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Fukushima fallout at Milano, Italy

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Radionuclides from Fukushima fallout were first detected at Milano region in a rain water sample, collected during March 27-28, with the concentrations of 131I and 137Cs isotopes in the rainwater to be equal with 0.89 Bq L-1 and 0.12 Bq L-1, respectively. During the same days a snowfall sample was collected from Monte Rosa mountain at a height of 3000 m, with the concentrations of 131I and 137Cs in snowfall to be lower than that in rainwater sample. A sample of dry deposition that was collected 9 days after the rainfall event of 27-28 March, 2011 showed that the dry deposition of 131I and 137Cs was 0.40 Bq m-2 and 0.24 Bq m-2 respectively. The concentrations of 131I in sheep and cow milk samples collected on 30 March, 2011 from a farm at Macugnaga, Monte Rosa mountain, were 0.30 Bq L-1 and 0.37 Bq L-1 respectively. Daily monitoring of the airborne activity levels was carried out with a high volume air sampler and Glass Fiber filters as the collection substrate. Increased atmospheric radioactivity was detected on air filter taken on 30 March 2011, wile the maximum activity of 467 μ Bq m-3, occurred at April 3-4, 2011. A week later the activities had fallen to about 50% of peak values, with a general decreasing trend over the following days. In the time period of one month after the nuclear accident, concentrations of 137Cs and 134Cs in air as high as 88 μ Bq m-3 and 78 μ Bq m-3, respectively were recorded. According to the measurements, airborne activity levels remains of no concern for public health in Italy.

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