NICHOLAS JAMES LUTSKO

Postdoctoral Associate at MIT
Department of Earth, Atmospheric and Planetary Sciences

Email: lutsko@mit.edu
Website: https://nicklutsko.github.io

54-1823, Building 54
77 Massachusetts Avenue MIT
Cambridge, MA 02139.

Education

2012-2017 **Ph.D.** Princeton University.
Thesis title: Aspects of Eddy Momentum Fluxes in the General Circulation of the Troposphere.
Adviser: Professor Isaac Held

2008-2012 **Msci.** Geophysics, Imperial College London

Publications

2018 Lutsko, N. J. and Takahashi, K. (2018). What can the internal variability of cmip5 models tell us about their climate sensitivity? *Journal of Climate*, Accepted

Lutsko, N. J. (2018). The response of an idealized atmosphere to enso-like heating: Superrotation and the breakdown of linear theory. *Journal of the Atmospheric Sciences*, 75:3–20

2017 Popp, M. and Lutsko, N. J. (2017). Quantifying the zonal-mean structure of tropical precipitation. *Geophysical Research Letters*, 44(18):9470–9478. 2017GL075235

Lutsko, N. J., Held, I. M., Zurita-Gotor, P., and O'Rourke, A. K. (2017). Lower tropospheric eddy momentum fluxes in idealized models and reanalysis data. *Journal of the Atmospheric Sciences*, 74:3787 – 3797

2016 Lutsko, N. J. and Held, I. M. (2016). The response of an idealized atmosphere to orographic forcing: Zonal vs meridional propagation. *Journal of the Atmospheric Sciences*, 73(8):3701 – 3718

2015 Lutsko, N. J., Held, I. M., and Zurita-Gotor, P. (2015). Applying the fluctuation–dissipation theorem to a two-layer model of quasi-geostrophic turbulence. *Journal of the Atmospheric Sciences*, 72(8):3161 – 3177

Confererence Presentations

2017	**AOFD** *(Talk)* Lower Tropospheric Eddy Momentum Fluxes in Idealized Models and Reanalysis Data
2016	**AGU** *(Talk)* What Can the Internal Variability of Climate Models Tell Us About Their Climate Sensitivity?
	Model Hierarchies Workshop *(Poster)* The Responses of Idealized Atmospheric Models to Orographic Forcing
2015	**AOFD** *(Talk)* The Response of the Mid-Latitudes to Idealized Orography in the Presence of a Jet
	AOFD *(Poster)* Applying the Fluctuation–Dissipation Theorem to a Two-Layer Model of Quasi-Geostrophic Turbulence

Seminars

2018	Laboratoire de Meteorologie Dynamique, NYU, MIT
2017	University of Chicago, Geophysical Fluid Dynamics Laboratory (thesis defense), Columbia University

Professional Activities

Reviewer Journal of the Atmospheric Sciences, Journal of Climate, Geophysical Review Letters, GFDL Internal Reviews.

June 2017	**AOFD Session Chair** *Theme:* Theoretical Advances in AOFD.
August 2015	**Organizer** Princeton AOS Workshop. *Theme:* Using Climate Models to Study Extreme Climates.
Fall 2013 – Spring 2014	**Organizer** Princeton AOS Student Seminar series.

Awards, Fellowships and Summer Schools

2016	Rossbypalooza
2014	Cambridge FDSE Summer School
2013–2016	NSF Graduate Research Fellowship
2012	Princeton University Centennial Fellowship
2012	Imperial College Governor's Prize
2009	EPSRC Summer Research Grant
2008	R. Stoddard Longcroft Prize at Imperial College

Teaching

Spring 2016	**Assistant Instructor** Princeton GEO202: Ocean, Atmosphere, and Climate (with Professor Allison Gray)
Fall 2015	**Assisted with class projects** Princeton AOS576: Current Topics in Dynamic Meteorology Large-Scale Structure/Atmosphere (with Professor Isaac Held)

Outreach

2018	**Hosted lab visit** with students in MIT Executive MBA Program.
	Participant Climate Changed competition.