

Joseph P. Clark

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Education

2016 – present: Ph.D., Meteorology and Atmospheric Science, *The Pennsylvania State University*

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., V. Shenoy, S. B. Feldstein, S. Lee, and, M. Goss, 2019: The Role of Horizontal Temperature Advection on the Interdecadal Arctic Winter Warming Trend. (*In prep*).

Clark, J. P. and S. B. Feldstein, 2019: What Drives the North Atlantic Oscillation's Temperature Anomaly Pattern? Part II: A Decomposition of the Surface Downward Longwave Radiation Anomalies. *J. Atmos. Sci.* (*In press*). <https://doi.org/10.1175/JAS-D-19-0028.1>

Clark, J. P. and S. B. Feldstein, 2019: 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.* (*In press*). <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 Experience

2019 (10/15): Meteo 422 – Advanced Atmospheric Dynamics, substitute teacher (covered the general circulation)

2019 (09/30): Meteo 422 – Advanced Atmospheric Dynamics, substitute teacher (covered the QG-Omega eqn.)

2019 (04/20): iSTEAM “Now You Sea It, Now You Don't: Investigating Arctic Sea Ice” workshop, teacher

2017 (Fall): Meteo 470 – Climate Dynamics, teaching assistant

2017 (Spring): Meteo 411 – Synoptic Meteorology Laboratory, teaching assistant

Presentations (* denotes award winner)

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

Professional Memberships

Since 2015: American Meteorological Society

Since 2018: American Geophysical Union

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