.09E-01	2.09E-01	2.09E-01	2.09E-01	2.09E-01
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

5.57E+01 0.00E+00 1.78E-01 1.56E-01 1.77E-01 1.78E-01 1.78E-01 1.78E-01 1.78E-01

5.90E+01 0.00E+00 1.51E-01 1.31E-01 1.49E-01 1.50E-01 1.50E-01 1.50E-01 1.51E-01



6.24E+01 0.00E+00 1.26E-01 1.09E-01 1.25E-01 1.26E-01 1.26E-01 1.26E-01 1.26E-01 1.26E-01

6.60E+01 0.00E+00 1.04E-01 9.01E-02 1.03E-01 1.04E-01 1.04E-01 1.04E-01 1.04E-01 1.04E-01

6.99E+01 0.00E+00 8.53E-02 7.35E-02 8.45E-02 8.53E-02 8.53E-02 8.53E-02 8.53E-02

7.39E+01 0.00E+00 6.91E-02 5.92E-02 6.83E-02 6.90E-02 6.90E-02 6.90E-02 6.90E-02

7.82E+01 0.00E+00 5.52E-02 4.71E-02 5.46E-02 5.52E-02 5.52E-02 5.52E-02 5.52E-02

8.28E+01	0.00E+00	4.35E-02	3.70E-02	4.30E-02	4.35E-02	4.35E-02	4.35E-02	4.35E-02	4.35E-02
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

8.76E+01	0.00E+00	3.39E-02	2.87E-02	3.35E-02	3.39E-02	3.39E-02	3.39E-02	3.39E-02	3.39E-02
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

9.27E+01 0.00E+00 2.60E-02 2.19E-02 2.57E-02 2.60E-02 2.60E-02 2.60E-02 2.60E-02



9.81E+01 0.00E+00 1.96E-02 1.64E-02 1.94E-02 1.96E-02 1.96E-02 1.96E-02 1.96E-02

1.00E+02 0.00E+00 1.78E-02 1.49E-02 1.76E-02 1.78E-02 1.78E-02 1.78E-02 1.78E-02

1.04E+02 0.00E+00 1.46E-02 1.22E-02 1.44E-02 1.46E-02 1.46E-02 1.46E-02 1.46E-02

1.10E+02 0.00E+00 1.06E-02 8.84E-03 1.05E-02 1.06E-02 1.06E-02 1.06E-02 1.06E-02

1.16E+02 0.00E+00 7.63E-03 6.31E-03 7.51E-03 7.62E-03 7.62E-03 7.63E-03 7.63E-03

1.23E+02 0.00E+00 5.36E-03 4.41E-03 5.27E-03 5.36E-03 5.36E-03 5.36E-03 5.36E-03

1.30E+02    0.00E+00    3.69E-03    3.03E-03    3.63E-03    3.69E-03    3.69E-03    3.69E-03    3.69E-03

1.38E+02    0.00E+00    2.49E-03    2.03E-03    2.44E-03    2.49E-03    2.49E-03    2.49E-03    2.49E-03



1.46E+02 0.00E+00 1.64E-03 1.33E-03 1.61E-03 1.64E-03 1.64E-03 1.64E-03 1.64E-03

1.54E+02 0.00E+00 1.05E-03 8.51E-04 1.03E-03 1.05E-03 1.05E-03 1.05E-03 1.05E-03

1.63E+02 0.00E+00 6.61E-04 5.29E-04 6.43E-04 6.60E-04 6.60E-04 6.60E-04 6.61E-04

1.73E+02    0.00E+00    4.03E-04    3.20E-04    3.91E-04    4.02E-04    4.02E-04    4.03E-04    4.03E-04

1.83E+02 0.00E+00 2.39E-04 1.88E-04 2.30E-04 2.38E-04 2.38E-04 2.38E-04 2.39E-04

1.94E+02	0.00E+00	1.37E-04	1.06E-04	1.32E-04	1.37E-04	1.37E-04	1.37E-04	1.37E-04
----------	----------	----------	----------	----------	----------	----------	----------	----------

2.05E+02    0.00E+00    7.63E-05    5.78E-05    7.27E-05    7.62E-05    7.62E-05    7.63E-05

2.17E+02    0.00E+00    4.10E-05    3.03E-05    3.88E-05    4.09E-05    4.10E-05    4.10E-05    4.10E-05



2.29E+02 0.00E+00 2.13E-05 1.53E-05 1.99E-05 2.12E-05 2.12E-05 2.12E-05 2.13E-05

2.43E+02 0.00E+00 1.06E-05 7.40E-06 9.80E-06 1.06E-05 1.06E-05 1.06E-05 1.06E-05

2.57E+02    0.00E+00    5.09E-06    3.44E-06    4.64E-06    5.08E-06    5.08E-06    5.08E-06    5.08E-06

2.72E+02 0.00E+00 2.34E-06 1.53E-06 2.09E-06 2.33E-06 2.33E-06 2.33E-06 2.33E-06

2.88E+02 0.00E+00 1.02E-06 6.50E-07 8.99E-07 1.02E-06 1.02E-06 1.02E-06 1.02E-06

3.00E+02 0.00E+00 5.42E-07 3.36E-07 4.67E-07 5.41E-07 5.41E-07 5.41E-07 5.42E-07

3.05E+02    0.00E+00    4.29E-07    2.64E-07    3.68E-07    4.28E-07    4.28E-07    4.28E-07    4.28E-07

3.22E+02	0.00E+00	1.70E-07	1.01E-07	1.44E-07	1.70E-07	1.70E-07	1.70E-07	1.70E-07
----------	----------	----------	----------	----------	----------	----------	----------	----------



