



## Scaling and isotropy in the inertial range of atmospheric turbulence

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The exact law known as Kolmogorov  $4/5$  law is one of the most important results in fluid turbulence. Obtained with the hypotheses of incompressibility, homogeneity and isotropy, it defines the extension of the inertial range of the turbulent cascade. When the global isotropy hypothesis is released for a less restrictive local isotropy, the law can still be used in a more general form, known as Yaglom law. In the isotropic case the two laws must have a well defined ratio at each scale. The study of the ratio between the two laws can thus give information about the isotropy properties of the system.

The two laws are compared here using atmospheric boundary layer wind data taken in Spain under stable and unstable conditions. It is shown that isotropy is observed, but not always verified in the dataset.