



1 First case studies of 3-D-Monte-Carlo Radiative transfer calculations in mountainous terrain in the UV wavelength range

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Radiative transfer in complex topography, e.g. in the alps, still pose a field of challenges. The slightly modified 3-D-Monte-Carlo model GRIMALDI is used to model the radiation field around Sonnblick in the alps. The topography is taken into account using a high resolution digital elevation map. The effect of variable albedo, due to snow cover is investigated. For this preliminary study a cloudless atmosphere is assumed. The results of the model calculations for real case studies are compared to measurements taken with a Bentham spectroradiometer DM 150 on top of Sonnblick

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