

Title : RESRAD Default Parameters

File : FCS BFM INSITU UA CO-58.RAD

Regression Coefficients for Peak All Pathways

| | Repetition = | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | Position |
|--|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|---------------|
| Coefficient of Determination (R-squared) = | | | | 0.81 | 0.83 | 0.83 | | | | 0.03 | 0.02 | 0.04 | in | |
| Description of Probabilistic Variable | PRCC | PRCC | PRCC | SRRC | SRRC | SRRC | PCC | PCC | PCC | SRC | SRC | SRC | SRC | Variable List |
| Kd of Co-58 in Contaminated Zone | -0.86 | -0.87 | -0.87 | -0.73 | -0.74 | -0.74 | -0.05 | -0.03 | -0.04 | -0.05 | -0.03 | -0.04 | 16 | |
| Depth of roots | 0.76 | 0.78 | 0.79 | 0.51 | 0.52 | 0.53 | 0.00 | 0.03 | 0.09 | 0.00 | 0.03 | 0.09 | 10 | |
| Contaminated zone b parameter | 0.02 | 0.06 | 0.21 | 0.01 | 0.03 | 0.09 | -0.08 | 0.02 | 0.02 | -0.08 | 0.02 | 0.02 | 2 | |
| Cover erosion rate | -0.05 | -0.13 | -0.04 | -0.02 | -0.05 | -0.02 | -0.04 | -0.02 | 0.08 | -0.04 | -0.02 | 0.08 | 15 | |
| Weathering removal constant of all vegetation | -0.02 | -0.11 | -0.05 | -0.01 | -0.05 | -0.02 | -0.01 | -0.03 | -0.04 | -0.01 | -0.03 | -0.04 | 12 | |
| Humidity in air | 0.00 | -0.05 | -0.10 | 0.00 | -0.02 | -0.04 | 0.09 | -0.01 | -0.03 | 0.09 | -0.01 | -0.03 | 14 | |
| Wet foliar interception fraction of leafy vegetables | -0.06 | 0.13 | 0.07 | -0.02 | 0.05 | 0.03 | -0.03 | 0.05 | 0.01 | -0.03 | 0.05 | 0.01 | 13 | |
| Wet weight crop yield of fruit, grain and non-leafy vegetables | -0.05 | 0.11 | 0.02 | -0.02 | 0.05 | 0.01 | 0.06 | 0.03 | -0.04 | 0.06 | 0.03 | -0.04 | 11 | |
| Indoor dust filtration factor | -0.02 | -0.03 | -0.04 | -0.01 | -0.01 | -0.02 | 0.02 | -0.06 | -0.03 | 0.02 | -0.06 | -0.03 | 8 | |
| Runoff coefficient | 0.00 | 0.07 | 0.00 | 0.00 | 0.03 | 0.00 | -0.06 | 0.02 | -0.04 | -0.06 | 0.02 | -0.04 | 5 | |
| Kd of Co-58 in Saturated Zone | 0.01 | 0.05 | -0.04 | 0.00 | 0.02 | -0.02 | -0.01 | 0.03 | 0.00 | -0.01 | 0.03 | 0.00 | 17 | |
| Mass loading for inhalation | -0.04 | 0.01 | 0.00 | -0.02 | 0.00 | 0.00 | 0.00 | -0.01 | 0.13 | 0.00 | -0.01 | 0.13 | 7 | |
| Contaminated zone erosion rate | -0.03 | 0.00 | 0.05 | -0.01 | 0.00 | 0.02 | -0.02 | -0.02 | 0.01 | -0.02 | -0.02 | 0.01 | 1 | |
| Wind Speed | -0.03 | 0.05 | 0.00 | -0.01 | 0.02 | 0.00 | 0.03 | 0.06 | -0.06 | 0.03 | 0.06 | -0.06 | 4 | |
| b Parameter of Unsaturated zone | 1 | -0.02 | 0.02 | 0.01 | -0.01 | 0.01 | 0.01 | 0.00 | -0.02 | 0.00 | 0.00 | -0.02 | 0.00 | 6 |
| Evapotranspiration coefficient | 0.05 | -0.01 | -0.06 | 0.02 | 0.00 | -0.02 | -0.04 | 0.00 | 0.00 | -0.04 | 0.00 | 0.00 | 3 | |
| Depth of soil mixing layer | -0.02 | 0.00 | 0.02 | -0.01 | 0.00 | 0.01 | -0.02 | 0.06 | 0.00 | -0.02 | 0.06 | 0.00 | 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.