

# *Jovanka Nikolic*

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## **Contact information:**

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## **Education:**

- 2020. **Ph.D.** in Geography from Michigan State University, East Lansing, MI  
*Advisor:* Dr. Shiyuan (Sharon) Zhong
- 2012. **M.S.** in Geography, Michigan State University, East Lansing, MI
- 2007. **B.S.** in Meteorology, Department of Meteorology, Faculty of Physics, University of Belgrade, Serbia

## **Professional experience:**

- 2020 - **Postdoctoral Associate**, Indiana University, Department of Earth and Atmospheric Sciences
- 2014.-2019. **Graduate Teaching Assistant**, Michigan State University, Department of Geography
- 2010.-2014. **Graduate Research Assistant**, Michigan State University, Department of Geography.
- 2008.-2009. **Younger analyst**, Republic Hydrometeorological Service of Serbia, Numerical Weather Prediction Department

## **Teaching experience:**

- *Spring 2015, Summer 2014, 2015, 2016, 2017, 2019:*  
Online Geography Instructor (Introduction to Meteorology, undergraduate level)
- *Fall 2015, Fall 2016, Spring 2017:*  
Online Teaching Instructor (Introduction to Geographic Information LAB, undergraduate level)
- *Summer 2018:*  
Online Geography Instructor (Introduction to Geographic Information, undergraduate level)
- *Fall 2015, Spring 2016:*  
Teaching Assistant (Introduction to Meteorology, undergraduate level)
- *Fall 2016:*  
Teaching Assistant (Spatial Data Analysis, graduate level)

### **Peer Reviewed Publications:**

Winkler, J. A., A. B. Cinderich, S. D. Ddumba, D. Doubler, **J. Nikolic**, Perdinan, A. M. Pollyea, D. R. Young, and C. Zavalloni, (2013): Understanding the Impacts of Climate on Perennial Crops. *Climate Vulnerability: Understanding and Addressing Threats to Essential Resources*. Elsevier Inc., Academic Press, 3749.

Walters, C. K., J. A. Winkler, S. Husseini, R. Keeling, **J. Nikolic**, and S. Zhong, (2014): Low-Level Jets in the North American Regional Reanalysis (NARR): A Comparison with Rawinsonde Observations. *J. Appl. Meteor. Climatol.*, 53, 2093–2113.

Katurji, M., **J. Nikolic**, S. Zhong, S. Pratt, L. Yu, W. E. Heilman (2015): Application of a statistical emulator to fire emission modeling. *Journal of Environmental Modeling and Software*, 73, 254-259.

**Nikolic, J.**, S. Zhong, L. Pei, X. Bian, W. E. Heilman, J. J. Charney (2019): Sensitivity of Low-Level Jets to Land-Use and Land-Cover Change over the Continental U.S. *Atmosphere*, 10, 174.

Charney, J.J., M. Kiefer, S. Zhong, W.E. Heilman, **J. Nikolic**, X. Bian, J.L. Hom, K.L. Clark, N.S. Skowronski, M.R. Gallagher, M. Patterson, Y. Liu, and C Hawley (2019): Assessing Forest Canopy Impacts on Smoke Concentrations Using a Coupled Numerical Model. *Atmosphere*. 10(5): 273-. 24 p. <https://doi.org/10.3390/atmos10050273>.

**Nikolic, J.**, S. Zhong, L. Pei, X. Bian, W. E. Heilman, J. J. Charney (2019): The Influence of Land Use and Land Cover Change on Frost-Free Season Length Over the Contiguous United States. *Annals of the American Association of Geographers* (submitted).

Zhong, S., T. Wang, M. Shen, P. Sciusco, L. Pei, **J. Nikolic**, K. McKeehan, H. Kashongwe, P. Hatamibahmanbeiglou, K. Camacho, D. Akanga, J. Charney, Joseph, X. Bian (2009): Will land use land cover change drive atmospheric conditions to become more conducive to wildfires in the United States?. *International Journal of Climatology*(submitted).

