Danielle Groenen, Ph.D.

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EDUCATION

Ph.D., Meteorology, Florida State University, Tallahassee, FL   Aug 2019
M.S., Atmospheric Science, University of California, Davis, CA   Dec 2009
B.S., Physics, University of York, UK   July 2006

RESEARCH/SCIENCE EXPERIENCE

Research Scientist, University of Alabama in Huntsville   Jan 2021 – present
NASA Interagency Implementation and Advanced Concepts Team (IMPACT)
Projects: NASA's Airborne Data Management Group (ADMG) and the Multi-Mission
Algorithm and Analysis Platform (MAAP)
Supervisor: Dr. Sundar Christopher

Senior Research Scientist, Hampton, VA   Aug 2019 – Jan 2021
Science Systems and Applications, Inc. (SSAI)
Atmospheric Science Data Center (ASDC) at NASA Langley Research Center
Supervisor: Lindsay Parker

Graduate Research Assistant, Florida State University, FL   Mar 2014 – June 2019
Ph.D. Dissertation Title: *Diagnosing the Atmospheric Phenomena Associated with the Onset and Demise of the Rainy Season in Mesoamerica*
Advisor: Dr. Mark Bourassa

Internships at NASA/JPL, Pasadena, CA   Summer 2014 & 2016
Advisors: Drs. Huikyo Lee, Paul Loikith, and Duane Waliser

Graduate Student Researcher, U.C. Davis, CA   Sep 2007 – Sep 2009
Master's Thesis Title: *Study of Cloud Tilting Properties using 2-D Cloud Simulations*
Advisor: Dr. Shu-hua Chen

OUTREACH AND COMMUNICATION

Guest on "Engineers for a Sustainable World (ESW) Talks." Talk was recorded and will be put on the ESW Talks YouTube channel. Video presentation, July 9, 2021.

Rivera, Elisa and Miguel Fraga. Guest on "Episode 5 - Monitoring Earth's Health." *Borderless Sustainability*. Podcast audio, February 14, 2021. Listen here.

Groenen, Danielle, Sanjana Paul, and Madison Broddle. Author and presenter of "Data Driven Storytelling Using Atmospheric Data to Share Your Science." *NASA Earthdata* webinar. Recorded on March 25, 2020. YouTube recording here.

PUBLICATIONS

Groenen, D., 2018: The Effects of Climate Change on the Pests and Diseases of Coffee Crops in Mesoamerica. *J. Climatol. Weather Forecasting*, **6: 239.** doi:10.4172/2332-2594.1000239

Misra, V., **D. Groenen**, A. Bharadwaj, and A. Mishra, 2016: The warm pool variability of the tropical northeast Pacific. *Int. J. Climatol.*, **36 (14):** 4625–4637, doi:10.1002/joc.4658

HONORS, AWARDS AND CERTIFICATES
- Yale School of Public Health's Climate Change and Health Certificate Program (2019)
  → Part of the inaugural cohort
- NASA Earth and Space Science Fellow (NESSF), 2015-2018
  - Project Title: *Mid-Summer Droughts Amidst Landfalling Tropical Cyclones and Atmospheric Rivers*
- Professional Teaching Certification in Florida covering Physics (6-12) (valid from 2010-2017)

TEACHING EXPERIENCE
Instructor, Florida State University, Tallahassee, FL   Aug 2013 - Apr 2014
Introduction to the Atmosphere lecture section (42 students) in Fall 2013
Introductory Meteorology lab section (23 students) in Spring 2014

Outreach Specialist, Deep-C Consortium, Tallahassee, FL   Aug 2013 - Mar 2014
Developed curriculum for brand new citizen science initiative called Project GOO (Gulf Oil Observers)

Physics Teacher, Academy of the Holy Names, Tampa, FL   Aug 2011 - June 2013
1 class of Physics Honors at 9th grade level
4 classes of Physics College Prep at 9th grade level

Physics Teacher, Howard W. Blake High School, Tampa, FL   Aug 2010 - June 2011
3 classes of Physical Science at 10th grade level
2 classes of Physics Honors at 11th and 12th grade levels
1 class of AP Physics B at 11th and 12th grade levels

Math and Physics Tutor   Nov 2009 - Dec 2012
Private tutor for junior high, high school and college students in Geometry, Algebra I and II, Trigonometry, SAT Math, and Physics

Teaching Assistant, U.C. Davis, CA   Jan - March 2009
Global Climate Change lecture section (100 students)
- Graded weekly quizzes and exams, held office hours

PROFESSIONAL MEMBERSHIPS
- American Geophysical Union (2007-present)
- FSU Fellows Society (2016-present)
- Chi Epsilon Pi, Meteorology Honors Society (2014-present)
  - President-Elect 2015-2016

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SKILLS

- Proficient in Microsoft Outlook, Word, PowerPoint, and Excel
- Proficient in Slack, Microsoft Teams, Trello, Jira/Confluence, SharePoint, Zoom, Google Meet and Google Drive
- Proficient in the following programming languages: Python, Fortran, Matlab, GrADS, R Studio
- Knowledge of NASA satellite mission's data management procedures
- Experience as Product Owner (PO) and Scrum Master in a SAFe Scaled Agile business framework
- Beginner's knowledge of Esri ArcGIS Pro and ArcGIS StoryMaps
- Strong communication skills – proficient in writing and editing scientific papers and extensive public speaking experience

LANGUAGES

- English – Native
- French – Intermediate
- Spanish – Intermediate
- Dutch – Beginner