

# Curriculum Vitae – Mark A. Bourassa

Department of Earth, Ocean and  
Atmospheric Science  
College of Arts and Sciences  
The Florida State University  
Tallahassee, FL 32306–4520  
Phone: (850) 645-4788  
FAX: (850) 644-4841  
e-mail: [mbourassa@fsu.edu](mailto:mbourassa@fsu.edu)

Center for Ocean – Atmospheric  
Prediction Studies  
College of Arts and Sciences  
The Florida State University  
Tallahassee, FL 32306–2840  
Phone: (850) 644-6923  
FAX: (850) 644-5092  
<http://coaps.fsu.edu/~bourassa/>

## **Professional Preparation**

- 08/90 – 12/93      Ph.D., Purdue University, West Lafayette, Indiana. Major: Atmospheric Sciences (Tropical Meteorology). Dissertation: A flux parameterization including the effects of capillary waves and sea state. Dissertation supervisor: Dayton Vincent.
- 09/86 – 05/89      M.Sc., University of Alberta, Edmonton, Alberta, Canada. Major: Meteorology. Thesis: A risk analysis of the accretion of wet snow on transmission lines. Thesis supervisor: Edward Lozowski.
- 09/81 – 05/85      B.Sc., University of Alberta, Edmonton, Alberta, Canada. Major: Physics.

## **Post-Doctoral Education**

- 1996 – 2002      Research Associate, Center for Ocean-Atmospheric Prediction Studies, Florida State University, Tallahassee, Florida.
- 1994 – 1995      Office of Naval Research Postdoctoral Fellow, College of Marine Studies, University of Delaware, Lewes, DE.

## **Professional Experience**

- 2002 – 2008      Assistant Professor – Department of Meteorology and Center for Ocean–Atmospheric Prediction Studies, College of Arts and Sciences, Florida State University.
- 2004 –              Geophysical Fluid Dynamics Institute Associate – GFDI, College of Arts and Sciences, Florida State University.
- 2008 - 2010      Associate Professor - Department of Meteorology and Center for Ocean–Atmospheric Prediction Studies, College of Arts and Sciences, Florida State University.
- 2010 - 2013      Associate Professor - Department of Earth, Ocean, and Atmospheric Sciences and Center for Ocean–Atmospheric Prediction Studies, College of Arts and Sciences, Florida State University.
- 2013 -              Professor - Department of Earth, Ocean, and Atmospheric Sciences and Center for Ocean–Atmospheric Prediction Studies, College of Arts and Sciences, Florida State University.
- 2015 -              Associate Director, COAPS, College of A&S, Florida State University

**Membership in Professional Organizations**

American Geophysical Union

American Meteorological Society

Institute of Electrical and Electronics Engineers (IEEE) Geosciences &amp; Remote Sensing Society

International Pan Oceanic Remote Sensing Conference Association (PORSEC)

**ACTIVITIES AND HONORS**

ONR Ocean Science Postdoctoral Fellow	1994 – 1995
Science Working Team, NASA NSCAT mission	1996 – 1999
Ocean Vector Winds Science Team, NASA/OSU QuikSCAT mission	1998 –
Co-chair for QuikSCAT surface truth	1998 – 2005
AMS Committee on Interaction of the Sea and Atmosphere	2003 – 2006
Next Vector Winds Mission Science Working Group	2003 – 2004
Shipboard Automated Meteorological and Oceanographic Systems (SAMOS) Working Group	2005 –
SEAFLUX Working Group	2005 –
NOAA Expert Team on the State of the Ocean	2005 –
NASA Tropical Cloud Systems and Processes (TCSP) science team	2005 – 2008
Associate Editor Journal Atmospheric and Oceanic Technology	2007 – 2009
Co-chair of the (USCLIVAR) High Latitude Surface Fluxes Working Group	2008 – 2012
NASA Ocean Vector Winds Science Team Leader	2008 –
NASA PO.DAAC User Working Group	2008 – 2013
William T. Pecora Award for the QSCAT mission team	2008
Participations in ASCAT Science Advising Group	2008 –
GCOM-W2 Joint Research and Operational User Working Group	2009 –
NASA NEWS Science team	2009 –
Chair, International Ocean Vector Winds Science Organizing Com.	2010 –
NASA Sea Surface Temperature Science team	2010 –
Co-chair Ocean Observations Panel for Climate	2013 –
Co-chair Joint Commission on Marine Meteorology (JCOMM) cross-cutting Task Team on Satellite Data requirements	2013 –

