

Title : RESRAD Default Parameters

File : FCS BFM INSITU UA TC-99.RAD

Regression Coefficients for Peak All Pathways

Description of Probabilistic Variable	Repetition =												Position in Variable List						
	1			2			3			1				2			3		
	Coefficient of Determination (R-squared) =																		
	PRCC	PRCC	PRCC	SRRC	SRRC	SRRC	PCC	PCC	PCC	SRC	SRC	SRC							
Depth of roots	0.91	0.91	0.91	0.74	0.73	0.74	0.90	0.86	0.90	0.73	0.74	0.74	10						
Kd of Tc-99 in Contaminated Zone	-0.84	-0.85	-0.85	-0.52	-0.54	-0.54	-0.84	-0.75	-0.84	-0.54	-0.50	-0.55	16						
Weathering removal constant of all vegetation	-0.47	-0.51	-0.48	-0.18	-0.20	-0.18	-0.39	-0.36	-0.43	-0.15	-0.17	-0.17	12						
Evapotranspiration coefficient	0.34	0.37	0.37	0.12	0.14	0.13	0.32	0.21	0.26	0.12	0.09	0.10	3						
Runoff coefficient	0.21	0.11	0.18	0.07	0.04	0.06	0.10	0.10	0.09	0.04	0.04	0.03	5						
Wet weight crop yield of fruit, grain and non-leafy vegetables	-0.18	-0.15	-0.15	-0.06	-0.05	-0.05	-0.14	-0.10	-0.08	-0.05	-0.04	-0.03	11						
Wet foliar interception fraction of leafy vegetables	0.17	0.03	0.10	0.06	0.01	0.03	0.13	0.07	0.08	0.05	0.03	0.03	13						
b Parameter of Unsaturated zone 1	-0.05	0.11	0.11	-0.02	0.04	0.04	-0.06	0.02	0.05	-0.02	0.01	0.02	6						
Indoor dust filtration factor	0.10	0.02	0.02	0.03	0.01	0.01	-0.02	-0.01	-0.01	-0.01	0.00	0.00	8						
Kd of Tc-99 in Saturated Zone	-0.04	-0.07	-0.03	-0.01	-0.02	-0.01	0.01	-0.01	-0.03	0.00	0.00	-0.01	17						
Depth of soil mixing layer	-0.03	-0.03	-0.06	-0.01	-0.01	-0.02	-0.02	0.02	-0.06	-0.01	0.01	-0.02	9						
Contaminated zone erosion rate	0.02	-0.03	-0.10	0.01	-0.01	-0.03	0.00	-0.08	-0.01	0.00	-0.03	0.00	1						
Mass loading for inhalation	0.03	0.01	0.04	0.01	0.00	0.01	0.01	0.00	0.11	0.00	0.00	0.04	7						
Humidity in air	0.00	0.00	-0.04	0.00	0.00	-0.01	0.03	-0.03	-0.04	0.01	-0.01	-0.01	14						
Cover erosion rate	0.03	0.02	-0.01	0.01	0.01	0.00	0.05	0.08	-0.04	0.02	0.04	-0.02	15						
Wind Speed	0.06	-0.09	-0.01	0.02	-0.03	0.00	-0.02	-0.06	0.03	-0.01	-0.03	0.01	4						
Contaminated zone b parameter	0.03	-0.02	-0.01	0.01	-0.01	0.00	0.04	0.03	0.03	0.01	0.01	0.01	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.