

## BIOGRAPHICAL SKETCH

### ERIC P. CHASSIGNET

Director, Center for Ocean-Atmospheric Prediction Studies  
Florida State University  
Tallahassee, Florida

#### PERSONAL

Citizenship: USA  
Current Academic Rank: Professor  
Department: Earth, Ocean, and Atmospheric Science  
Telephone: (850) 645-7288  
FAX: (850) 644-4841  
Email address: [echassignet@coaps.fsu.edu](mailto:echassignet@coaps.fsu.edu)

#### HIGHER EDUCATION

Ph. D. in Physical Oceanography, 1988, University of Miami, Miami, USA.

#### PROFFSSIONAL EXPERIENCE

Florida State University	Professor	3/06 - present
	COAPS director	3/06 - present
	FCI director	6/10 - present
University of Miami	Adjunct Professor	3/06 - present
	Professor	6/01 - 3/06
	Associate Professor	6/95 - 5/01
	Assistant Professor	9/90 - 5/95
Woods Hole Oceanographic Institution (WHOI)	GFD Faculty	8/00 - present
National Center for Atmospheric Research (NCAR)	Postdoctoral Associate	8/88 - 8/90

#### SYNERGISTIC ACITIVITIES

2015-present Member, University Corporation for Atmospheric Research Community Advisory Committee for NCEP (UCACN) Model Advisory Committee (UMAC)

2015-present CLIVAR Atlantic Panel

2015-present Member, Association of Public and Land-grant Universities' Board on Oceans, Atmosphere, and Climate

2010-present Fellow, NOAA Cooperative Institute for Marine and Atmospheric Studies (CIMAS)

2006-present Fellow, NOAA Northern Gulf of Mexico Cooperative Institute (NGI)

2004-present SHOM Advisory Panel

2001-present International GODAE Science Steering Committee

1999-present Coordinator, HYCOM Consortium for Data Assimilative Modeling

1999-present WOCE/CLIVAR Working Group on Ocean Model Development

2015 NSF Oceanography Review Panel

2014-2016 National Research Council (NRC) committee member "Developing a U.S. Research Agenda to Advance Subseasonal to Seasonal Forecasting"

2011-2015 Director, Deep-C Gulf of Mexico Research Initiative Consortium  
2009-2012 MyOcean Science Advisory Committee  
2011 DOE Science Focus Area Review Panel  
2007-2010 TeraGrid Science Advisory Board  
2007 Host for ONR Southeast Region Progress Review  
2004-2005 US CLIVAR Atlantic Panel  
2004 NSF Oceanography Review Panel  
2003-2004 International Liège Colloquium on Ocean Hydrodynamics Scientific Organizing Committee  
2002-2006 ESMF Advisory Board  
2002-2003 NSF Lagrangian/Autonomous Platforms Workshop Steering Committee  
2001-2002 2002 WOCE Conference Organizing Committee  
2001 MERCATOR-OCEAN Review Panel  
2000-2001 International Liège Colloquium on Ocean Hydrodynamics Scientific Organizing Committee  
1999-2011 National Center for Atmospheric Research Scientific Computing Division Advisory Panel  
1999-2008 US-GODAE Science Steering Committee  
1997-1998 NSF APROPOS Workshop Science Steering Committee  
1995-1997 National Center for Atmospheric Research Scientific Computing Division Advisory Panel  
1994-1998 ONR/DAMÉE-NAB Steering Committee  
1993 NSF Oceanography Review Panel  
1992-1997 WOCE Working Group in Numerical Modeling

#### **UNIVERSITY COMMITTEE AND ADMINISTRATIVE RESPONSABILITIES**

2016 Professeur invité, Université TOULOUSE III - Paul Sabatier  
2013 Director, Summer GFD Program, "Buoyancy-Driven Flows", Woods Hole, USA.  
2012-present Director, Florida Climate Institute (FCI) at the Florida State University  
2011-present Florida State University, Steering Committee, Inter-American Seas Research Consortium (ISRC)  
2011-present Florida State University, Department of Earth, Ocean and Atmospheric Science Computer Committee  
2010-present Florida State University, Department Earth, Ocean, and Atmospheric Science Building Committee  
2010-2012 Co-Founder and Director, Florida Climate Institute (jointly with the University of Florida)  
2007-present Chair, Florida State University, High Performance Computing Advisory Panel  
2006-present Director, Florida State University, Center for Ocean-Atmospheric Predictions Studies (COAPS)  
2010 Director, AOSTA Alpine Summer School, "Buoyancy-Driven Flows", Valsavarenche, Italy.  
2009-2011 Florida State University, Department of Oceanography Computer Committee

- 2008 Chair, Quality Enhancement Review for the Geophysical Fluid Dynamics Institute at Florida State University
- 2004 Director, GODAE Summer School "Ocean Weather Forecasting: An Integrated View of Oceanography", Lalonde Les Maures, France
- 2003-2005 University of Miami, RSMAS School Council
- 1998-2006 University of Miami, RSMAS Computing and Communications Committee (Chair 1998-2004, Co-Chair 2004-2006).
- 1998 Director, NATO-Advanced Study Institute, "Ocean Modeling and Parameterization", Les Houches, France
- 1992-2006 University of Miami, RSMAS, Meteorology and Physical Oceanography Academic Committee (Chair 1992-1995)
- 1992-2006 University of Miami, RSMAS, Meteorology and Physical Oceanography Space Committee (Chair 1997-2006)