## TEACHING

### Courses Taught

MET2700	General Meteorology (Fall of 2003, 2004, 2006, 2008, and 2009)
MET3220C	Computational Meteorology (Spring of 2006 and 2007)
MET4450/5451	Physical Meteorology II / Advanced Physical Meteorology II (Spring of 2005, 2008, 2009, 2010, 2011, 2013, 2015, 2017)
MET6480	Advanced Topics in Physical Meteorology: Applied Satellite Remote Sensing (Fall 2013, 2015)
MET6155	Advanced Topics in Climatology: Data Analysis (Spring 2016, Fall 2017)
OCP5551	Physics of the Air-Sea Boundary-Layer (Spring of 2003 and 2004; Fall of 2005, 2007, 2010, 2012, 2014, 2016)
MET5930	Masters Seminar (Spring 2010)
MET6930	Ph.D. Seminar (Spring 2010)

### Chair of Doctoral Dissertation Supervisory Committees

Ryan Maue	(Sum. 2010)	Evolution of Frontal Structure Associated with Extratropical Transitioning Hurricanes
Stephen Guimond <sup>1</sup>	(Fall 2010)	Tropical Cyclone Inner-Core Dynamics: A Latent Heat Retrieval and its Effects on Intensity and Structure Change; and the Impacts of Effective Diffusion on the Axisymmetrization Process.
Aaron Paget	(Summ. 2013)	Important contributing factors for estimating the active and total whitecap coverage globally using satellite-derived parameters
Paul Hughes	(Summer 2014)	The Influence of Small-Scale Sea Surface Temperature Gradients on Surface Vector Winds and Subsequent Impacts on Oceanic Ekman Pumping
Rachel Weihs	(Summer 2016)	Surface and Atmospheric Boundary Layer Responses to Diurnal Variations in Sea Surface Temperature in an NWP Model
Heather Holbach	(Fall 2016)	Wave and Wind Direction Effects On Ocean Surface Emissivity Measurements In High Wind Conditions
Qi Shi	(Fall 2017)	Impacts of Surface Currents in Air/Sea Coupling
Kyle Ahern	(ongoing)	High-Latitude Cyclones
Danielle Groenen <sup>2</sup>	(ongoing)	Rainfall Patterns in MesoAmerica
John Steffen	(ongoing)	Fresh Water Mixing due to Hurricanes
Tachanat Bhatrasataponkul	(ongoing)	Origins of the North Atlantic Cold Blob

### Member of Doctoral Dissertation Supervisory Committees

Xu Chen	(ongoing)
Jason Ducker	(ongoing)
Kelly Graham	(ongoing)
Xiaolin Zheng	(2017)

<sup>1</sup> Co-chair with Paul Reasor

<sup>2</sup> Co-chair with Vasu Misra

Chalermrat Sangmanee (2017)  
 Andy Hazelton (2016)  
 Lakshika Girihagama (2015)  
 Nick Heath (2015)  
 Holly Newell (2015)  
 Christopher Selman (Summer 2015)  
 Ryan Truchelut (summer 2015)  
 Nam-Young Kang (Fall 2014)  
 Austin Todd (Spring, 2013)  
 Mona Behl (Summer 2012)  
 Rose Njoroge (Fall 2011)  
 Brent Roberts (Fall 2011)  
 Philip Hayes (Summer 2011)  
 Luke Peffers (Spring 2011)  
 Henry Winterbottom (Fall 2010)  
 Christelle Castet (Fall 2009)  
 Jeremiah Brown (Fall 2008)  
 Matt Carrier (Fall 2007)  
 Sujata Dash (Fall 2005)  
 Yoo-Jeong Noh (Fall 2005)

