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UV-B radiation behavior at southern space observatory (29.4°S, 53.8°W): 2000 - 2003 Brewer data

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UV-B radiation has been monitored using MKII (2000 â 2002) and MKIII (2002 â 2003) Brewer Spectrophotometers, taking spectral irradiance with a resolution of 0.5 nm between 290-325 nm and 286.5-363 nm respectively. The UV irradiance data employed were daily integral of the wavelengths 300, 305 and 310 nm, daily integral from 290 to 325 nm and biologically effective daily integral (the convolution of the irradiance data with Mckinlay-Diffey Action Spectrum). Analyzing the data, for example, for Autumn 2001 - Summer 2002, the means (at 305 nm) for the daily integral in 10² J/m²nm units were derived: 2.14+/-1.60 in autumn, 1.64+/-1.00 in winter, 5.50+/-2.50 in spring and 6.80+/-2.60 in summer, where the errors represent 2+/- . However, the biologically effective daily integral between 290 â 325 nm, for the same period, represented about 0.3 â 0.4

Keywords: **UV-B radiation, biologically effective radiation, behavior, brewer spectrophotometer**

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