



## **Metrological capabilities of Scanning Long Range Doppler Lidars**

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Many application areas are interested in getting wind measurements within the Planetary Boundary Layer (PBL) height, and with a relatively high accuracy. These applications include meteorology like PBL studies, air traffic safety like aircraft induced wake vortices and wind shears detection or wind farming like wind resources assessment.

In order to answer these demands there are recent developments and deployments of long-range vertical profiler or fully hemispherical scanning wind lidars.

To validate the measurements provided by such a system, it is possible to make inter-comparisons with a met mast at short distance and with wind profilers radar or sodar at longer distance. But, there are difficulties that may arise from the implementation of this kind of methodology because of the uncertainty related to the campaign set-up and the instruments used as reference.

In that perspective Leosphere is developing a method to assess the accuracy of the Leosphere's lidars.

In this presentation, we will give a detail description of the method and its results.