### **Chair of Master's Thesis Supervisory Committees**

Renee Richardson (ongoing)	Ocean Surface Stress for Hurricane Force Winds
Heather Roman-Stork (ongoing)	Ocean Surface Wind Variability of the Indian Ocean Interseasonal Oscillation
Li Keqiai (Sum. 2016)	Bias adjustment of the historical record of visually observed winds from volunteer observing ships
Kyle Ahern (Spring 2015)	Analysis of Polar Mesocyclonic Surface Turbulent Fluxes in The Arctic System Reanalysis (ASRv1) Dataset
Matthew Clark (Sum. 2015)	Oil Transport through Stokes Drift for DWH Oil Slick
Russell Glazer <sup>3</sup> (Fall 2014)	The Influence of Mesoscale sea surface temperature gradients on tropical cyclones
Kevin Formy (Sum. 2014)	None (comprehensive examination)
John Steffen (Sum. 2014)	The Effects of Sea Surface Temperature Gradients On Surface Turbulent Fluxes
Robbie Nedbor-Gross <sup>4</sup> (Fall 2013)	Investigation of the relationship between the Yucatan Channel transport and the loop current area in a multi-decadal numerical simulation
Cristina Collier (Sum. 2012)	Effects of Sea State on Offshore Wind Resourcing
Heather Holbach (Sum. 2012)	The Effects of Gap-Wind-Induced Vorticity, the Monsoon Trough, and the ITCZ on Tropical Cyclogenesis
Racheal Weihs (Spring 2012)	Modeled Diurnally Varying Sea Surface Temperatures and Their Influence On Surface Heat Fluxes

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<sup>3</sup> Co-chair with Bob Hart

<sup>4</sup> Co-chair with Eric Chassignet

Benton Farmer <sup>2</sup>	(Spring 2011)	Evaluation of bulk heat fluxes from atmospheric data sets
Joel Scott <sup>5</sup>	(Sum. 2011)	An Intercomparison Of Numerically Modeled Flux Data And Satellite-Derived Flux Data For Warm Seclusions
Jackie May	(Fall 2010)	Quantifying Variance due to Temporal and Spatial Difference Between Ship and Satellite Winds
Steven DeNapoli	(Fall 2010)	Determining the Error Characteristics of H*Wind
Marcus Williams <sup>2</sup>	(Sum. 2010)	Characterizing Multi-Decadal Temperature Variability In The Southeastern United States
Joshua Griffin	(Spring 2010)	Characterization of Errors in Various Moisture Roughness Length Parameterizations
Kelly McBeth	(Fall 2008)	Uncertainty of Scatterometer-Derived Vorticity
David Moroni	(Sum. 2008)	A Global and Regional Diagnostic Comparison of Air-Sea Flux Parameterizations During Episodic Events
Michelle Stewart	(Sum. 2007)	Cyclogenesis and Tropical Transition in Frontal Zones
Steve Guimond	(Spring 2007)	A Diagnostic Study of the Effects of Trough Interactions on Tropical Cyclone QPF
Kristen Briggs	(Fall 2006)	ENSO Event Reproduction: A Comparison of an EOF vs. Cyclostationary (CEOF) Approach
Jeffrey Taylor	(Fall 2006)	Comparison of ECMWF and QuikSCAT-Derived Surface Pressure Gradients
Paul Hughes	(Spring 2006)	North Atlantic Decadal Variability of Ocean Surface Fluxes
Robert Banks	(Fall 2005)	Variability of Indian Ocean Surface Fluxes Using a New Objective Method
Khara Lombardi	(Fall 2004)	Resolving the Diurnal and Synoptic Variability of Scatterometer Vector Wind Observations

