



## Intermittency of ABL turbulence

**I.R.Cantalapiedra**(1),C.Yague(2),O.B.Mahjoub(1,3),J.M. Redondo(1)

(1) Universitat Politècnica de Catalunya, (2) Universidad Complutense de Madrid, (3) Ministerio de Asuntos Exteriores

Data from SABLES98 atmospheric boundary layer experimental campaign have been used to evaluate intermittency from the measurements of sonic anemometry at different levels and a wide range of Richardson's numbers.

The method described in [1] has been used, taking advantage of extended self similarity ESS even in the situations where the third order structure function scaling exponents are not zero. Spectral and fractal methods are used to evaluate intermittency from data described in [2]. The observations are compared with unstratified coastal low level wind turbulence [3].

[1]Mahjoub O.B., Redondo J.M. and Babiano A. (1998)Structure functions in complex flows. *Journal of Flow Turbulence and Combustion*, 59, 299-313.

[2]Cuxart et al. (2000) Stable Atmospheric Boundary Layer Experiment in Spain, A Report. *Boundary Layer Met.* 96, 337-370.

[3] Redondo J.M., Bezerra M.O., Soler M.R. an Cantalapiedra I.R. (1998) Measurements and estimates of tracer diffusion in the NW Mediterranean Sea. *Proc. IV Environmental and Eng. Geophysical Society,EEGS 95-98*. Barcelona.