

Education

2016 – 2021: Ph.D., Meteorology and Atmospheric Science, *The Pennsylvania State University* **GPA: 3.98**
2012 – 2016: B.S., Atmospheric and Oceanic Sciences (with honors), *Stony Brook University*
2012 – 2016: B.S., Applied Mathematics and Statistics, *Stony Brook University*

Publications

Clark, J. P., E. E. Clothiaux, S.B. Feldstein, and S. Lee 2021: Drivers of Surface Downwelling Longwave Irradiance Changes from 1984 through 2017. (*In prep: The first draft is complete*).

Clark, J. P. and S.B. Feldstein, 2021: The Temperature Anomaly Pattern of the Pacific North/American Teleconnection: Growth, Decay and Phase Asymmetries. *J. Atmos. Sci.*, (*Submitted*).

Clark, J. P., V. Shenoy, S. B. Feldstein, S. Lee, and M. Goss, 2021: The Role of Horizontal Temperature Advection on Arctic Amplification. *J. Climate*. (Early Online Release: <https://doi.org/10.1175/JCLI-D-19-0937.1>)

Clark, J. P. and S. B. Feldstein, 2020: What Drives the North Atlantic Oscillation’s Temperature Anomaly Pattern? Part II: A Decomposition of the Surface Downward Longwave Radiation Anomalies. *J. Atmos. Sci.*, **77**, 199-216. <https://doi.org/10.1175/JAS-D-19-0028.1>

Clark, J. P. and S. B. Feldstein, 2020: What Drives the North Atlantic Oscillation’s Temperature Anomaly Pattern? Part I: The Growth and Decay of the Surface Air Temperature Anomalies. *J. Atmos. Sci.*, **77**, 185-198. <https://doi.org/10.1175/JAS-D-19-0027.1>

Clark, J. P., and S. Lee, 2019: The Role of the Tropically Excited Arctic Warming Mechanism on the Warm Arctic Cold Continent Surface Air Temperature Trend Pattern. *Geophys. Res. Lett.*, **46**, 8490-8499. <https://doi.org/10.1029/2019gl082714>

Teaching Assistantships

2020 (Spring): Meteo 003 – Introductory Meteorology
2017 (Fall): Meteo 470 – Climate Dynamics
2017 (Spring): Meteo 411 – Synoptic Meteorology Laboratory

Substitute Teaching Experience

2019 (10/15): Meteo 422 – Advanced Atmospheric Dynamics (covered the general circulation)
2019 (09/30): Meteo 422 – Advanced Atmospheric Dynamics (covered the QG-Omega eqn.)

Guest Lectures

2020 (12/03): Meteo 421 – Atmospheric Dynamics (a discussion of Clark and Feldstein 2020a)

Workshops

2019 (11/05): iSTEAM “Now You Sea It, Now You Don’t: Investigating Arctic Sea Ice”
Role: Lecturer (NSF-funded outreach workshop for middle and high school teachers)
2019 (04/20): iSTEAM “Now You Sea It, Now You Don’t: Investigating Arctic Sea Ice”
Role: Lecturer (NSF-funded outreach workshop for middle and high school teachers)

Presentations (* denotes award winner; • denotes oral; ○ denotes poster)

- **Clark, J. P.**, S. B. Feldstein and S. Lee. “Is Arctic amplification an Average of Externally-Forced Changes in the Weather?” American Meteorological Society Annual Meeting. Online, January 11-15, 2021
- **Clark, J. P.**, S. B. Feldstein and S. Lee. “The Role of Horizontal Temperature Advection on Arctic Amplification.” Earth System Science Center (ESSC) / Climate Dynamics Seminar: Online, October 14, 2020
- **Clark, J. P.** and S. B. Feldstein. “The Processes that drive the Temperature Anomalies of the Pacific/North American Teleconnection Pattern.” American Meteorological Society Annual Meeting: Boston, MA, January 12-16, 2020
- **Clark, J. P.** and S. Lee. “The Role of the Tropically Excited Arctic Warming Mechanism on the Warm Arctic Cold Continent Surface Air Temperature Trend Pattern.” American Meteorological Society Annual Meeting: Boston, MA January 12-16, 2020

- **Clark, J. P.** and S. B. Feldstein. “What Drives the North Atlantic Oscillation's Surface Air Temperature and Skin Temperature Anomaly Patterns?” American Meteorological Society Atmospheric and Oceanic Fluid Dynamics Conference: Portland, ME, June 24-28, 2019
- **Clark, J. P.** and S. B. Feldstein. “The Relationship of the North Atlantic Oscillation's Vertical Temperature Structure and Water Budget to the Surface Downward Longwave Radiation Anomaly Pattern.” American Meteorological Society Atmospheric and Oceanic Fluid Dynamics Conference: Portland, ME, June 24-28, 2019
- **Clark, J. P.** and S. B. Feldstein. “What Drives the North Atlantic Oscillation's Surface Air Temperature and Skin Temperature Anomaly Patterns?” Frank Talk: Penn State, Dept. of Meteorology and Atmospheric Science, April 17, 2019
- **Clark, J. P.** and S. B. Feldstein. “What Drives the North Atlantic Oscillation’s Surface Air Temperature Anomaly Pattern?” American Meteorological Society Annual Meeting: Phoenix, AZ, January 6-10, 2019
- * **Clark, J. P.**, Feldstein, S. B., and S. Lee. “On the role of horizontal temperature advection for the inter-decadal Arctic warming trend.” American Meteorological Society Annual Meeting: Phoenix, AZ, January 6-10, 2019
- **Clark, J. P.** and S. B. Feldstein. “What Drives the North Atlantic Oscillation’s Surface Air Temperature Anomaly Pattern?” American Geophysical Union Fall Meeting: Washington D.C., December 10-14, 2018
- **Clark, J. P.** and S. B. Feldstein. “What drives the NAO’s Surface Air Temperature Anomaly Pattern?” First-Year Graduate Student Symposium, Penn State, Dept. of Meteorology and Atmospheric Science: August 18, 2017
- **Clark, J. P.** and E. K. M. Chang, “Modulation of Winter Precipitation by Extratropical Cyclone Activity over Mid-Latitude Regions.” American Meteorological Society Annual Meeting Student Conference: New Orleans, LA, January 10-14, 2016

Technical Skills

Shell scripting, NCAR Command Language (NCL), MATLAB, Fortran 90, Community Earth System Model (CESM), Rapid Radiative Transfer Model (RRTMG), Held-Suarez Idealized GFDL Dynamical core

Professional Memberships

Since 2015: American Meteorological Society

Since 2018: American Geophysical Union

Since 2021: European Geosciences Union

Professional Service

Reviewer for: *Science Advances*, *Journal of Climate*, *Climate Dynamics*, *Journal of Geophysical Research: Atmospheres*, *Journal of Applied Meteorology and Climatology*, *International Journal of Climatology*

Awards and Recognitions

01/2019: Outstanding Student Presentation Award, American Meteorological Society Annual Meeting

05/2016: Undergraduate Recognition Award for Academic Excellence

06/2016: America East All-Academic Team for Outdoor Track & Field

03/2016: America East All-Academic Team for Indoor Track & Field

11/2015: America East All-Academic Team for Cross Country