### **Member of Master's Thesis Supervisory Committees**

Kelly Graham	(ongoing)	Chin-Ying Chien	(Fall 2009)
Britany McNamara	(ongoing)	Brent Roberts	(Fall 2008)
Kaitlyn Smolernoff	(2015)	Christine Hamman	(Fall 2007)
Duygu Aktas	(Dec. 2014)	David Ryglicki	(Fall 2007)
Sun Jie	(Fall, 2014)	Lauren Davison	(Summer 2007)
Stas Spearinsky	(Fall, 2014)	Scott Rudlosky	(Summer 2007)
James Duncan	(Sum. 2013)	Rebecca Smith	(Summer 2007)
Eric Mortenson	(Sum. 2103)	Will Sexton	(Spring 2007)
Katie Moore	(Sum. 2012)	Elizabeth Minter	(Fall 2006)
Grayum Vickers	(Sum. 2012)	Henry Winterbottom	(Fall 2006)
Geoff Montee	(Fall 2011)	Michael Hanggi	(Spring 2006)
Ashly Stroman	(Fall 2011)	Andrew Kimball	(Summer 2005)
Lauren Moeller	(Sum. 2011)	Michelle Hite	(Fall 2005)
Alec Bogdanoff	(Spring 2011)	Derrick Weitlich	(Fall 2004)
Andrew Murray	(Spring 2010)	Ryan Maue	(Summer 2004)
John Smith	(Spring 2010)	Justin Brolley	(Fall 2004)
Jacob Rettig	(Spring 2010)	Pete Bogenschultz	(Fall 2004)

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<sup>5</sup> Co-chair with Carol Anne Clayton

Brian Jones	(Summer 2004)	Ryan Sharp	(Fall 1999)
Shannon Davis	(Fall 2002)	Kathy Verzone	(Fall 1999)
Kyle Hilburn	(Fall 2002)	David Zierden	(Fall 1998)
Phillip Pegin	(Fall 1999)		

### **Chair of Undergraduate Honors Thesis Committees**

Catherine Stauffer	(2018) Ongoing
Thomas Karmel	(2016) Trends in rainfall characteristics in the southeastern United States
Connor Dacey	(2015) Accuracy of pressure gradients near tropical cyclones in operational analyses
Lauren Zuromski	(2015) Investigating relationships between rising temperatures and heavy rainfall events in the southeastern US using analog methods
Antonio Cruz	(2014) Bias Assessment of rain-related errors in tropical Pacific remotely sensed winds
Alexandra Keclik	(2014) Accuracy of Atlantic tropical cyclone landfall forecasts
Johna Rudzin	(2012) The influence of atmospheric cold-air outbreaks on the upper-ocean thermal variability of the Florida Straits
Rochelle Worsnop	(2012) Statistics of extreme temperature occurrences in the southeastern United States
Nick Heath	(2011) Determining the effects of Stokes drift on the movement of oil in the Gulf of Mexico
Heather Holbach	(2010) Vorticity-based detection of tropical cyclogenesis in the eastern Pacific basin

### **Member (not chair) of Undergraduate Honors Thesis Committees**

Jacob Carstens	(2016)
Sean Freeman	(2015) Vertical Transport of Trace Gases in Tropical Cyclones
Aaron Swearington	(2015)
Lauren Visin	(2014)
Abby Spanger	(2013) When, Where, And Why: Oviposition Site Preference And Reproductive Seasonality Of <i>Nerita Scabricots</i>
Josh Cossuth	(2010) Climatology of Dvorak classifications for operational probabilistic genesis forecasts

