

# NICHOLAS JAMES LUTSKO

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

Email: [lutsko@princeton.edu](mailto:lutsko@princeton.edu)  
Website: <https://nicklutsko.github.io>

Program in Atmospheric and Oceanic Sciences  
300 Forrester Road, Sayre Hall  
Princeton, NJ 08544.

## 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

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| Under review | Lutsko, N. J., Held, I. M., and Takahashi, K. What can the internal variability of cmip5 models tell us about their climate sensitivity? <i>Journal of Climate</i> , Submitted   |
| 2017         | Lutsko, N. J. (2017). The response of an idealized atmosphere to enso-like heating: Superrotation and the breakdown of linear theory. <i>Journal of the Atmospheric Sciences</i> , In press                                |
|              | Popp, M. and Lutsko, N. J. (2017). Quantifying the zonal-mean structure of tropical precipitation. <i>Geophysical Research Letters</i> , In press  |
|              | 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> , In press           |
| 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

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

## Seminars

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| 2017 | University of Chicago, Geophysical Fluid Dynamics Laboratory (thesis defense),<br>Columbia University |
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## 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

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| 2016      | Rosbypalooza                                    |
| 2014      | Cambridge FDSE Summer School                    |
| 2013–2016 | NSF Graduate Research Fellowship                |
| 2012      | Princeton University Centennial Fellowship      |
| 2012      | Imperial College Governor’s Prize               |
| 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)