

Title : RESRAD Default Parameters
File : FCS BFM INSITU UA CS-134.RAD

Regression Coefficients for Peak All Pathways

| Description of Probabilistic Variable | Repetition = | | | | | | | | | | | | 3 Position in Variable List | |
|--|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------------------|--|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | | |
| | Coefficient of Determination (R-squared) = | | | | | | | | | | | | | |
| | | | | 0.84 | 0.84 | 0.85 | | | | | 0.10 | 0.06 | 0.11 | |
| | PRCC | PRCC | PRCC | SRRC | SRRC | SRRC | PCC | PCC | PCC | SRC | SRC | SRC | List | |
| Depth of roots | 0.87 | 0.87 | 0.88 | 0.71 | 0.70 | 0.72 | 0.26 | 0.21 | 0.29 | 0.25 | 0.21 | 0.28 | 10 | |
| Kd of Cs-134 in Contaminated Zone | -0.82 | -0.83 | -0.83 | -0.57 | -0.59 | -0.58 | -0.12 | -0.06 | -0.10 | -0.11 | -0.06 | -0.09 | 16 | |
| Weathering removal constant of all vegetation | -0.04 | -0.10 | -0.08 | -0.02 | -0.04 | -0.03 | -0.02 | -0.02 | -0.01 | -0.02 | -0.02 | -0.01 | 12 | |
| Wet foliar interception fraction of leafy vegetables | -0.05 | 0.16 | 0.06 | -0.02 | 0.06 | 0.02 | -0.03 | 0.03 | 0.02 | -0.03 | 0.03 | 0.02 | 13 | |
| Contaminated zone b parameter | -0.01 | 0.02 | 0.16 | -0.01 | 0.01 | 0.06 | -0.07 | 0.03 | 0.01 | -0.07 | 0.03 | 0.01 | 2 | |
| Cover erosion rate | -0.06 | -0.07 | -0.03 | -0.02 | -0.03 | -0.01 | -0.02 | -0.01 | 0.06 | -0.02 | -0.01 | 0.06 | 15 | |
| Wet weight crop yield of fruit, grain and non-leafy vegetables | 0.03 | 0.11 | -0.01 | 0.01 | 0.05 | 0.00 | 0.08 | -0.02 | -0.04 | 0.08 | -0.01 | -0.04 | 11 | |
| b Parameter of Unsaturated zone | 1 0.03 | 0.03 | 0.06 | 0.01 | 0.01 | 0.02 | -0.01 | 0.00 | 0.01 | -0.01 | 0.00 | 0.01 | 6 | |
| Wind Speed | 0.00 | 0.04 | 0.03 | 0.00 | 0.02 | 0.01 | 0.04 | 0.05 | -0.06 | 0.04 | 0.05 | -0.05 | 4 | |
| Mass loading for inhalation | 0.00 | 0.02 | 0.06 | 0.00 | 0.01 | 0.02 | 0.00 | -0.01 | 0.10 | 0.00 | -0.01 | 0.09 | 7 | |
| Contaminated zone erosion rate | -0.03 | 0.06 | 0.03 | -0.01 | 0.02 | 0.01 | -0.01 | -0.02 | 0.00 | -0.01 | -0.02 | 0.00 | 1 | |
| Indoor dust filtration factor | -0.03 | 0.00 | -0.02 | -0.01 | 0.00 | -0.01 | 0.02 | -0.04 | -0.01 | 0.02 | -0.04 | -0.01 | 8 | |
| Humidity in air | 0.09 | -0.06 | -0.09 | 0.04 | -0.02 | -0.03 | 0.07 | 0.02 | -0.03 | 0.07 | 0.02 | -0.03 | 14 | |
| Runoff coefficient | -0.03 | 0.07 | 0.00 | -0.01 | 0.03 | 0.00 | -0.07 | 0.00 | -0.06 | -0.06 | 0.00 | -0.06 | 5 | |
| Kd of Cs-134 in Saturated Zone | -0.03 | 0.06 | -0.08 | -0.01 | 0.03 | -0.03 | -0.02 | 0.00 | -0.01 | -0.02 | 0.00 | -0.01 | 17 | |
| Evapotranspiration coefficient | 0.01 | 0.01 | -0.05 | 0.00 | 0.00 | -0.02 | -0.03 | 0.01 | 0.00 | -0.03 | 0.01 | 0.00 | 3 | |
| Depth of soil mixing layer | 0.02 | -0.01 | -0.01 | 0.01 | 0.00 | -0.01 | -0.03 | 0.07 | -0.01 | -0.03 | 0.07 | -0.01 | 9 | |

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.