**Refereed Journal Articles Published, In Press, and Submitted**

- Hoffman, R.N., N. Prive, and M. Bourassa, 2017: Comments on "Reanalyses and Observations: What's the difference?" *Bull. Amer. Met. Soc.*, **98**, 2455-2459. DOI: 10.1175/BAMS-D-17-0008.1
- Bentamy, A., Piollé, J. F., Grouazel, A., Paul, F., Azelmat, H., Mathieu, P. P., Schuchmann, K. V., Sathyendranah, S., King, H. E., Danielson, R., Esau, I., Johannessen, J., Gulev, S., Clayson, C. A., Pinker, R., Grodsky, S., Bourassa, M., Smith, S. R., Haines, K., Valdivieso, M., Merchant, C., Chapron, B., Anderson, A., Hollmann, R., & Simon, J., 2017: Towards Improved Estimation of Turbulent Heat Flux over the Global Oceans. *Remote Sensing of Environment*, **201**, 196-218. DOI: 10.1016/j.rse.2017.08.016
- Dukhovskoy, D. S., **M. A Bourassa**, G. Nina Petersen, and J. Steffen, 2017: Comparison of the ocean surface vector winds from atmospheric reanalysis and scatterometer-base wind products over the subpolar North Atlantic and their applications for ocean forcing. *J. Geophys. Res.* **122(3)**, 1943-1973, doi:10.1002/2016JC012453
- Holbach, H. M. and **M. A. Bourassa**, 2017: Platform and Across Swath Comparison of Vorticity Spectra from QuikSCAT, ASCAT-A, OSCAT2, and ASCAT-B Scatterometers. *J. Selected Topics in Applied Earth Observations and Remote Sensing*, **99**, 110.1109/JSTARS.2016.2642583
- Krishnamurti, T. N. S. Jana, R. Krishnamurti, V. Kumar, R. Deepa, F. Papa, **M. A. Bourassa**, and M. M. Ali, 2017: Monsoonal Intraseasonal Oscillations in the Ocean Heat Content over the Surface Layers of the Bay of Bengal. *J. Marine Systems*, **167**, 19-32. DOI: 10.1016/j.jmarsys.2016.11.002
- Wentz, F., L. Ricciardulli, E. Rodriguez, B. Stiles, **M. Bourassa**, D. Long, R. Hoffman, A. Stoffelen, A. Verhoef, L. O'Neill, T. Farrar, D. Vandermark, A. Fore, S. Hristove-Veleva, J. Turk, R. Gaston, and D. Tyler, 2017: Evaluating and extending the ocean winds data climate record. *J. Selected Topics in Applied Earth Observations and Remote Sensing*, **99**, 10.1109/JSTARS.2016.2643641
- Ali, M. M., **Bourassa, M. A.**, Bhowmick, S. A., Sharma, R., & Niharika, K., 2016: Retrieval of Wind Stress at the Ocean Surface From AltiKa Measurements. *Ieee Geoscience and Remote Sensing Letters*, **13(6)**, 821-825.
- Ali, M. M., Neetu, S., Suresh Kumar, M., Zheng, Y., Bourassa, M., & Rao, C. V. (2016). Dominant thermal interaction with atmospheric processes occurs in the upper 50m of the Indian Ocean. *submitted*.
- Daneshgar Asl, S., D. S. Dukhovskoy, **M. Bourassa**, Ian R. MacDonald, 2016: Hindcast modeling for the persistence of oil slicks released from natural seeps. *Rem. Sens. Environ.*, **189**, 96-107, DOI: 10.1016/j.rse.2016.11.003
- Smith, S. R., N. Lopez<sup>1,2</sup> and **M. A. Bourassa**, 2016: SAMOS Air-sea Fluxes: 2005-2014. *Geoscience Data Journal*. doi: 10.1002/gdj3.34
- Zheng, Y., **M. A. Bourassa**, M. M. Ali, and T. N. Krishnamurti, 2016: Distinctive features of rainfall over the Indian homogeneous rainfall regions between strong and weak Indian summer monsoons, *J. Geophys. Res. Atmos.*, 121, doi: 10.1002/2016JD025135

