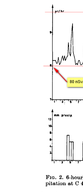
« 22 July 2016 storm flood and radon washout No Certain Doom »

Rain and radioactivity: rain-out or wash-out?

In this comment I will continue to comment some of the problems explaining what really happens ("hallucinatory" speaking) during dirtied precipitation events. Some very good papers will be shortly reviewed and I thank **Marcel Sevenjhem** for his really important comments.

1. A phenomenon known since long times ago

That atmospheric radiation peaks during precipitation events is known for many, many years. As an example, Thomas Thomson from the Swedish Meteorological and Hydrological Institute, Stockholm, wrote in his 1966 paper "Artificial radioactivity in precipitation and the natural background radiation" (**link**), he speaks of a 35x-fold increase in background radiation which is correlated to precipitation. The following figure 2 from this paper (with only additional documents this (note that 1 micro-roentgen per hour equals 10 nSv/h):


μr/hr
Increase of ~15 nSv/h = 35x-fold increase by 15mm precipitation
80 nSv/h
0 nSv/h
0
1
2
3
4
5
6
7
8
9
10
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