

Synergistic Activities: Dr. David J. Delene (ORCID 0000-0002-2733-6021)

Broader Participation

Dr. David Delene has been the Cloud Probes Principal Investigator (PI) on the recent NASA IMPACTS field project, which focuses on understanding snowstorm events. The NASA IMPACTS project has a broad participation of scientist with vastly different backgrounds. Dr. Delene has been PI on several projects involving research aircraft sampling, which include SARPEC, CapeEX19, CAPE2015, POLCAST. Additionally, Dr. Delene participated in many aircraft field projects (e.g. ORACLES, OLYMPEx, IPHEX, GCPeX, MC3E) during career. Dr. Delene provides field experience opportunities to students from underrepresented minority (URM) groups. Effective mentoring practices are central to Dr. Delene's efforts at enhancing representation from all groups and encouraging student to uptake careers in scientific research.

Education

In college course offered, Dr. Delene aims to implement improvements in teaching techniques, incorporating experimental learning into course work and providing demonstrations utilizing research instrumentation and show recent observations to students. Dr. Delene has mentored over 60 undergraduate students, including seven Experimental Learning undergraduate students working on research projects with undergraduate salary support from the State of North Dakota. Dr. Delene offers a "Plotting and Programming in Python" 12 hour workshop, yearly for undergraduate and graduates student to provide the programming tools necessary to analyze scientific data sets.

Outreach

Dr. Delene has been involved in outreach to K-12 through the coordination of hands-on activities, demonstration of scientific instruments, and precipitation at science fairs. Dr. Delene has a website with videos, blogs and real-time observations made available for the public to learn about atmospheric operations. Dr. Delene has conducted several press-releases related to research project and student activities, and has taking part in several news interviews.

Awards

Student Chapter of the American Meteorology Society 'Golden Remer' Award (April 2018).

University of North Dakota's 'Spirit Faculty Achievement' Award (May 7, 2014).

Student Chapter of the American Meteorology Society 'Golden Remer' Award (April 2013).

Student Chapter of the American Meteorology Society 'Golden Remer' Award (April 2007).

Review

Reviewer for grant proposals and journals in field of atmospheric observations, aerosols and cloud physics. Dr. Delene has been a reviewer of articles for Journals such as Journal of Atmospheric and Oceanic Technology, Remote Sensing, Biointerphase, Journal of Atmospheric Measurement Techniques, Journal of Atmospheric Research, Bulletin of the American Meteorological Society, Journal of Geophysical Research, Journal of Atmospheric Chemistry and Physics, and Atmospheric Environment. Dr. Delene has been a reviewer of proposals for NSF, DOE Office of Science, NASA Postdoctoral Program, National Science Centre Poland, NASA Instrument Incubator Program, NASA Experimental Program to Stimulate Competitive Research, and NASA ESTO's.