- Zheng, Y., M. M. Ali, **M. A. Bourassa**, 2015: Contribution of Monthly and Regional Rainfall to the Strength of Indian Summer Monsoon. *Mon. Wea. Rev.*, *144*, 3037-3055.
- Ali M.M., P.V.Nagamani, N. Sharma, R.T Venu Gopal, M. Rajeevan, G.J.Goni and **M. A Bourassa**, 2015: Relationships Between Ocean Mean Temperatures and Indian Summer Monsoon Rainfall. *Atmospheric Science Letters*. **16**, 408-413. DOI: 10.1002/asl2.576
- Ali, M. M., **M. A. Bourassa**, I.V. Ramana and K. Niharika, 2014: An Artificial Neural Network Model Function for SARAL-Altika Winds. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, *11*, 5217-5325.
- Paget, A.<sup>1</sup>, **M. A. Bourassa**, and M. D. Anguelova, 2015: Comparing in situ and satellite-based observations of oceanic whitecaps. *J. Geophys. Res.*, *120*, 2826-2843, doi:10.1002/2014JC010328.
- Holbach, H. M., and **M. A. Bourassa**, 2014: The effects of gap-wind-induced vorticity, the monsoon trough, and the ITCZ on tropical cyclogenesis. *Mon. Wea. Rev.*, **142**, 1312-1325. doi: 10.1175/MWR-D-13-00218.1
- Nedbor-Gross, R., D. S. Dukhovskoy, **M. A. Bourassa**, S. L. Morey, E. P. Chassignet, 2014: Investigation of the relationship between the Yucatan Channel transport and the Loop Current area in a multi-decadal numerical simulation. *Marine Technology Society Journal*, **48**, 15 - 26.
- Vose, R. S. S. Applequist, **M. A. Bourassa**, S. C. Pryor, R. J. Barthelmie, B. Blanton, P. D. Bromirski, H. E. Brooks, A. T. DeGaetano, R. M. Dole, D. R. Easterling, R. E. Jensen, T. R. Karl, K. Klink, R. W. Katz, M. C. Kruk, K. E. Kunkel, M. C. MacCracken, T. C. Peterson, B. R. Thomas, X. L. Wang, J. E. Walsh, M. F. Wehner, D. J. Wuebbles, and R. S. Young, 2014: Monitoring and Understanding Changes in Extremes: Extratropical Storms, Winds, and Waves. *Bull. Amer. Meteor. Soc.*, **95**, 377 - 386. DOI: <http://dx.doi.org/10.1175/BAMS-D-12-00162.1>
- Weih, R., and **M. A. Bourassa**, 2014: Modeled diurnally varying sea surface temperatures and their influence on surface heat fluxes. *J. Geophys. Res.*, **119**, 4101-4123, doi:10.1002/2013JC009489.
- Zheng, Y., R. Zhang, and **M. A. Bourassa**, 2014: Impact of east Asian winter and Australian summer monsoons on the enhanced surface westerlies over the western tropical Pacific preceding the El Niño onset. *J. Clim.*, **27**, 1928-1944. doi: <http://dx.doi.org/10.1175/JCLI-D-13-00369.1>
- Ali, M. M., G. S. Bhat, D. G. Long, S. Bharadwaj, **M. A. Bourassa**, 2013: Estimating wind stress at the Ocean surface from scatterometer observations. *IEEE GRSL*, **10**. 1129 - 1132. doi:10.1109/LGRS.2012.2231937
- Bourassa, M.**, S. Gille, C. Bitz, D. Carlson, I. Cerovecki, M. Cronin, W. Drennan, C. Fairall, R. Hoffman, G. Magnusdottir, R. Pinker, I. Renfrew, M. Serreze, K. Speer, L. Talley, and G. Wick, 2013: High-latitude ocean and sea ice surface fluxes: requirements and challenges for climate research. *Bull. Amer. Meteor. Soc.* **94**, 403 - 423. <http://dx.doi.org/10.1175/BAMS-D-11-00244.1>

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<sup>1</sup> Underlined authors are students whose research pertinent to this publication was supervised by Mark Bourassa



