

# Dr. Melissa S. Bukovsky

bukovsky@ucar.edu

National Center for Atmospheric Research  
P.O. Box 3000, Boulder, CO 80307-3000  
Phone: 1-303-497-8136 (office)

*As of April 2021*

## RESEARCH INTERESTS

---

- Regional climate modeling, model validation and analysis.
- Regional climate change impacts, adaptation, and uncertainty.

## EDUCATION

---

- 2004 – 2009**     **University of Oklahoma** (OU; Norman, OK)  
Ph.D., May 2009, Meteorology  
College of Atmospheric and Geographic Sciences, School of Meteorology  
Doctoral Advisors: Dr. David Karoly (CSIRO), and Dr. Frederick Carr (OU)
- 2002 – 2004**     **University of Oklahoma** (Norman, OK)  
M.S., August 2004, Meteorology  
College of Atmospheric and Geographic Sciences, School of Meteorology  
Masters Advisors: Dr. Jack Kain (NSSL), and Dr. Kelvin Droegemeier (previously OSTP)
- 2000 – 2002**     **Northern Illinois University** (NIU; DeKalb, IL)  
B.S., May 2002, Meteorology  
Department of Geography
- 1998 – 2000**     **College of DuPage** (Glen Ellyn, IL)  
A.S., August 2000

## RESEARCH EXPERIENCE

---

- Project Scientist III**, August 2020 – present
- National Center for Atmospheric Research (NCAR)/  
Computational and Information Systems Lab (CISL) & Research Applications Lab (RAL)/  
Regional Integrated Sciences Collective (RISC), Boulder, CO
- Project Scientist II**, October 2015 – July 2020  
NCAR/CISL&RAL/RISC
- Project Scientist I**, January 2012 – September 2015
- NCAR/ Institute for Mathematics Applied to Geosciences (IMAGe)/ RISC, Boulder, CO
- Post-Doctoral Fellow**, July 2009 – December 2011
- NCAR/IMAGe/RISC, Boulder, CO
  - Postdoctoral Sponsor: Dr. Linda Mearns
- Graduate Research Assistant**, June 2002 – May 2009
- School of Meteorology, University of Oklahoma, Norman, OK
- Oak Ridge Institute for Science and Education Summer Research Internship**, Summer 2001
- Storm Prediction Center (SPC), Norman, OK

