### **Biographical Sketch**

### Jason C. Furtado

Assistant Professor University of Oklahoma School of Meteorology 120 David L. Boren Blvd. Norman, OK 73072 Phone No.: 1-405-325-1391 jfurtado@ou.edu

## A. PROFESSIONAL PREPARATION

Lyndon State College	Lyndonville, VT	Meteorology	B.S., 2002
		Mathematics	B.S., 2002
Colorado State University	Fort Collins, CO	Atmospheric Science	M.S., 2005
Georgia Institute of	Atlanta, GA	Earth and Atmospheric	Ph.D., 2010
Technology		Sciences	

## **B. APPOINTMENTS**

2015 - Present	University of Oklahoma, Norman, OK
	Assistant Professor, School of Meteorology
	Affiliate, South Central Climate Adaptation Science Center
	Affiliate Faculty, Department of Psychology
2014 - 2015	Boston University, Boston, MA
	Lecturer, Department of Earth and Environment
2011 - 2015	Atmospheric and Environmental Research, Lexington, MA
	Staff Scientist, Climate Analysis Branch

# **C. PRODUCTS**

(i) Most Closely Related to the Proposed Project

- 1. Green, M. R. and **J. C. Furtado**. 2019. Evaluating the Joint Influence of the Madden-Julian Oscillation and the Stratospheric Polar Vortex on Weather Pattern across the Northern Hemisphere. *J. Geophys. Res.* (in press).
- Flanagan, P. X., J. B. Basara, J. C. Furtado, and X. Xiao. 2018. Primary Atmospheric Drivers of Pluvial Years in the United States Great Plains. *J. Hydrometeor*. 19:643-658, <u>https://doi.org/10.1175/JHM-D-17-0148.1</u>.
- 3. Furtado, J. C., J. Cohen, and E. Tziperman. 2016. The Combined Influences of Autumnal Snow and Sea Ice on Northern Hemisphere Winters. *Geophys. Res. Lett.* 43. doi: 10.1002/2016GL068108.
- Anderson. B. T., D. J. S. Gianotti, G. Salvucci, and J. C. Furtado. 2016. Dominant Timescales of Potentially Predictable Precipitation Variations across the Continental United States. *J. Climate*, 29:8881–8897. doi: 10.1175/JCLI-D-15-0635.1.
- Cohen, J., J. A. Screen, J. C. Furtado, M. Barlow, D. Whittleston, D. Coumou, J. Francis, K. Dethloff, D. Entekhabi, J. Overland, and J. E. Jones. 2014. The Relationship between Recent Arctic Amplification and Extreme Mid-latitude Weather. *Nature Geoscience*. 7:627 – 637.

### (ii) Other Significant Products

- 1. You, Y., and J. C. Furtado. 2017. The Role of South Pacific Atmospheric Variability in the Development of Different Types of ENSO. *Geophys. Res. Lett.* 44:7438–7446, doi:10.1002/2017GL073475.
- 2. Furtado, J. C., J. L. Cohen, A. H. Butler, E. E. Riddle, and A. Kumar. 2015. Eurasian Snow Cover Variability and Links to Winter Climate in the CMIP5 Models. *Climate Dyn.* 45:2591–2605.
- Cohen, J. L., J. Jones, J. C. Furtado, and E. Tziperman. 2013. Warm Arctic, Cold Continents: A Common Pattern Related to Arctic Sea Ice Melt, Snow Advance, and Extreme Winter Weather. *Oceanography*. 26. <u>http://dx.doi.org/10.5670/oceanog.2013.70</u>.
- Furtado, J. C., E. Di Lorenzo, B. T. Anderson, and N. Schneider. 2012. Linkages between the North Pacific Oscillation and Central Tropical Pacific SSTs at Low Frequencies. *Climate Dyn.* 39:2833 – 2846.
- 5. **Furtado**, J. C., E. Di Lorenzo, N. Schneider, and N. Bond. 2011. North Pacific Decadal Variability and Climate Change in the IPCC AR4 models. *J. Climate*. 24:3049 3067.

# **D. SYNERGISTIC ACTIVITIES**

- Skype-A-Scientist Program (2017 Present). This program connects scientists with K-12 students worldwide. As part of this program, I have spoken with elementary school and high school students from many different backgrounds about weather forecasting, climate change, and patterns of climate variability.
- High School Student Visits, University of Oklahoma (2016 Present). I serve as a volunteer faculty member and interacted with visiting high school students and their parents to the School of Meteorology. These students are highly interested in meteorology and science, and my involvement with them was to discuss life as a college student, as a meteorology student, and share my own experiences in weather.
- Undergraduate Research and Mentoring, University of Oklahoma (2015 Present). I serve as a faculty mentor for several groups of senior undergraduate students for their Capstone project. Additionally, I hired an undergraduate research assistant for a grant and also mentored an NSF REU student during Summer 2017. Topics included: (a) Impacts of the intensity of ENSO on North American teleconnections; (b) Stationarity of the California rainfall / ENSO teleconnection; (c) Trends in US extratropical cyclones in the past and future; (d) Analysis of downscaled and biascorrected future climate model simulations of flood threats across Oklahoma; and (e) Recent past and future trends in the stratospheric polar vortex. This mentoring included several female and minority students.
- Member, Weather Analysis and Forecasting (WAF) Committee, American Meteorological Society (2014–Present). As a member of this committee, I have worked with many other research scientists and operational meteorologists in organizing the annual WAF/NWP Conference and soliciting and voting for nominees for the Charles Mitchell and the Exceptional Specific Prediction Awards. I also reviewed revisions and new entries for the AMS Glossary of Meteorology and occasionally helped maintain the social media presence of the committee.
- Host and Co-Organizer of 42<sup>nd</sup> Annual NOAA Climate Diagnostics & Prediction Workshop (October 2017). I was honored to be nominated and selected to host and co-organize this annual workshop. My work included logistics for the meeting and organizing sessions and talks. The workshop featured about 100 international scientists, including support for underrepresented graduate students and early career scientists.