3.41E+02 0.00E+00 6.42E-08 3.68E-08 5.25E-08 6.40E-08 6.41E-08 6.41E-08 6.42E-08

3.61E+02 0.00E+00 2.28E-08 1.27E-08 1.80E-08 2.28E-08 2.28E-08 2.28E-08 2.28E-08

3.82E+02 0.00E+00 7.66E-09 4.10E-09 5.79E-09 7.64E-09 7.64E-09 7.65E-09 7.65E-09

4.04E+02 0.00E+00 2.41E-09 1.25E-09 1.75E-09 2.40E-09 2.40E-09 2.41E-09 2.41E-09

4.28E+02    0.00E+00    7.08E-10    3.55E-10    4.64E-10    7.06E-10    7.06E-10    7.07E-10    7.07E-10

4.53E+02 0.00E+00 1.94E-10 9.37E-11 1.14E-10 1.93E-10 1.93E-10 1.94E-10 1.94E-10

4.79E+02	0.00E+00	4.92E-11	2.30E-11	2.53E-11	4.90E-11	4.91E-11	4.91E-11	4.91E-11
----------	----------	----------	----------	----------	----------	----------	----------	----------

5.07E+02	0.00E+00	1.15E-11	5.16E-12	4.50E-12	1.15E-11	1.15E-11	1.15E-11	1.15E-11
----------	----------	----------	----------	----------	----------	----------	----------	----------



5.36E+02    0.00E+00    2.48E-12    1.06E-12    4.38E-13    2.47E-12    2.48E-12    2.48E-12    2.48E-12

5.68E+02	0.00E+00	4.91E-13	2.00E-13	2.80E-14	4.87E-13	4.89E-13	4.89E-13	4.90E-13
----------	----------	----------	----------	----------	----------	----------	----------	----------

6.01E+02	0.00E+00	9.01E-14	3.48E-14	2.21E-15	8.81E-14	8.85E-14	8.89E-14	8.95E-14
----------	----------	----------	----------	----------	----------	----------	----------	----------

6.36E+02	0.00E+00	1.69E-14	5.88E-15	7.38E-16	1.53E-14	1.57E-14	1.60E-14	1.66E-14
----------	----------	----------	----------	----------	----------	----------	----------	----------

6.73E+02    0.00E+00    4.80E-15    1.32E-15    1.96E-16    3.41E-15    3.86E-15    4.29E-15    4.45E-15

7.12E+02    0.00E+00    3.00E-15    6.54E-16    5.16E-17    1.76E-15    2.30E-15    2.49E-15    2.70E-15

7.53E+02	0.00E+00	2.76E-15	5.47E-16	3.68E-17	1.55E-15	2.10E-15	2.27E-15	2.47E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

7.97E+02	0.00E+00	2.73E-15	5.11E-16	2.88E-17	1.50E-15	2.00E-15	2.23E-15	2.44E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------



8.44E+02	0.00E+00	2.72E-15	4.85E-16	2.33E-17	1.48E-15	1.96E-15	2.21E-15	2.42E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

8.93E+02	0.00E+00	2.72E-15	4.61E-16	2.02E-17	1.44E-15	1.95E-15	2.19E-15	2.42E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

9.45E+02    0.00E+00    2.71E-15    4.38E-16    1.83E-17    1.43E-15    1.93E-15    2.18E-15    2.41E-15

1.00E+03	0.00E+00	2.68E-15	4.16E-16	1.72E-17	1.38E-15	1.91E-15	2.17E-15	2.40E-15
----------	----------	----------	----------	----------	----------	----------	----------	----------

-----



Probabilistic results summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL UNCERTAINTY ANALYSIS\FCS SOIL UNCERTAINTY ANALYSIS EU-152.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	3.216E+00
2	0.000E+00	3.214E+00
3	0.000E+00	3.217E+00