## REFEREED PUBLICATIONS

---

- Bukovsky, M.S.**, J. Gao, L. Mearns, B. O'Neill, 2021: SSP-based land use change scenarios: a critical uncertainty in future regional climate change projections. *Earth's Futures*, 9, e2020EF001782. <https://doi.org/10.1029/2020EF001782>
- Mahoney, K.M., J. D. Scott, M. Alexander, R. McCrary, M. Hughes, D. Swales, **M. S. Bukovsky**, 2021: Precipitation projections for the Western United States in NA-CORDEX models. *Clim. Dyn.* <https://doi.org/10.1007/s00382-021-05632-z>
- Coppola, E., F. Raffaele, F. Giorgi, G. Giuliani, G. Xuejie, J. Ciarlo, T. R. Sines, A. Torres, S. Das, F. di Sante, E. Pichelli, R. Glazer, M. Ashfaq, **M. S. Bukovsky**, E.-S. Im, D. Jacob, C. Teichman, A. Remedio, T. Remke, A. Kriegsmann, K. Buelow, T. Weber, L. Buntmeyer, K. Sieck, and D. Rechid, 2021: Climate hazard indices projections based on CORDEX-CORE, CMIP5 and CMIP6 ensemble. *Clim. Dyn.* <https://doi.org/10.1007/s00382-021-05640-z>
- Torres-Alavez, J. A., S. Das, A. Corrales-Suastegui, E. Coppola, F. Giorgi, F. Raffaele, **M. S. Bukovsky**, M. Ashfaq, and T. Sines, 2021: Future projections in the climatology of global low-level jets. *Clim. Dyn.* <https://doi-org.cuucar.idm.oclc.org/10.1007/s00382-021-05671-6>
- Wang, Z., T.Q. Zhang, C.S. Tan, L. Xue, **M.S. Bukovsky**, and Z.M. Qi, 2021: Modeling impacts of climate change on crop yield and phosphorus loss in a subsurface drained field of Lake Erie region. *Agricultural Systems*, 190, 103110. <https://doi.org/10.1016/j.agsy.2021.103110>
- Teichmann, C., D. Jacob, A. R. Remedio, T. Remke, L. Buntmeyer, P. Hoffmann, A. Kriegsmann, L. Lierhammer, K. Bülow, T. Weber, K. Sieck, D. Rechid, G. S. Langendijk, E. Coppola, F. Giorgi, J. Ciarlo, F. Raffaele, G. Giuliani, G. Xuejie, T. R. Sines, J. A. Torres-Alavez, S. Das, F. di Sante, E. Pichelli, R. Glazer, M. Ashfaq, **M. S. Bukovsky**, and E.-S. Im, 2020: Assessing mean climate change signals in the global CORDEX-CORE ensemble. *Clim. Dyn.* <https://doi.org/10.1007/s00382-020-05494-x>
- Bukovsky M.S.**, and L.O. Mearns, 2020: Regional Climate Change Projections from NA-CORDEX and their Relation to Climate Sensitivity. *Climatic Change*, <https://doi.org/10.1007/s10584-020-02835-x>.
- Pryor, S., R. Barthelmie, **M. S. Bukovsky**, L. Leung, K. Sakaguchi, 2020: Climate change impacts on wind power generation: State of the art and prospects for innovation. *Nature Reviews: Earth & Environment*, <https://doi.org/10.1038/s43017-020-0101-7>.
- Ciarlo, J. M., E. Coppola, A. Fantini, F. Giorgi, X. Gao, Y. Tong, R. H. Glazer, J. A. Torres-Alavez, T. Sines, E. Pichelli, F. Raffaele, S. Das, **M. S. Bukovsky**, M. Ashfaq, E.-S. Im, T. Nguyen-Xuan, C. Teichmann, A. Remedia, T. Remke, K. Bülow, T. Weber, L. Buntmeyer, K. Sieck, D. Rechid, and D. Jacob, 2020: A new spatially distributed Added Value Index for Regional Climate Models: the EURO-CORDEX and the CORDEX-CORE highest resolution ensembles. *Clim. Dyn.* <https://doi.org/10.1007/s00382-020-05400-5>
- Jiang, Q., Z. Qi, F. Tang, L. Xue, **M. S. Bukovsky**, 2020: Modeling climate change impact on streamflow as affected by snowmelt in Nicolet River Watershed, Quebec. *Computers and Electronics in Agriculture*, 178, 105756. <https://doi.org/10.1016/j.compag.2020.105756>
- Lloyd, E.A., L.O. Mearns, **M.S. Bukovsky**, 2020: An analysis of the disagreement about added value by regional climate models. *Synthese*, DOI 10.1007/s11229-020-02821-x.
- Gutowski Jr., W. J., A. Hall, R. Leung, T. O'Brian, C. Patricola, P. Ullrich, R. W. Arritt, **M. S. Bukovsky**, K. V. Calvin, Z. Feng, A. D. Jones, G. J. Kooperman, E. Monier, M. S. Pritchard, S. Pryor, Y. Qian, A. M.

