

Saska Gjorgjievska

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Education

- **New Mexico Institute of Mining and Technology (NMT)** Socorro, NM
Ph.D. in Physics with Dissertation in Atmospheric Physics
2006 - 2014
Dissertation topic: Interaction between dynamics and thermodynamics during tropical cyclogenesis.
- **Sts. Kiril and Metodij University** Skopje, Macedonia
Diploma in Meteorology
2003 - 2006
- **Sts. Kiril and Metodij University** Skopje, Macedonia
Curricula from the program of Bachelor of Science, Physics
1993 - 1996

Work Experience

- **Postdoctoral Research Scientist, NMT** 2014 - Present
- **Research Assistant, Geophysical Research Center, NMT** 2006 - 2014
- **Medical Technician, Macedonia** 1998 - 2006

Skills

- Programming and analysis software: Matlab, Octave, Candis (C-language Analysis & Display), Python, Maxima, and Maple.
- Familiarity with Open Office and MS Office.
- Familiarity with Unix, Linux, Mac OS and Windows environments.
- Fluent in English and Macedonian.
- Proficient in Serbian, Croatian, and Bulgarian.

Awards and Professional Affiliations

- Recipient of the Langmuir Award for Excellence in Research
- Member of the American Meteorological Society (AMS)

- Member of the Sigma Pi Sigma Honor Society (SPS)
- Member of the Society of Physics Students

Publications

- Raymond, D. J., Ž. Fuchs, S. Gjorgjievska, and S. Sessions, 2015: Balanced dynamics and thermodynamic constraints in the tropical troposphere. *J. Adv. Model. Earth Syst.*, **07**, doi:10.1002/2015MS000467.
- Raymond, D. J., S. Gjorgjievska, S. Sessions, and Ž. Fuchs, 2014: Tropical cyclogenesis and mid-level vorticity. *Aust. Meteorol. Oceanogr. Soc. J.* **64**, 11-25.
- Gjorgjievska, S., and D. J. Raymond, 2014: Interaction between dynamics and thermodynamics during tropical cyclogenesis, *Atmos. Chem. Phys.*, **14**, 3065-3082, doi:10.5194/acp-14-3065-2014.
- Fuchs, Ž., S. Gjorgjievska, and D. J. Raymond, 2012: Effects of Varying the Shape of the Convective Heating Profile on Convectively Coupled Gravity Waves and Moisture Modes, *J. Atmos. Sci.*, **69**, 2505–2519.
- Clark Evans, H. M. Archambault, J. M. Cordeira, C. Fritz, T. J. Galarneau Jr., S. Gjorgjievska, K. S. Griffin, A. Johnson, W. A. Komaromi, S. Monette, P. Muradyan, B. Murphy, M. Riemer, J. Sears, D. Stern, B. Tang, S. Thompson. 2012: The Pre-Depression Investigation of Cloud-Systems in the Tropics (PREDICT) Field Campaign: Perspectives of Early Career Scientists, *Bull. Amer. Meteor. Soc.*, **93**, 173–187.

Conferences

- 2015 HS3 Science Team Meeting, NASA Ames Research Park, Mountain View, CA, USA (May 2015). *Mesoscale Convective Mass Flux in Tropical Cyclones* (talk)
- 31st Conference on Hurricanes and Tropical Meteorology, San Diego, CA, USA (March 2014). *The decay of tropical storm Gaston (2010)* (talk)
- Workshop on Tropical Dynamics and the MJO, University of Hawaii, Honolulu, HI, USA (January 2014). *Interaction between dynamics and thermodynamics during tropical cyclogenesis* (talk)
- Dynamics and Predictability of High-impact Weather and Climate Events, An ICDM Workshop, Kunming, China (August 2012). *Dynamics and thermodynamics of tropical cyclogenesis* (poster)
- 30th Conference on Hurricanes and Tropical Meteorology, Ponte Vedra Beach, FL, USA (April 2012). *Dynamics and thermodynamics of tropical cyclogenesis in the North Atlantic and the Caribbean*(talk)
- Second Split Workshop in Atmospheric Physics and Oceanography, Faculty of Science, University of Split, Split, Croatia (May 2010). *Possible connection between stratospheric temperature changes and tropical cyclone activity* (talk)
- 29th Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, Tuscon, AZ, USA (May 2010). *Convectively Coupled Kelvin Waves and Moisture Modes in 3-D Simulations* (talk)
- 17th Conference on Atmospheric and Oceanic Fluid Dynamics, American Meteorological Society, Stowe, VT (June 2009). *Barotropic Instability in the Caribbean and the Tropical East Pacific* (poster)

- May, 2009: Split Workshop in Atmospheric Physics and Oceanography , Faculty of Natural Sciences and Mathematics, Physics Department, Split, Croatia (May 2009). *Buoyancy in tropical cyclones and other rapidly rotating atmospheric vortices* (talk)

Field Experiments

- PREDICT, Pre-Depression Investigation of Cloud-systems in the Tropics (Aug 15 - Sep 11, 2010.) I performed preliminary dropsonde data analysis after each mission. These preliminary results helped with planning the next mission.

Selected Relevant Coursework

- **Graduate level:** Numerical Modeling & Simulations, Atmospheric Remote Sensing, Numerical PDEs, Atmospheric Convection, Systems of ODE's, Statistical Mechanics, and Electricity & Magnetism.
- **Undergraduate level:** Statistical Methods, Numerical Methods in Fluid Dynamics, Dynamic Meteorology, Physics of Clouds, Meteorological Measurements and Observations, Boundary Layer Dynamics with Turbulence Theory, Synoptic Meteorology (weather forecast and analysis), Practicum of Analysis and Weather Forecast, Climatology, Applied Meteorology and Agrometeorology.

Teaching Experience

- Fall 2014 Instructor, Physics II