

Comparison of measured and modelled UV spectral irradiance at the Izaña station based on LibRadtran and UVA-GOA models.

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On this work we will compare spectral measurements made with the spectroradiometer *Bentham DMT 300* (UIIMP, University of Innsbruck, Institute of Medical Physics) and the simulations obtained with two radiative transfer models *UVA-GOA* and *LibRadtran*. The measurements were made on the 1st of June of 2005, during the *QASUME* (Quality Assurance of Solar Ultraviolet Spectral Irradiance Measurements) intercomparison at the Izaña station. This station belongs to AEMET (Meteorological State Agency), and is located on Tenerife Island (Spain) at 2.400 m above sea level. (28°17.9' N, 16°24.96' W) The total ozone column data were provided by the *Brewer #157* spectroradiometer and the aerosol data were provided by *AERONET*. The results for the *UVA-GOA* model show that for wavelengths lower than 320 nm the differences are between the 20%-30% at 280 nm and 10% at 320 nm. For the *LibRadtran* model the differences are between 20% at 280 nm and 3%-5% at 320 nm. These differences between both models are due to the different way to obtain the simulations on each model. For the range between 320 nm and 400 nm, the differences are lower than 5% for the comparison between both models and the measurements.