

# Variations in UV radiation in Chile

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The first observation of UV global radiation in Chile with a portable multichannel radiometer are reported. Four UV wavelengths are included: 305, 320, 340 and 380 nm. Observation latitudes spanning from 18° to 53 °S allow an estimation of latitudinal variations in daily maxima for both summer and winter. Measurements over Santiago deviate from a smooth latitudinal profile, probably as a consequence of urban air pollution. The main effect of this is to prevent UV solar radiation from reaching the ground, especially during winter. Altitudinal increments in UV radiation are estimated by comparing observations along the coast and valleys with others on the Andes and one isolated summit. Diurnal variations in the height increment support an increase from morning to evening. The results indicate that in rural areas the altitudinal increment is lower (4%-10% per kilometre) than that reported for Europe, reaching very low magnitudes (2% or less) in the Andean summits of desert regions. © 1995