

Title : RESRAD Default Parameters

File : FCS SOIL UNCERTAINTY ANALYSIS PU-239.RAD

## Regression Coefficients for Peak All Pathways

Description of Probabilistic Variable	Repetition =			1			2			3			Position
	PRCC	PRCC	PRCC	SRRC	SRRC	SRRC	PCC	PCC	PCC	SRC	SRC	SRC	
	Coefficient of Determination (R-squared) =												Variable
				0.90	0.94	0.95				0.53	0.61	0.57	List
Depth of roots	-0.95	-0.97	-0.98	-0.94	-0.96	-0.97	-0.71	-0.77	-0.75	-0.70	-0.77	-0.75	11
Kd of Pu-239 in Saturated Zone	-0.20	-0.21	-0.21	-0.07	-0.05	-0.05	-0.02	-0.04	-0.05	-0.02	-0.03	-0.03	18
Mass loading for inhalation	0.13	0.20	0.17	0.04	0.05	0.04	0.05	0.08	0.05	0.03	0.05	0.03	8
Kd of Pu-239 in Contaminated Zone	-0.19	-0.13	-0.09	-0.06	-0.03	-0.02	-0.05	-0.05	-0.01	-0.04	-0.03	-0.01	16
Indoor dust filtration factor	0.07	0.17	0.15	0.02	0.04	0.03	-0.03	0.05	0.02	-0.02	0.03	0.01	9
Contaminated zone erosion rate	-0.10	-0.11	-0.14	-0.03	-0.03	-0.03	-0.06	-0.05	-0.04	-0.05	-0.03	-0.03	1
Runoff coefficient	-0.13	-0.11	-0.09	-0.04	-0.03	-0.02	-0.10	-0.06	-0.07	-0.07	-0.04	-0.05	5
Evapotranspiration coefficient	-0.11	-0.10	-0.11	-0.04	-0.02	-0.03	-0.10	-0.06	-0.10	-0.07	-0.04	-0.07	3
Well pump intake depth	-0.12	-0.07	-0.11	-0.04	-0.02	-0.02	-0.13	-0.09	-0.06	-0.09	-0.06	-0.04	6
Wind Speed	-0.08	-0.08	-0.12	-0.03	-0.02	-0.03	0.01	-0.01	0.02	0.00	0.00	0.01	4
Wet foliar interception fraction of leafy vegetables	0.07	0.13	0.03	0.02	0.03	0.01	0.03	0.11	0.01	0.02	0.07	0.00	14
Humidity in air	0.00	-0.03	-0.09	0.00	-0.01	-0.02	0.02	0.03	-0.03	0.01	0.02	-0.02	15
Depth of soil mixing layer	0.01	0.03	0.01	0.00	0.01	0.00	0.10	0.00	0.07	0.07	0.00	0.04	10
Wet weight crop yield of fruit, grain and non-leafy vegetables	-0.01	0.10	-0.04	0.00	0.03	-0.01	-0.02	0.02	-0.06	-0.01	0.01	-0.04	12
Weathering removal constant of all vegetation	0.05	0.05	-0.06	0.01	0.01	-0.01	-0.03	0.00	-0.06	-0.02	0.00	-0.04	13
Kd of Pu-239 in Unsaturated Zone 1	0.01	-0.07	0.01	0.00	-0.02	0.00	-0.02	-0.04	-0.03	-0.02	-0.03	-0.02	17
Contaminated zone b parameter	0.03	-0.01	0.00	0.01	0.00	0.00	-0.01	-0.02	0.02	-0.01	-0.02	0.01	2
b Parameter of Unsaturated zone 1	-0.02	0.04	0.01	-0.01	0.01	0.00	0.07	0.02	0.03	0.05	0.01	0.02	7

The coefficient of determination ranges from 0 to 1; it provides a measure of the variation in the dependent variable (Dose or Risk) that is explained by the variation in the independent variables under the assumed linear regression model.