- Purna Chand Ch, M. V. Rao, I. V. Ramana, M. M. Ali, J. Patoux, and **M. A. Bourassa**, 2013: Estimation of Sea-Level Pressure Fields during Cyclone Nilam from Oceansat-2 Scatterometer Winds, *Atmos. Sci. Let.*, (on line). DOI: 10.1002/asl2.473
- Rudzin<sup>2</sup>, J. E., S. L. Morey, **M. A. Bourassa**, and S. R. Smith, 2013: The influence of loop current position on winter sea surface temperatures in the Florida Straits. *Earth Interactions*, **17**, 9 pgs. DOI: 10.1175/2013EI000521.1
- Zheng, Y., **M. A. Bourassa**, and P. J. Hughes, 2013: Influences of sea surface temperature gradients and surface roughness changes on the motion of surface oil: a simple idealized study. *J. Appl. Meteor. Clim.*, **52**, 1561 - 1575. DOI: 10.1175/JAMC-D-12-0211.1
- DiNapoli, S. M., **M. A. Bourassa**, and M. D. Powell, 2012: Uncertainty and intercalibration analysis of H\*Wind. *J. Atmos. Ocean Tech.*, **29**, 822-833.
- Hughes, P., and **M. A. Bourassa**, J. Rolph, and S. R. Smith, 2012: Averaging-Related Biases in Monthly Latent Heat Fluxes. *J. Atmos. Oceanic Technol.*, 29(7), 974-986. DOI: 10.1175/JTECH-D-11-00184.1
- Smith, S. R., **M. A. Bourassa**, and D. L. Jackson, 2012: Supporting Satellite Research With Data Collected by Vessels. *Sea Tech.*, June 2012, 21 – 24.
- Guimond, S. R., **M. A. Bourassa** and P. D. Reasor, 2011: A latent heat retrieval and its effects on the intensity and structure change of Hurricane Guillermo (1997). Part I: the algorithm and observations. *J. Atmos. Sci.*, **68**, 1549-1567.
- Knapp K. R., S. Ansari, C. L. Bain, **M. A. Bourassa**, M. J. Dickinson, C. Funk, C. N. Helms, C. C. Hennon, C. D. Holmes, G. J. Huffman, J. P. Kossin, H.-T. Lee, A. Loew, and G. Magnusdottir, 2011: Globally gridded satellite observations for climate studies. *Bull. Amer. Meteor. Soc.*, **92**, 893-907.
- Liu, J., J. A. Curry, C. A. Clayson, and **M. A. Bourassa**, 2011: High-resolution satellite surface latent heat fluxes in North Atlantic hurricanes. *Mon. Wea. Rev.*, **139**, 2735-2747.
- May, J., and **M. A. Bourassa**, 2011: Quantifying variance due to temporal and spatial difference between ship and satellite winds. *J. Geophys. Res.*, **116**, DOI:10.1029/2010JC006931
- Smith, S., P. Hughes, and **M. Bourassa**, 2011: A comparison of nine monthly air-sea flux products. *Internat. J. Climatol.*, **31**, 1002-1027, doi: 10.1002/joc.2225.
- Smith, R.S., **M.A. Bourassa**, and M. Long, 2011: Pirate attacks affect Indian Ocean climate research. *Eos*, **92**, 225-226.
- Weissman, D. E., and **M. A. Bourassa**, 2011: The influence of rainfall on scatterometer backscatter within tropical cyclone environments – implications on parameterization of sea surface stress. *Trans. Geosci. Remote Sens.*, **49**, 4805-4814, DOI 10.1109/TGRS.2011.2170842
- Bourassa, M. A.**, and K. McBeth-Ford, 2010: Uncertainty in scatterometer-derived vorticity, *J. Atmos. Oceanic Technol.* **27**, 594 – 603. DOI: 10.1175/2009JTECHO689.1
- Bourassa, M. A.**, S. Gille, D. L. Jackson, B. J. Roberts, and G. A. Wick, 2010: Ocean Winds and Turbulent Air-Sea Fluxes Inferred From Remote Sensing. *Oceanography*, **23**, 36-51.

