Accuracy of dual-Doppler lidar retrievals of near-shore winds - DTU Orbit (12/10/2019)

**Accuracy of dual-Doppler lidar retrievals of near-shore winds**

Abstract: In this presentation the accuracy in retrieving horizontal wind speed and wind direction using a dual-Doppler lidar system will be described. First, the line of sight wind speed uncertainty is described followed by the detailed description of the various sources of errors in laser beam pointing with a particular focus on static errors. A methodology for assessing static pointing errors is presented accompanied with results from the method implementation. Afterwards, mathematical relations for the horizontal wind speed and wind direction uncertainties are derived. For the end, the derived mathematical relations are implemented for the uncertainty assessment of the dual-Doppler retrievals of near-shore winds that took place during the RUNE experiment.

**General information**

Publication status: Published
Organisations: Department of Wind Energy, Meteorology & Remote Sensing
Contributors: Vasiljevic, N., Courtney, M.
Publication date: 2017
Media of output: PowerPoint

**Event Information**

Event: WindEurope Resource Assessment Workshop 2017
Location: Edinburgh International Conference Centre, Edinburgh, United Kingdom
Electronic versions:
Submitted_Vasiljevic.pptx

Research output: Non-textual form › Sound/Visual production (digital) – Annual report year: 2017 › Research