

Prof. Julie K. Lundquist

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Prof. Lundquist leads an interdisciplinary research group in the Dept. of Atmospheric and Oceanic Sciences, University of Colorado, with a joint appointment at the National Renewable Energy Laboratory. Her research group uses observational and computational approaches to understand the atmospheric boundary layer, with emphasis on atmospheric influences on turbine productivity, turbine wake dynamics, and downwind impacts of wind energy. Before joining CU-Boulder, Dr. Lundquist designed and led wind energy projects at Lawrence Livermore National Laboratory. Her Ph.D. is in Astrophysical, Planetary, and Atmospheric Science from CU-Boulder, as is her M.S. degree. She studied English and Physics as an undergraduate at Trinity University, San Antonio, Texas. She has authored or co-authored over 65 refereed publications and nearly 200 conference presentations. Beyond wind energy, her current research projects include assessment of dissipation rate in the atmospheric boundary layer (NSF-CAREER), flow in complex terrain (NSF: Perdigão), and improving simulation capabilities for wildfire (DOI) and urban fires (OPP).