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<sup>2</sup> highlight indicates papers where the student was an undergraduate

- Morey, S. L., D. S. Dukhovskoy, and **M. A. Bourassa**, 2009: Connectivity between variability of the Apalachicola River flow and the bio-optical oceanic properties of the northern West Florida Shelf. *Continental Shelf Research*, doi:10.1016/j.csr.2009.02.003.
- Wallcraft, A. J., Kara, A. B., C. N. Barron, E. J. Metzger, R. Pauley and **M. A. Bourassa**, 2009: Comparisons of Monthly Mean 10m Wind Speeds from Satellites and NWP Products over the Global Ocean, *J. Geophys. Res.*, **114**, D16109, doi:10.1029/2008JD011696. [13 citations]
- Kara, A. B., A. J. Wallcraft, and **M. A. Bourassa**, 2008: Air-Sea Stability Effects on the 10m Winds Over the Global Ocean: Evaluations of Air-Sea Flux Algorithms. *J. Geophys. Res.*, **113**, C04009, doi:10.1029/2007JC004324.
- Kara, A. B., A. J. Wallcraft, C. N. Barron, E. J. Metzger, H. E. Hurlburt and **M. A. Bourassa**, 2008: Accuracy of 10 m Wind Speeds from Satellites and NWP Products Near Land–Sea Boundaries. *J. Geophys. Res.*, **113**, C04009, doi:10.1029/2007JC004324.
- Perrie, W., W. Zhang, **M. A. Bourassa**, H. Shen, and P. Vachon, 2008: Impact of satellite winds on marine wind simulations. *Weather and Forecasting*, **23**, 290-303.
- Weissman, D. E., and **M. A. Bourassa**, 2008: Measurements of the Effect of Rain-induced Sea Surface Roughness on the Satellite Scatterometer Radar Cross Section. *IEEE Trans. Geosci. Remote Sens.*, **46**, 2882-2894.
- Bourassa, M. A.**, R. N. Maue, S. R. Smith, P. J. Hughes, and J. Rolph, 2007: Global winds. State of the Climate in 2006. A. Arguez, H. J. Diamond, F. Fetterer, A. Horvitz, and J. M. Levy, Eds., *Bull. Amer. Meteor. Soc.*, **88**, S25-S27.
- Gierach, M. M., **M. A. Bourassa**, P. Cunningham, P. Reasor, and J. J. O'Brien, 2007: Vorticity-Based Detection of Tropical Cyclogenesis. *J. Appl. Meteor. Clim.*, **46**, 1214–1229.
- Kara, A. B., J. Metzger, **M. A. Bourassa**, 2007: Ocean Current and Wave Effects on Wind Stress Drag Coefficient and Fluxes over the Global Ocean. *Geophys. Res. Letts.*, **34**, L01604–01607, doi:10.1029/2006GL027849.
- Bourassa, M. A.**, S. R. Smith, P. Hughes, and J. Rolph, 2006: “Atlantic monthly air–sea fluxes and the 2005 hurricanes”, State of the Climate in 2005. K. A. Shein, A. M. Waple, H. J. Diamond, And J. M. Levy eds., *Bull. Amer. Meteor. Soc.*, **87**, 535 p.
- Morey, S. L., **M. A. Bourassa**, D. S. Dukhovskoy, and J. J. O’Brien, 2006: Modeling studies of the upper ocean response to a tropical storm. *Ocean Dynamics*, 13pp., DOI: 10.1007/s10236-006-0085-y.
- Morey, S. L., S. Baig, **M. A. Bourassa**, D. S. Dukhovskoy, and J. J. O’Brien, 2006: Remote forcing contribution to storm-induced sea level rise during Hurricane Dennis. *Geophys. Res. Letts.*, **33**, L19603–19607, doi:10.1029/2006GL027021.
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