- Rhoades, A. F. Roberts, K. Sakaguchi, N. Urban, C. Zarzycki, 2020. The ongoing need for high-resolution regional climate models: Process understanding and stakeholder information. *Bull. Amer. Meteor. Soc.*, 101, E664–E683, <https://doi.org/10.1175/BAMS-D-19-0113.1>.
- Jiang Q., Z. Qi, L. Xue, **M.S. Bukovsky**, C.A. Madramootoo, W. Smith, 2020: Assessing climate change impacts on greenhouse gas emissions, water quality and crop production in subsurface drained field. *Science of the Total Environment*, 705, 135969. <https://doi.org/10.1016/j.scitotenv.2019.135969>
- Pryor, S. C., T. J. Shepherd, **M. S. Bukovsky**, and R. J. Barthelmie, 2019: Assessing the stability of wind resource and operating conditions. *Journal of Physics: Conference Series*, 1452:012084. doi: 10.1088/1742-6596/1452/1/012084
- Prein, A.F., **Bukovsky, M.S.**, Mearns, L.O., Bruyère, C., and Done, J.M., 2019. Simulating North American Weather Types with Regional Climate Models. *Frontiers in Environmental Science*, 7, 36. <https://doi.org/10.3389/fenvs.2019.00036>
- Bukovsky, M.S.**, J. Thompson, and L.O. Mearns, 2019: The effect of weighting on the NARCCAP ensemble mean. Does it make a difference? Can it make a difference? *Clim. Res.*, 77, 23-43, doi: 10.3354/cr01541.
- Carrillo, C.M., C.L. Castro, G. Garfin, H.-I. Chang, **M.S. Bukovsky**, and L.O. Mearns, 2018: Pacific sea surface temperature related influences on North American monsoon precipitation within North American Regional Climate Change Assessment Program models. *Int. J. Climatology*, 38, 4189-4210. <https://doi.org/10.1002/joc.5561>
- Bukovsky, M.S.**, R.R. McCrary, A. Seth, L.O. Mearns, 2017: A mechanistically credible, poleward shift in warm-season precipitation projected for the U.S. Southern Great Plains? *J. Climate*, 30, 8275-8298, doi: 10.1175/JCLI-D-16-0316.1.
- Mearns, L.O., **M.S. Bukovsky**, and V. Schweizer, 2017: Potential value of expert elicitation for determining differential credibility of regional climate change simulations: An exercise with the NARCCAP co-PIs for the Southwest monsoon region of North America. *Bull. Amer. Meteor. Soc.*, 98, 29-35. doi: <http://dx.doi.org/10.1175/BAMS-D-15-00019.1>
- Wang, Z., Z. Qi, L. Xue, **M.S. Bukovsky**, 2016: RZWQM2 simulated management practices to mitigate climate change impacts on nitrogen losses and corn production. *Environmental Modeling and Software*, 84, 99-111.
- Gilleland, E., **M.S. Bukovsky**, C.L. Williams, S. McGinnis, C.M. Ammann, B.G. Brown, L.O. Mearns, 2016: Evaluating NARCCAP model performance for frequencies of severe-storm environments. *Adv. Stat. Clim. Meteorol. Oceanogr.*, 2, 137-153. <https://doi.org/10.5194/ascmo-2-137-2016>
- Bukovsky, M.S.**, C.M. Carrillo, D.J. Gochis, D.M. Hammerling, R.R. McCrary, and L.O. Mearns, 2015: Towards assessing NARCCAP regional climate model credibility for the North American Monsoon: Future climate simulations. *J. Climate*, 28, 6707-6728, doi: 10.1175/JCLI-D-14-00695.1
- Wang, Z., Z. Qi, L. Xue, **M.S. Bukovsky**, M.J. Helmers, 2015: Modeling the impacts of climate change on nitrogen losses and crop yield in a subsurface drained field. *Climatic Change*, 129, 323-335.
- Weller, G.B., D. Cooley, S.R. Sain, **M.S. Bukovsky**, 2013: Two case studies on NARCCAP precipitation extremes. *J. Geophys. Res.*, 118, 10475-10489.

**Bukovsky, M.S.**, D.J. Gochis, and L.O. Mearns, 2013: Towards assessing NARCCAP regional climate model credibility for the North American Monsoon: Current climate simulations. *J. Climate*, 26, 8802-8826, doi: <http://dx.doi.org/10.1175/JCLI-D-12-00538.1>.

Mearns, L.O., S. Sain, L.R. Leung, **M.S. Bukovsky**, S. McGinnis, S. Biner, D. Caya, R.W. Arritt, W. Gutowski, E. Takle, M. Snyder, R.G. Jones, A.M.B. Nunes, S. Tucker, D. Herzmann, L. McDaniel, L. Sloan, 2013: Climate change projections of the North American Regional Climate Change Assessment Program (NARCCAP). *Clim. Change*, 120, 965-975, doi:10.1007/s10584-013-0831-3.

**Bukovsky, M.S.**, 2012: Temperature trends in the NARCCAP regional climate models. *J. Climate*, 25, 3985-3991.

Mearns, L.O., R. Arritt, S. Biner, **M.S. Bukovsky**, D. Caya, D. Flory, W. Gutowski, R. Jones, W. Moufouma-Okia, R. Laprise, R. Leung, Y. Qian, S. McGinnis, L. McDaniel, D. Middleton, S. Sain, A. Nunes, J. Roads, L. Sloan, M. Snyder, G. Takle, 2011: North American Regional Climate Change Assessment Program: Overview of Phase 1 Results, *Bull. Amer. Metr. Soc.*, 93, 1337-1362.

Fiedler, B.H., and **M.S. Bukovsky**, 2011: The effect of a giant wind farm on precipitation in a regional climate model. *Environ. Res. Lett.*, 6, 045101. doi:10.1088/1748-9326/6/4/045101.

**Bukovsky, M.S.**, and D.J. Karoly, 2011: A regional modeling study of climate change impacts on warm-season precipitation in the central U.S. *J. Climate*, 24, 1985-2002.