### **Papers presented at professional meetings:**

**Jovanka Nikolic**, Sharon Zhong, Claudia Walters, and Julie Winkler: “An observational and numerical case study of the northerly low-level jet over the Great Plains of the United States”. Annual Meeting East Lakes Division of the Association of American Geographers, Grand Rapids Michigan, October 2010.

Claudia K. Walters, Sara Husseini, Julie A. Winkler, **Jovanka Nikolic** and Shiyuan Zhong: “Identifying Low-Level Jets from the North American Regional Renalysis: A Comparison with Rawinsonde Observations”. Annual Meeting, New York, February 2012.

Claudia K. Walters, Ryan Keeling, Julie A. Winkler, Dana Doubler, Xindi Bian, Shiyuan Zhong and **Jovanka Nikolic**: “Investigating the Evolution of Northerly Low-Level Jets”. Annual Meeting, Los Angeles, April 2013.

Dana Doubler, Julie A. Winkler, Claudia K. Walters, Shiyuan Zhong, Xindi Bian **and Jovanka Nikolic**: “A NARR derived low-level jet climatology for North America”. Annual Meeting, Los Angeles, April 2013.

**Jovanka Nikolic**, Shiyuan Zhong, Claudia K. Walters and Julie A. Winkler: “A observational and numerical case study of the northerly low-level jet over the Great Plains of the United States”. Annual Meeting East Lakes Division of the Association of American Geographers, Toledo, Ohio October 2013.

**Jovanka Nikolic**, Michael T. Kiefer, Shiyuan Zhong, Warren E. Heilman, Joseph J. Charney and Xindi Bian: “The effects of a Forest Canopy on the Transport and Dispersion of Smoke Plume from Low-intensity Prescribed Burns: A Numerical Study with a Coupled Model”. Meteorology and Climate Modeling for Air Quality, Sacramento September 16-18, 2015.

**Jovanka Nikolic**, Michael T. Kiefer, Shiyuan Zhong, Warren E. Heilman, Joseph J. Charney and Xindi Bian: “The effects of a Forest Canopy on the Transport and Dispersion of Smoke Plume from Low-intensity Prescribed Burns: A Numerical Study with a Coupled Model”. Triple G 2015 GIS Day Poster Gallery, Michigan State University November 18, 2015.

**Jovanka Nikolic**, Michael T. Kiefer, Shiyuan Zhong, Warren E. Heilman, Joseph J. Charney and Xindi Bian: “The Effect of Forest Gaps on the Transport and Dispersion of Smoke Plumes from Low-Intensity Wildland Fires”. 5th International Fire Behavior and Fuels Conference, Portland, OR April 11-15, 2016.

**Jovanka Nikolic**, Michael T. Kiefer, Shiyuan Zhong, Warren E. Heilman, Joseph J. Charney, Xindi Bian, Kenneth Clark, John Hom and Nicholas Skowronski: “A Numerical Study of the Effect of a Forest Canopy on the Transport and Dispersion of Smoke Plumes from Low-Intensity Prescribed Burns.: 2nd International Smoke Symposium, Long Beach November 14-18, 2016.

**Jovanka Nikolic**, Shiyuan Zhong, Lisi Pei, Xindi Bian, Warren E. Heilman, Joseph J. Charney: “The Influence of Land Use and Land Cover Change on Frost-Free Season Length Over the Contiguous United States”. Annual Meeting East Lakes Division of the Association of American Geographers, Saginaw, Michigan October 2019.

**Languages:**

Serbian (and Croatian, Bosnian, Montenegrin), English

**Rewards:**

ELDAAG Annual Meeting Student Awards, PhD Paper Oral Presentation (3rd place)  
Dissertation Completion Fellowship (DCF) for Fall 2019

**Peer-Reviewer:**

*Atmosphere, Climate*