

Call for one-year postdoctoral position (2017)

Variability of the lower atmosphere and turbulence in a coastal area
observed by a Doppler wind lidar

Keywords	Atmospheric dynamics; atmospheric turbulence; Doppler(wind) lidar
Project	<p>A Doppler wind lidar has been settled on Dunkerque port in order to characterize the wind potential of the region. The resulting wind profile database will include at least one year of continuous observations recorded with a high temporal resolution in the first 200m above ground level. The postdoctoral researcher will be in charge of analyzing this database, including:</p> <ul style="list-style-type: none"> • Statistical analysis, also using ancillary data (sonic anemometer, Doppler radar... or Lagrangian back-trajectories). • Detection of particular events such as sea/land breezes, fogs, storms, strong vertical wind shear... and study of their impact on the wind profile. • Assess if the parameters of atmospheric turbulence (wind variances, momentum fluxes, turbulent kinetic energy) can be retrieved from high temporal resolution wind lidar profiling, and validate the results in regards with other observations. <p>This project takes place in the framework of the regional program CLIMIBIO¹ and of the Labex program CaPPA².</p>
Qualifications	The candidate should have a PhD in physics of the atmosphere or in meteorology. He/she should have expertise in one or more of the followings fields: lidar, micrometeorology, atmospheric turbulence. Skills in data analysis and computer programming (Matlab or equivalent) are also required.
Application	Candidates are invited to send their application by email, including a statement of research activities, a cover letter, a CV, as well name and address of two referees who could write a recommendation letter.
Salary	2020 € net.
Dates	The candidate should be available for starting on January 1 st 2017 as the contract ending date cannot exceed December 31 2017.
Lab location	Laboratory for Physico-Chemistry of the Atmosphere (LPCA) Université du Littoral-Côte d'Opale (ULCO) 189A, avenue Maurice Schumann, 59140 Dunkerque, France
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¹ CLIMIBIO: Changement climatique, Dynamique de l'atmosphère, Impacts sur la biodiversité et la santé humaine. <http://climibio.univ-lille.fr/> (in French).

² CaPPA: Chemical and Physical Properties of the Atmosphere. <http://www.labex-cappa.fr/> (in French).