**Bukovsky, M.S.**, and D.J. Karoly, 2009: The sensitivity of WRF precipitation in nested regional climate simulations. *J. Applied Metr. Clim.*, 48, 2152-2159.

**Bukovsky, M.S.**, and D.J. Karoly, 2007: A Brief Evaluation of Precipitation from the North American Regional Reanalysis. *J. Hydrometeorology*, 8, 837-846.

**Bukovsky, M.S.**, J.S. Kain, and M.E. Baldwin, 2005: Bowing convective systems in a popular operational model: Are they for real? *Wea. Forecasting*, 21, 307-324.

## ADDITIONAL PUBLICATIONS

---

Rendfrey, T., **M. Bukovsky**, and S. McGinnis, 2018. "NA-CORDEX Visualization Collection" UCAR/NCAR, <https://doi.org/10.5065/9oZF-H771>.

Mearns, L.O., et al., including **M. Bukovsky**, 2017: The NA-CORDEX dataset, version 1.0. NCAR Climate Data Gateway, Boulder CO, <https://doi.org/10.5065/D6S1J1CH>

Mearns, L.O., **M.S. Bukovsky**, S.C. Pryor, V. Magana, 2018: Downscaling of Climate Information. *Climate Modeling: Philosophical and Conceptual Issues*. Eds. E.A. Lloyd and E. Winsberg, Springer Nature, Germany. DOI: 10.1007/978-3-319-65058-6. (Updated from 2014.)

Brown, C., et al., including **M. Bukovsky**, 2016: Decision-Scaling: A Decision Framework for DoD Climate Risk Assessment and Adaptation Planning. Report prepared as a part of DoD SERDP RC-2204.

Moss, R., et al., including **M. Bukovsky**, 2015: Climate outlook for the Mid-Atlantic. Report prepared as a part of DoD SERDP RC-2206, Assessing Vulnerability of DoD Installations to Climate Change - Informing Decision Making.

Mearns, L.O., **M.S. Bukovsky**, S.C. Pryor, V. Magana, 2014: Downscaling of Climate Information. *Climate Change in North America*. Ed. G. Ohring. Springer International, Switzerland. DOI: 10.1007/978-3-319-03768-4\_5.

**Bukovsky, M.S.**, 2011: Masks for the Bukovsky regionalization of North America, Regional Integrated Sciences Collective, Institute for Mathematics Applied to Geosciences, National Center for Atmospheric Research, Boulder, CO. [<http://www.narccap.ucar.edu/contrib/bukovsky/>]

## **AWARDS & FELLOWSHIPS**

---

2019	NCAR/CISL Special Recognition Award for Outstanding Effort in NA-CORDEX (North American Coordinated Regional Downscaling Experiment) Simulation Production
2009	OU School of Meteorology, Faculty Recognition for Outstanding Performance as a Graduate Student Award
2007	Outstanding Student Presentation Award, American Meteorological Society (AMS) 16 <sup>th</sup> Applied Climatology Conference
2007	OU School of Meteorology, Yoshi Sasaki Award for Best M.S. Manuscript/Publication
2007	AMS Summer Policy Colloquium Travel Fellowship
2004 - 2009	OU Alumni Graduate Fellowship
2002	NIU Geography Dept. Most Excellent Senior Award
2001	NIU Geography Dept., Most Excellent Junior Award
2001	Guillermo Salazar Rodriguez Undergraduate Scholarship, American Meteorological Society
2000	Baron Services Undergraduate Scholarship, American Meteorological Society
1998 - 2000	Academic Excellence Scholarship, College of DuPage

## **Professional Service**

---

### **Member**

WCRP CORDEX Science Advisory Team. 1/2021 - 12/2024  
AMS Committee of Judges for Undergraduate Awards. 1/2020 – 1/2023 (Chair, 2021)  
AMS Committee on Mesoscale Processes. 2/1/2006 – 1/31/2010

### **Co-convener**

*Regional Climate: Modeling, Analysis, and Impacts*. AGU 2019, 2021, 2021  
*Regional Climate Modeling, Including CORDEX*. EGU 2019, 2020, 2021  
*North American Regional Climate Change Assessment Program (NARCCAP)*. AMS 2013

### **Grant Review Panel Member**

DOE ASR, April 2016 (reviewed 7 proposals)  
DOE ASR, Feb. 2015 (reviewed 6 proposals)

