### NICHOLAS JAMES LUTSKO

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

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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. (2018). The response of an idealized atmosphere to enso-like heating: Superrotation and the breakdown of linear theory. <i>Journal of the Atmospheric Sciences</i> , 75:3–20
2017	Popp, M. and Lutsko, N. J. (2017). Quantifying the zonal-mean structure of tropical precipitation. <i>Geophysical Research Letters</i> , 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. <i>Journal of the Atmospheric Sciences</i> , 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. <i>Journal of the Atmospheric Sciences</i> , 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. <i>Journal of the Atmospheric Sciences</i> , 72(8):3161 – 3177

#### Conference 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
2017	University of Chicago, Geophysical Fluid Dynamics Laboratory (thesis defense),
	Columbia University

### **Professional Activities**

**Reviewer** Journal of the Atmospheric Sciences, Journal of Climate, 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)