

Title : RESRAD Default Parameters

File : FCS SOIL UNCERTAINTY ANALYSIS NI-63.RAD

Regression Coefficients for Peak All Pathways

Description of Probabilistic Variable	Repetition =			1			2			3			Position
	1	2	3	1	2	3	1	2	3	1	2	3	
Coefficient of Determination (R-squared) =				0.99	0.99	0.99				0.92	0.92	0.92	in
	PRCC	PRCC	PRCC	SRRC	SRRC	SRRC	PCC	PCC	PCC	SRC	SRC	SRC	Variable
													List
Depth of roots	-0.99	-0.99	-0.99	-0.99	-0.99	-0.99	-0.96	-0.96	-0.96	-0.96	-0.96	-0.96	11
Kd of Ni-63 in Contaminated Zone	0.22	0.28	0.27	0.02	0.03	0.03	0.04	0.00	0.07	0.01	0.00	0.02	16
Evapotranspiration coefficient	0.14	0.12	0.11	0.01	0.01	0.01	-0.02	0.03	-0.01	-0.01	0.01	0.00	3
Depth of soil mixing layer	-0.02	-0.09	-0.04	0.00	-0.01	0.00	0.03	-0.01	-0.03	0.01	0.00	-0.01	10
Indoor dust filtration factor	0.02	0.06	0.07	0.00	0.01	0.01	0.02	0.10	0.03	0.00	0.03	0.01	9
Runoff coefficient	0.07	0.05	0.01	0.01	0.00	0.00	-0.06	0.05	-0.09	-0.02	0.01	-0.03	5
Wind Speed	0.02	0.01	-0.12	0.00	0.00	-0.01	-0.01	-0.02	-0.05	0.00	0.00	-0.01	4
Kd of Ni-63 in Saturated Zone	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.01	18
Wet foliar interception fraction of leafy vegetables	-0.01	0.05	0.03	0.00	0.01	0.00	-0.01	0.04	-0.03	0.00	0.01	-0.01	14
Wet weight crop yield of fruit, grain and non-leafy vegetables	-0.02	0.11	-0.01	0.00	0.01	0.00	-0.01	0.00	0.01	0.00	0.00	0.00	12
Humidity in air	0.05	-0.05	-0.08	0.01	0.00	-0.01	0.01	0.02	0.02	0.00	0.01	0.00	15
b Parameter of Unsaturated zone 1	-0.01	0.04	0.03	0.00	0.00	0.00	-0.08	-0.09	0.03	-0.02	-0.03	0.01	7
Kd of Ni-63 in Unsaturated Zone 1	0.05	0.00	0.00	0.01	0.00	0.00	0.04	-0.03	-0.06	0.01	-0.01	-0.02	17
Mass loading for inhalation	-0.02	0.07	0.01	0.00	0.01	0.00	0.06	0.12	0.02	0.02	0.03	0.01	8
Well pump intake depth	0.03	-0.04	0.06	0.00	0.00	0.01	-0.04	-0.10	0.08	-0.01	-0.03	0.02	6
Weathering removal constant of all vegetation	-0.02	0.03	-0.03	0.00	0.00	0.00	0.01	0.07	-0.05	0.00	0.02	-0.01	13
Contaminated zone b parameter	0.04	-0.01	-0.02	0.00	0.00	0.00	-0.01	-0.03	-0.05	0.00	-0.01	-0.02	2
Contaminated zone erosion rate	0.01	-0.03	0.03	0.00	0.00	0.00	-0.12	-0.11	-0.04	-0.04	-0.03	-0.01	1

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.