



Measurements of Background Gamma Radiation on Some Localities of North-East Kosovo

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Abstract: The measurement of natural environmental radiations is one of the most important subjects in health physics. The main sources of background radiation are cosmic, terrestrial and cosmogenic radiation produced by reactions with cosmic rays and atmospheric nuclei. Terrestrial radiation varies in different regions in the world. Generally the background dose rate from cosmic rays depends on the latitude and altitude. The dose rate range obtained in some north-east Kosovo, the dose rate varies from 119.28 nSv/h to 176.51 nSv/h. In all the surveyed points the mean dose rate was 138.8 nSv/h with a standard deviation of 19.11 nSv/h. The average annual effective dose obtained from this study is 0.170 mSv/annum which is still less than the recommended limit of 1 mSv/annum by International Commission on Radiation Protection [ICRP] for non occupational population exposure.

Key Words: *gamma, natural radiation, background, equivalent dose rate, outdoor.*

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