### **Reviewer**

Journal of Climate, Climate Dynamics, Climatic Change, Journal of Geophysical Research, Journal of Geophysical Research - Atmospheres, Journal of Hydrometeorology, Climate Research, Journal of Atmospheric Science, National Science Foundation, Journal of Applied Meteorology and Climatology, International Journal of Climatology, Monthly Weather Review, Geophysical Research Letters, Proceedings of the National Academy of Sciences of the United States of America, Weather and Forecasting, Meteorology And Atmospheric Physics, Natural Sciences and Engineering Research Council of Canada, Geoscientific Model Development, Nature Climate Change, Synthese,

### **Tour Guide**

NCAR Mesa Lab. 2015-present (on hold due to pandemic)

### **Mentor**

SOARS Writing Mentor: 2012, 2013, 2014, 2015

## INVITED LECTURES & SEMINARS

---

### *The Influence of Future Land-Use Changes on Regional Climate Change Projections*

Iowa State University, 26 March 2021 (remote due to pandemic)

### *Climate Change in Colorado*

Protect Our Winters, Colorado Chapter, 20 January 2021 (remote due to pandemic)

### *Climate Change Impacts in the U.S.*

Cherokee Trail High School, Aurora, CO, 29 April 2020 (remote due to pandemic)

### *A Storyline for Precipitation in the U.S. Southern Great Plains*

University of Reading, Reading, UK, 29 April 2019

### *Climate Change: Past, Present, and Future*

Naropa University, Boulder, CO: 11 November 2018, 3 April 2018, 8 Nov. 2016, 10 Nov. 2015, 18 Nov. 2014, 19 Nov. 2013, 20 Nov. 2012, and 15 Nov 2011

### *Using Regional Climate Information*

2018 International Summer School on Atmospheric and Oceanic Sciences on regional modeling, data analysis, and uncertainties, Aug. 27-31, L'Aquila, Italy. <http://cetemps.aquila.infn.it/issaos/>

### *Real-World Uncertainty*

2018 International Summer School on Atmospheric and Oceanic Sciences on regional modeling, data analysis, and uncertainties, Aug. 27-31, L'Aquila, Italy. <http://cetemps.aquila.infn.it/issaos/>

### *WRF Regional Climate Model Evaluation: Best Practices for Atmosphere Analysis*

NCAR Customized Training Workshop for WRF, Boulder, CO, 2 February 2018.

### *North American Climate Change Impacts*

AMS Training Workshop for K-12 Science Teachers, Boulder, CO, 27 June 2017.

### *Regional Climate Model Data*

NCAR Regional Climate Tutorial Lecture, Boulder, CO, 10 July, 2017.

### *Regional Climate Change & Extreme Weather*

To Nihon University (Japan) Geoscience Undergraduates and Faculty, at NCAR. 4 September 2014

### *Assessing the Credibility of the North American Monsoon Projections from the NARCCAP Regional Climate Models*

NCAR/MMM Seminar Series, Boulder, CO, 18 April 2014.

### *Assessing the Credibility of the North American Monsoon Projections from the NARCCAP Regional Climate Models*

NCAR/CISL Seminar Series, Boulder, CO, 12 March 2014.

### *Climate Change: Past, Present, and Future*

University of Colorado at Denver, Denver, CO, 13 Nov. 2013.

### *Regional Climate Model Projections for the North American Monsoon*

University of California at Davis, 31 Jan. 2012.

### *Trends and Bias in the NARCCAP Regional Climate Models.*

University of California at Davis, 8 Nov. 2011.

*Uncertainties in Regional Impacts of Climate Change.*

Danish Meteorological Institute (DMI)/Centre for Regional Change in the Earth System (CRES), Ph.D. Course on Regional Climate Modeling and its use for Climate Impacts, 10 May 2011.  
<http://cres-centre.net/joomla/index.php/en/education/regionalclimatemodellingmay2011>

*Uncertainty in Climate Projections.*

DMI/CRES, Ph.D. Course on Regional Climate Modeling and its use for Climate Impacts, 10 May 2011.

*Regional Climate Model Projections of Warm-Season Precipitation in the Central U.S.*

Iowa State University, 17 Feb. 2011.

*Dynamically Downscaling Global Climate Simulations for the Central U.S. Warm-Season.*

University of Kansas at Lawrence, 10 Nov. 2010.

## **CONFERENCE PRESENTATIONS (FIRST-AUTHORED ONLY)**

---

Bukovsky, M.S., J. Gao, and L.O. Mearns, 2020: Extreme Event Exposure Uncertainty in NA-CORDEX Projections. Poster. *AGU Fall Meeting*, online-only due to pandemic.

