



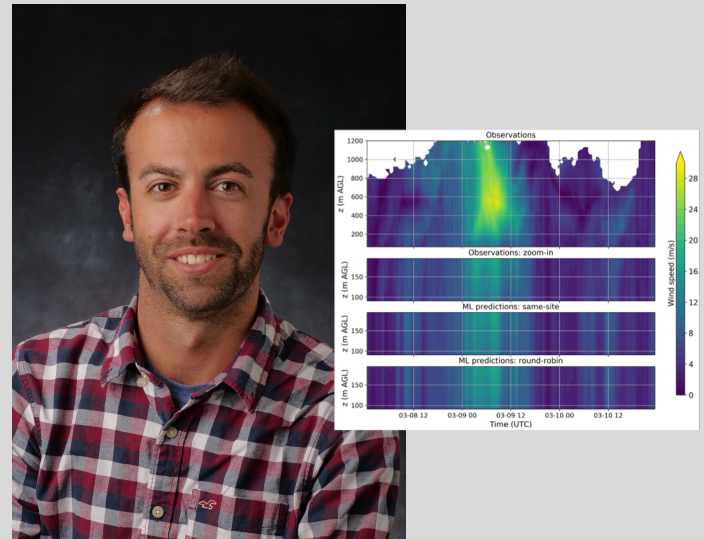
ATOC COLLOQUIUM

Welcome!

Please join us for the next ATOC Colloquium on **Friday, March 11** from **11:00 AM–12:00 PM**, which will be held in **SEEC S228 and simulcast over Zoom**. This week's colloquium features **Dr. Nicola Bodini (NREL)**. Please join us for coffee beginning at 10:45 AM and stay for lunch from Illegal Pete's afterwards. **Please be aware that masks are now optional on the CU Boulder campus.**

How can we leverage machine learning in the wind energy sector?

As we now have access to a huge amount of atmospheric observations, machine learning (ML) offers unprecedented opportunities for improved understanding and new discoveries in a variety of wind energy applications. In this talk, a brief, basic introduction to machine learning for Earth sciences will be given. Then, two examples of ML applications in the wind energy sector will be presented. First, the focus will be on how to use ML-based approaches to vertically extrapolate wind speed to the heights of interest for wind energy purposes, both onshore and offshore. Next, machine learning will be leveraged to propose several augmentations to the current industry standard for the operational assessment of wind plant annual energy production.



Location: SEEC S228 & Zoom

Zoom:

<https://cuboulder.zoom.us/j/95824397766>

Password: ATOC

About the ATOC Colloquium

The Department of Atmospheric and Oceanic Sciences (ATOC) Colloquium is typically held **every other Friday** from **11:00 AM–Noon**. Colloquia alternate between the following formats: (A) Full-length talk by a faculty member or invited speaker, (B) Three conference-length talks by graduate students. If you would like to nominate a speaker (including self), please email the ATOC Colloquium Committee Chair, Prof. Jan Lenaerts (jan.lenaerts@colorado.edu). Please visit www.colorado.edu/atoc/colloquium for further details.