

Title : RESRAD Default Parameters

File : FCS SOIL UNCERTAINTY ANALYSIS TC-99.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
				0.95	0.95	0.96				0.89	0.90	0.90	List
Depth of roots	-0.97	-0.97	-0.98	-0.95	-0.95	-0.96	-0.94	-0.94	-0.95	-0.93	-0.93	-0.94	11
Evapotranspiration coefficient	0.49	0.52	0.61	0.12	0.14	0.14	0.34	0.38	0.40	0.12	0.13	0.14	3
Well pump intake depth	-0.42	-0.38	-0.35	-0.10	-0.09	-0.07	-0.21	-0.27	-0.12	-0.07	-0.09	-0.04	6
Kd of Tc-99 in Contaminated Zone	0.29	0.31	0.37	0.07	0.07	0.08	0.18	0.09	0.25	0.06	0.03	0.08	16
Runoff coefficient	0.24	0.27	0.26	0.05	0.06	0.05	0.10	0.20	0.12	0.03	0.07	0.04	5
Indoor dust filtration factor	0.05	0.14	0.01	0.01	0.03	0.00	0.03	0.11	0.06	0.01	0.03	0.02	9
Depth of soil mixing layer	-0.05	-0.08	-0.05	-0.01	-0.02	-0.01	0.00	-0.04	-0.04	0.00	-0.01	-0.01	10
Mass loading for inhalation	0.08	0.06	0.04	0.02	0.01	0.01	0.09	0.10	0.05	0.03	0.03	0.02	8
Weathering removal constant of all vegetation	-0.07	0.02	-0.07	-0.02	0.01	-0.01	0.00	0.06	-0.05	0.00	0.02	-0.02	13
Kd of Tc-99 in Saturated Zone	-0.01	-0.03	-0.07	0.00	-0.01	-0.01	-0.04	0.00	-0.05	-0.01	0.00	-0.02	18
Humidity in air	0.05	0.04	-0.02	0.01	0.01	0.00	0.03	0.06	-0.02	0.01	0.02	-0.01	15
b Parameter of Unsaturated zone 1	-0.04	0.01	0.08	-0.01	0.00	0.02	-0.07	-0.08	0.02	-0.02	-0.03	0.01	7
Wind Speed	0.02	0.00	0.03	0.00	0.00	0.01	0.04	-0.02	-0.05	0.01	-0.01	-0.01	4
Kd of Tc-99 in Unsaturated Zone 1	0.03	0.03	-0.02	0.01	0.01	0.00	0.01	-0.01	-0.07	0.00	0.00	-0.02	17
Contaminated zone erosion rate	0.00	-0.02	-0.01	0.00	0.00	0.00	-0.07	-0.11	-0.05	-0.03	-0.04	-0.02	1
Wet foliar interception fraction of leafy vegetables	0.01	0.02	0.00	0.00	0.00	0.00	-0.01	0.03	-0.06	0.00	0.01	-0.02	14
Wet weight crop yield of fruit, grain and non-leafy vegetables	0.04	-0.05	-0.01	0.01	-0.01	0.00	0.01	-0.03	-0.02	0.00	-0.01	-0.01	12
Contaminated zone b parameter	-0.01	-0.02	0.04	0.00	0.00	0.01	-0.02	-0.04	-0.01	-0.01	-0.01	0.00	2

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.