

Title : RESRAD Default Parameters

File : FCS BFM INSITU UA NI-59.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) =																		
				0.67	0.67	0.67						0.03	0.02	0.04					
Description of Probabilistic Variable	PRCC	PRCC	PRCC	SRRC	SRRC	SRRC	PCC	PCC	PCC	SRC	SRC	SRC	List						
Kd of Ni-59 in Contaminated Zone	-0.77	-0.77	-0.77	-0.69	-0.71	-0.70	-0.07	-0.04	-0.06	-0.07	-0.04	-0.06	16						
Cover erosion rate	0.57	0.52	0.55	0.40	0.36	0.38	-0.02	-0.01	0.09	-0.02	-0.01	0.09	15						
Depth of roots	0.24	0.20	0.27	0.14	0.12	0.16	-0.01	0.02	0.08	-0.01	0.02	0.07	10						
Weathering removal constant of all vegetation	-0.13	-0.18	-0.13	-0.08	-0.10	-0.07	-0.02	-0.04	-0.05	-0.02	-0.04	-0.05	12						
Evapotranspiration coefficient	0.11	0.11	0.05	0.06	0.06	0.03	-0.04	0.00	0.00	-0.04	0.00	0.00	3						
Runoff coefficient	0.05	0.12	0.08	0.03	0.07	0.05	-0.06	0.02	-0.05	-0.06	0.02	-0.05	5						
Contaminated zone erosion rate	0.02	0.08	0.13	0.01	0.04	0.08	-0.02	-0.03	0.01	-0.02	-0.03	0.00	1						
b Parameter of Unsaturated zone	1	0.00	0.02	0.09	0.00	0.01	0.05	0.00	-0.02	0.01	0.00	-0.02	0.01	6					
Wet weight crop yield of fruit, grain and non-leafy vegetables	-0.02	0.03	0.08	-0.01	0.02	0.05	0.07	0.01	-0.04	0.07	0.01	-0.04	11						
Contaminated zone b parameter	-0.02	0.04	0.06	-0.01	0.02	0.04	-0.08	0.02	0.02	-0.08	0.02	0.02	2						
Depth of soil mixing layer	-0.02	-0.04	-0.01	-0.01	-0.02	-0.01	-0.02	0.06	0.00	-0.02	0.06	0.00	9						
Humidity in air	0.06	-0.03	-0.10	0.04	-0.02	-0.06	0.09	0.00	-0.03	0.09	0.00	-0.03	14						
Wet foliar interception fraction of leafy vegetables	-0.04	0.06	0.01	-0.02	0.03	0.01	-0.04	0.04	0.01	-0.04	0.04	0.01	13						
Indoor dust filtration factor	0.02	-0.04	0.00	0.01	-0.03	0.00	0.03	-0.06	-0.02	0.03	-0.06	-0.02	8						
Kd of Ni-59 in Saturated Zone	-0.03	0.02	0.02	-0.02	0.01	0.01	-0.01	0.01	-0.01	-0.01	0.01	-0.01	17						
Wind Speed	-0.05	0.00	0.05	-0.03	0.00	0.03	0.03	0.06	-0.06	0.03	0.06	-0.06	4						
Mass loading for inhalation	-0.02	0.04	-0.02	-0.01	0.02	-0.01	-0.01	-0.01	0.13	-0.01	-0.01	0.13	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.