Bukovsky, M.S., L.O. Mearns, J. Gao, B. O'Neill, 2020: The Sensitivity of Regional Climate Projections to SSP-Based Land Use Changes in the North American CORDEX Domain. Presentation. *EGU General Assembly*, Vienna, Austria. 4 May 2020. Online presentation due to pandemic.

Bukovsky, M.S., L.O. Mearns, J. Gao, B. O'Neill, 2020: The Sensitivity of Regional Climate Projections to SSP-Based Land Use Changes in the North American CORDEX Domain. Poster. AAG 2020, Denver, CO. Cancelled due to pandemic.

Bukovsky, M.S., 2019: CORDEX: An Overview. Remote presentation. Forum on Convective-Permitting Modeling for Sub-Seasonal to Seasonal Forecasting, Latsis Symposium, Zurich. 21 Aug. 2019.

Bukovsky, M.S., 2019: Exotic Uncertainties in NA-CORDEX. **Invited Presentation.** IUGG, Montreal, Canada. 11 July 2019.

Bukovsky, M.S., 2019: A Storyline for Precipitation in the U.S. Southern Great Plains. **Invited Presentation.** Workshop on physical modeling supporting a "storyline approach", Oslo, Norway. 24-26 April, 2019.

Bukovsky, M.S., C. Castro, T. Cavazos, R. Cerezo-Mota, F. Giorgi, W. Gutowski, R. Leung, A. Nunes, L. Mearns, S. Solman, E. Takle, 2019: In Memoriam: The Contributions of Dr. Raymond W. Arritt to Regional Climate Modeling. **Invited Presentation.** *EGU General Assembly*, Vienna, Austria. 10 April 2019.

Bukovsky, M.S., L.O. Mearns, J. Gao, B. O'Neill, 2019: The Sensitivity of Regional Climate Projections to SSP-Based Land Use Changes in the North American CORDEX Domain. Poster. *EGU General Assembly*, Vienna, Austria. 10 April 2019.

Bukovsky, M.S., L.O. Mearns, J. Gao, B. O'Neill, 2019: The Sensitivity of Regional Climate Projections to SSP-Based Land Use Changes in the North American CORDEX Domain. **Invited Presentation.** *Scenarios Forum 2019*, Denver, CO. 12 March 2019.

- Bukovsky, M.S., T.S. Rendfrey, and L.O. Mearns, 2018: The Sensitivity of Regional Climate Models to Equilibrium Climate Sensitivity. Presentation. *2018 AGU Fall Meeting*, Washington D.C., A31D-02. 12 Dec. 2018.
- Bukovsky, M.S., 2018: North American CORDEX, other modeling efforts, and sample results. **Invited Presentation.** *9<sup>th</sup> ICTP Workshop on the Theory and Use of Regional Climate Models*, Trieste, Italy. 1 June 2018.
- Bukovsky, M.S., R.R. McCrary, T.S. Rendfrey, A.S. Schroeder, and L. Mearns, 2017: Causes of Cool-Season Precipitation Bias in the East-South-Central U.S. Poster. *2017 AGU Fall Meeting*, New Orleans, LA. A23D-2396.
- Bukovsky, M.S., L.O. Mearns, S. McGinnis, R.R. McCrary, 2017: North American CORDEX and RISC Project Updates. Presentation. *NCAR Water Systems Retreat*, Boulder, CO, 5 December 2017.
- Bukovsky, M.S., and Coauthors: NA-CORDEX: Overview and Sample Results. Presentation. *EGU General Assembly 2017*, Vienna, Austria.
- Bukovsky, M.S., L.O. Mearns, S. McGinnis, R.R. McCrary, 2016: Snapshots of RISC. Presentation. *NCAR Water Systems Retreat*, Boulder, CO, 18 January 2017.
- Bukovsky, M.S., and Coauthors: NA-CORDEX: Overview and Sample Results. Presentation. *2016 AGU Fall Meeting*, San Francisco, CA.
- Bukovsky, M.S., 2016: Finding Certainty in Uncertain Projections of Warm-Season Precipitation in the Southern U.S. Plains. **Invited presentation.** *2016 AGU Fall Meeting*, San Francisco, CA.
- Bukovsky, M.S., 2016: North American CORDEX. **Invited presentation.** *8<sup>th</sup> ICTP Workshop on the Theory and Use of Regional Climate Models*, Trieste, Italy. 25 May 2016.
- Bukovsky, M.S., 2016: NA-CORDEX Simulations of the North American Monsoon. Presentation. *International Conference on Regional Climate-CORDEX*. Stockholm, Sweden, WCRP. 18 May 2016.
- Bukovsky, M.S., L.O. Mearns, S. McGinnis, R.R. McCrary, 2016: Snapshots of RISC. Presentation. *NCAR Water Systems Retreat*, Boulder, CO, 15 March 2016.
- Bukovsky, M.S., A. Seth, R.R. McCrary, L.O. Mearns, 2016: Regional climate model precipitation projections for the Southern Great Plains. Presentation. *28<sup>th</sup> Conf. on Climate Variability and Change*, New Orleans, LA. Amer. Meteor. Soc., 13B.5.
- Bukovsky, M.S., C.M. Carrillo, D.J. Gochis, L.O. Mearns, 2015: Assessing regional climate model simulation credibility for the North American Monsoon. **Invited presentation.** *Reunión Annual 2015*, Puerto Vallarta, Jalisco, Mexico. Unión Geofísica Mexicana, SE15-4.
- Bukovsky, M.S., C.M. Carrillo, D.J. Gochis, L.O. Mearns, 2015: Regional climate model projection credibility for the North American Monsoon. Presentation. *29<sup>th</sup> Conf. on Hydrology*, Phoenix, AZ. Amer. Meteor. Soc., 7.2.
- Bukovsky, M.S., C.M. Carrillo, D.J. Gochis, L.O. Mearns, 2014: Regional climate model projection credibility for the North American Monsoon. Poster. *2014 AGU Fall Meeting*, San Francisco, CA.