Title : RESRAD Default Parameters  
Input File : FCS SOIL UNCERTAINTY ANALYSIS EU-152.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	12	0.02	11	0.02	15	-0.03	15	-0.01
Contaminated zone b parameter	8	-0.03	8	-0.03	17	0.01	17	0.01
Evapotranspiration coefficient	4	0.04	4	0.04	3	0.25	3	0.13
Wind Speed	3	0.07	3	0.07	14	0.03	14	0.02
Runoff coefficient	1	0.11	1	0.11	4	0.09	4	0.05
Well pump intake depth	17	-0.01	17	-0.01	11	-0.04	11	-0.02
b Parameter of Unsaturated zone 1	13	0.01	13	0.01	8	-0.08	8	-0.04
Mass loading for inhalation	10	-0.03	10	-0.03	12	0.03	12	0.02
Indoor dust filtration factor	18	0.00	18	0.00	18	-0.01	18	0.00
Depth of soil mixing layer	7	0.04	7	0.04	10	0.04	10	0.02
Depth of roots	2	-0.09	2	-0.09	2	-0.73	2	-0.54
Wet weight crop yield of fruit, grain and non-leafy vegetables	14	0.01	14	0.01	6	-0.08	6	-0.04
Weathering removal constant of all vegetation	9	0.03	9	0.03	13	0.03	13	0.02
Wet foliar interception fraction of leafy vegetables	5	-0.04	5	-0.04	7	-0.08	7	-0.04
Humidity in air	16	0.01	16	0.01	16	0.02	16	0.01
Kd of Eu-152 in Contaminated Zone	6	0.04	6	0.04	1	0.77	1	0.63
Kd of Eu-152 in Unsaturated Zone 1	11	0.02	12	0.02	5	0.09	5	0.04
Kd of Eu-152 in Saturated Zone	15	-0.01	15	-0.01	9	-0.05	9	-0.03
R-SQUARE		0.03		0.03		0.74		0.74

-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 EU-152.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	17	0.01	16	0.01	7	-0.07	7	-0.04
Contaminated zone b parameter	2	-0.09	2	-0.09	4	-0.09	4	-0.05
Evapotranspiration coefficient	1	0.14	1	0.13	3	0.24	3	0.13
Wind Speed	14	-0.02	14	-0.02	9	-0.05	9	-0.03
Runoff coefficient	7	0.05	7	0.05	5	0.09	5	0.05
Well pump intake depth	3	0.07	3	0.07	13	-0.04	13	-0.02
b Parameter of Unsaturated zone 1	8	-0.04	8	-0.03	15	-0.02	15	-0.01
Mass loading for inhalation	6	-0.05	6	-0.05	11	0.05	11	0.03
Indoor dust filtration factor	11	0.02	11	0.02	8	0.06	8	0.03
Depth of soil mixing layer	5	-0.06	5	-0.06	16	0.01	16	0.01
Depth of roots	10	0.03	10	0.03	2	-0.69	2	-0.52
Wet weight crop yield of fruit, grain and non-leafy vegetables	16	-0.01	17	-0.01	18	-0.01	18	0.00
Weathering removal constant of all vegetation	4	-0.07	4	-0.07	6	0.07	6	0.04
Wet foliar interception fraction of leafy vegetables	13	0.02	13	0.02	10	0.05	10	0.03
Humidity in air	9	-0.03	9	-0.03	17	0.01	17	0.01
Kd of Eu-152 in Contaminated Zone	15	0.01	15	0.01	1	0.75	1	0.62
Kd of Eu-152 in Unsaturated Zone 1	18	0.00	18	0.00	12	-0.04	12	-0.02
Kd of Eu-152 in Saturated Zone	12	0.02	12	0.02	14	-0.03	14	-0.02
R-SQUARE	0.05		0.05		0.70		0.70	

-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 EU-152.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	14	0.02	14	0.02	15	-0.01	15	0.00
Contaminated zone b parameter	10	0.04	10	0.04	9	-0.03	9	-0.02
Evapotranspiration coefficient	1	0.10	1	0.10	3	0.14	3	0.07
Wind Speed	6	-0.06	6	-0.06	12	0.02	12	0.01
Runoff coefficient	7	0.06	7	0.06	11	0.03	11	0.01
Well pump intake depth	18	0.01	18	0.01	16	0.01	16	0.00
b Parameter of Unsaturated zone 1	15	-0.01	15	-0.01	13	-0.01	13	-0.01
Mass loading for inhalation	3	-0.07	3	-0.07	8	-0.03	8	-0.02
Indoor dust filtration factor	13	-0.03	13	-0.03	4	0.09	4	0.05
Depth of soil mixing layer	5	0.06	5	0.06	18	0.00	18	0.00
Depth of roots	2	-0.09	2	-0.09	2	-0.72	2	-0.55
Wet weight crop yield of fruit, grain and non-leafy vegetables	16	0.01	16	0.01	17	0.00	17	0.00
Weathering removal constant of all vegetation	4	-0.07	4	-0.06	5	-0.06	5	-0.03
Wet foliar interception fraction of leafy vegetables	9	-0.04	9	-0.04	10	-0.03	10	-0.02
Humidity in air	8	0.06	8	0.06	14	0.01	14	0.01
Kd of Eu-152 in Contaminated Zone	11	0.04	11	0.04	1	0.78	1	0.64
Kd of Eu-152 in Unsaturated Zone 1	12	-0.03	12	-0.03	7	-0.04	7	-0.02
Kd of Eu-152 in Saturated Zone	17	0.01	17	0.01	6	0.05	6	0.03
R-SQUARE	0.05		0.05		0.73		0.73	

-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.