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Measurements of UV aerosol optical depth in the French Southern Alps

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Abstract. Routine measurements of global and diffuse UV irradiances at Briançon station (1310 m a.s.l.) are used to retrieve the direct solar irradiance and the aerosol optical depth (AOD), for cloudless days. Data of three years (2003, 2004, 2005) are analyzed; the results confirm those of a preliminary analysis for 2001, 2002.

The atmosphere is very clear in winter, with AODs between 0.05 and 0.1. The turbidity increases slowly in spring, starting end of February, with AODs around 0.2–0.3 in mid summer, some values reaching 0.4. A similar behaviour is observed for all years, with somewhat higher values in late summer for the year 2003.

- [Final Revised Paper](#) (PDF, 614 KB)
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