- Bukovsky, M.S., L.O. Mearns, 2014: Dealing with a regional climate model ensemble. Presentation. *7<sup>th</sup> ICTP Workshop on the Theory and Use of Regional Climate Models*, Trieste, Italy.
- Bukovsky, M.S., R. R. McCrary, L.O. Mearns, 2013: Coastal inundation in the Chesapeake Bay: Current and Future. Presentation. *26<sup>th</sup> Conf. on Climate Variability and Change*, Atlanta, GA. Amer. Meteor. Soc., J8.2.
- Bukovsky, M.S., R. R. McCrary, L.O. Mearns, 2013: Coastal inundation in the Chesapeake Bay: Current and Future. Presentation. *2013 AGU Fall Meeting*, San Francisco, CA.
- Bukovsky, M.S., C. Liu, 2013: The effect of double dynamical downscaling on climate change simulations for the western U.S. Presentation. *14<sup>th</sup> Annual WRF Users' Meeting*, Boulder, CO
- Bukovsky, M.S., J. Thompson, L.O. Mearns, 2013: The effect of weighting on the NARCCAP ensemble mean. Presentation. *EGU General Assembly 2013*, Vienna, Austria. EGU2013-212.
- Bukovsky, M.S., J. Thompson, L.O. Mearns, 2013: The effect of weighting on the NARCCAP ensemble mean. Poster. *25<sup>th</sup> Conf. on Climate Variability and Change*, Austin, TX. Amer. Meteor. Soc., P106.
- Bukovsky, M.S., J. Thompson, L.O. Mearns, 2012: The effect of weighting on the NARCCAP ensemble mean. Poster. *2012 AGU Fall Meeting*, San Francisco, CA. GC11C-1007.
- Bukovsky, M.S., C. Liu, 2012: Double dynamical downscaling with WRF for the Western U.S. Presentation. *13<sup>th</sup> Annual WRF Users' Workshop*, Boulder, CO.
- Bukovsky, M.S. and L.O. Mearns, 2012: The North American Regional Climate Change Assessment Program: Overview and Preliminary Analysis. Presentation. *EGU General Assembly 2012*, Vienna, Austria, European Geophys. Union, EGU2012-3258-1.
- Bukovsky, M.S., 2012: Regional climate model simulations of the North American monsoon. Presentation. *2012 NARCCAP Users' Meeting*, Boulder, CO.
- Bukovsky, M.S., and L.O. Mearns, 2012: Projections of climate change for the North American Monsoon from the NARCCAP regional climate models. *26<sup>th</sup> Conference on Hydrology*, New Orleans, LA, Amer. Meteor. Soc., J17.2.
- Bukovsky, M.S., 2011: Towards establishing NARCCAP regional climate model credibility for the North American monsoon. **Invited presentation**. *2012 AGU Fall Meeting*, San Francisco, CA, Amer. Geophys. Union, GC23F-03.
- Bukovsky, M.S., 2011: NARCCAP Regional climate model simulations of the North American monsoon. Presentation. *World Climate Research Program Open Science Conference*, Denver, CO.
- Bukovsky, M.S., C. Liu, L.O. Mearns, 2011: Sensitivity of temperature and precipitation in WRF regional climate simulations of North America. Poster. *12<sup>th</sup> Annual WRF Users' Workshop*, Boulder, CO, P69.
- Bukovsky, M.S., 2011: Late 20th century temperature trends in the NARCCAP regional model simulations. Poster & Presentation. *2011 Annual Meeting*, Seattle, WA, Assoc. Amer. Geog.
- Bukovsky, M.S., 2011: Special Topics in Evaluation of Phase 1: The North American Monsoon. Presentation. *2011 NARCCAP Users' Meeting*, Boulder, CO.
- Bukovsky, M.S., D.J. Gochis, and L.O. Mearns, 2011: NARCCAP Regional Climate Model Simulations of the

