

Research of UV radiation intensity in relation with outdoor measurement conditions

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Abstract. This paper presents the results of measurements of ultraviolet radiation in Kuršmlija - Blace on July the 15th 2018, and in Kruševac - Trstenik on July the 16th 2018. The measurements were carried out by using a professional high-quality instrument YK-35UV, from 9 AM to 15:30 PM. The obtained results are grouped in two series, labeled as series A and B, and their statistical analysis have been made by introducing some corresponding statistical tests. From the results, it has become clear that the main part of UVR reaching the Earth's surface were related to UVA band. Moreover, as the intensity of the UVR during summer day increases along with temperature of the air, a method of UV health risk reduction should be devised.

Keywords: UV radiation, temperature, light meter model YK-35UV, measurement, statistical analysis.