- North American Monsoon. Poster. *23<sup>rd</sup> Conf. on Climate Variability and Change*, Seattle, WA, Amer. Meteor. Soc., P154.
- Bukovsky, M.S. and L.O. Mearns, 2010: Late 20<sup>th</sup> Century Temperature Trends in the NARCCAP Regional Model Simulations. Poster. *2010 AGU Fall Meeting*, San Francisco, CA, Amer. Geophys. Union, GC43F-1017.
- Bukovsky, M.S. and L.O. Mearns, 2010: The North American Regional Climate Change Assessment Program: Overview and Preliminary Analysis. Presentation. EGU General Assembly 2010, Vienna, Austria, European Geophys. Union, EGU2010-5452.
- Bukovsky, M.S. and L.O. Mearns, 2010: Summertime in the NARCCAP Regional Climate Simulations. Poster. *22<sup>nd</sup> Conf. on Climate Variability and Change*, Atlanta, GA, Amer. Meteor. Soc., P417.
- Bukovsky, M.S. and L.O. Mearns, 2009: A regional modeling study of climate change impacts on warm-season precipitation in the U.S. Presentation and Poster. *2009 AGU Fall Meeting*, San Francisco, CA, Amer. Geophys. Union, A33A-0213.
- Bukovsky, M.S., and D.J. Karoly, 2009: Changes in summertime precipitation over the U.S. due to climate change as simulated by the WRF Model. Poster. *7<sup>th</sup> Climate Prediction and Applications Science Workshop*, Norman, OK, OCS, Southern Climate Impacts Planning Program, and NOAA/NWS Climate Services Division.
- Bukovsky, M.S., and D.J. Karoly, 2009: Precipitation in WRF nested regional climate simulations. Poster, *21<sup>st</sup> Conf. on Climate Variability and Change*, Phoenix, AZ, AMS, P7.4.
- Bukovsky, M.S., and D.J. Karoly, 2008: An evaluation of climate model precipitation over the United States. Poster, *20<sup>th</sup> Conf. on Climate Variability and Change*, New Orleans, LA, AMS, P3.
- Bukovsky, M.S., and D.J. Karoly, 2007: A Brief Evaluation of Precipitation from the North American Regional Reanalysis. Presentation, *16<sup>th</sup> Conf. on Applied Climatology/14<sup>th</sup> Symp. On Meteorological Observation and Instrumentation*, San Antonio, TX, AMS, J3.8.
- Bukovsky, M.S., J.S. Kain, and M.E. Baldwin, 2005: Bowing convective systems in popular operational models: Are they for real? Presentation, *21<sup>st</sup> Conference on Weather Analysis and Forecasting / 17<sup>th</sup> Conference on Numerical Weather Prediction*, Washington, D.C., AMS, 2A.1.
- Bukovsky, M.S., and J.S. Kain, 2004: Predicting propagating convective systems using operational forecast models. Presentation, *22<sup>nd</sup> Conference on Severe Local Storms*, Hyannis, MA, AMS, 17.7.
- Bukovsky, M.S., P. Janish, J.S. Kain, and M.E. Baldwin, 2002: Evaluation of eta model forecast of mesoscale convective systems. Poster, *19<sup>th</sup> Conference on Weather Analysis and Forecasting and 15<sup>th</sup> Conference on Numerical Weather Prediction*, San Antonio, TX, AMS, J121-J124.