**GRADUATE OR POST-GRADUATE ADVISOR (\* Main advisor or supervisor)**

**M.S. or Ph.D.:** S. Sun, E. Fillenbaum, Y. Song, A. Roubicek\*, T. Özgökmen, D. Fratantoni, H. Kang, J. Jacob\*, S. Dutkiewicz, A. Paiva\*, D. Zhang, O. Esenkov, J. Hargrove, S. Sofianos, W. Cheng, M. Papadakis\*, B. O'Connor, M. Veneziani\*, B. Jaimes\*, M. Saraceno, X. Xu\*, C. Rousset, C.L. Gentemann, F. Yao, G. Athie De Valasco, D. Moroni, M. Magaldi, G. Colantuono, F. Gouillon\*, A. Kennedy\*, P. Hughes, J. Dong, C. Chien, A. Todd\*, D. VanDyke\*, H. Winterbottom\*, C. Albers, S. Sejas\*, P. Lewis\*, J.-P. Michael\*, M. Williams, G. Castellao, A. Smentek-Duerr, B. Farmer\*, G. Vickers\*, T. Nguyen\*, N. Crook, D. Aktas\*, M. Clark\*, T. Bhatrasatapongkul\*, E. Olvera\*, S. Bishnu\*, X. Chen\*, T. Stropshire\*.

**Postdocs:** T. Özgökmen\*, A. Romanou\*, L. Cherubin\*, V. Garnier\*, J. Olascoaga\*, D. Bi\*, M. Bentsen\*, A. Bozec\*, S. Rattan\*, C. Edwards\*, Li Ren\*.

**TEACHING**

Geophysical Fluid Dynamics  
Advanced Geophysical Fluid Dynamics  
Dynamical Oceanography  
Computer Models in Fluid Dynamics  
Numerical Methods

**PROFESSIONAL SOCIETIES**

Member American Geophysical Union  
Member American Meteorological Society  
Member American Association for the Advancement of Science

**HONORS AND AWARDS**

- 2012 Distinguished Research Professor (Florida State University)
- 2008 NOPP Excellence in Partnering Award (MISST)
- 2007 NOPP Excellence in Partnering Award (HYCOM Consortium)
- 1996 NSF Creativity Award (with R. Bleck)
- 1989 Post-Doctoral Fellowship, Geophysical Fluid Dynamics Program, Woods Hole Oceanographic Institution

- 1988-1990 Post-Doctoral Fellowship, Advanced Study Program of the National Center for Atmospheric Research
- 1987 Koczy Graduate Fellowship for most outstanding doctoral student at the Rosenstiel School of Marine and Atmospheric Sciences, University of Miami

### EDITORIAL RESPONSABILITIES

Journal of Physical Oceanography  
Journal of Marine Research  
National Academy of Science  
Journal of Geophysical Research - Oceans  
Physics of Fluids  
Dynamics of Atmosphere and Oceans (Guest editor for special issue)  
Journal of Computational Physics  
Deep-Sea Research  
Oceanologica Acta  
Progress in Oceanography  
Geophysical Research Letters  
Ocean Modelling  
Journal of Atmosphere and Oceanic Technology  
Marine Geodesy  
Journal of Marine Sciences  
Journal of Climate

### BOOKS or MONOGRAPHS

- 2016 National Academies of Sciences, Engineering, and Medicine. 2016. *Next Generation Earth System Prediction: Strategies for Subseasonal to Seasonal Forecasts*. Washington, DC: The National Academies Press, 290 pp, doi: 10.17226/21873.
- 2012 Chassignet, E.P., C. Cenedese, and J. Verron (Eds.), 2012: *Buoyancy-Driven Flows*, Cambridge University Press, 436 pp.
- 2006 Chassignet, E.P., and J. Verron (Eds.), 2006: *Ocean Weather Forecasting: An Integrated View of Oceanography*, Springer, 577 pp.
- 2000 Chassignet, E.P., and P. Malanotte-Rizzoli (Eds.), 2000: *Ocean Circulation Model Evaluation Experiments for the North Atlantic Basin*. Special issue of *Dyn. Atmos. Oceans.*, Elsevier Science Ltd., **32**, 155-432
- 1998 Chassignet, E.P., and J. Verron (Eds.), 1998: *Ocean Modeling and Parameterization*. Kluwer Academic Publishers, 451 pp.

### JURIED or REFERRED PUBLICATIONS (~150 publications)

- 2017 Trossman, D.S., B.K. Arbic, D.N. Straub, J.G. Richman, E.P. Chassignet, A.J. Wallcraft, and X. Xu, 2017. The role of rough topography in mediating impacts of bottom drag in eddying ocean circulation models. *J. Phys. Oceanogr.*, submitted.
- 2017 MacKinnon, J.A., M.H. Alford, J.K. Ansong, B.K. Arbic, A. Barna, B.P. Briegleb, F.O. Bryan, M.C. Buijsman, E.P. Chassignet, S. Diggs, P. Gent, S.M. Griffies, R.W. Hallberg, S.R. Jayne, M. Jochum, J.M. Klymak, E. Kunze, W.G. Large, S. Legg, B. Mater, A.V. Melet, L.M. Merchant, R. Musgrave, J.D. Nash, N.J. Norton, A. Pickering, R. Pinkel, K. Polzin, H.L. Simmons, L.C. St. Laurent, O.M. Sun, D.S. Trossman, A.F. Waterhouse, C.B. Whalen, and Z. Zhao, 2017. Climate process team on internal-wave driven ocean mixing. *Bull. Amer. Met. Soc.*, submitted.
- 2017 E. Van Sebille, S.M. Griffies, R. Abernathy, T.P. Adams, P. Berloff, A. Biastoch, B. Blanke, E.P. Chassignet, Y. Cheng, C.J. Cotter, E. Deleersnijder, K. Döös, H. Drake, S. Drijfhout, S.F. Gary,

- A.W. Heemink, J. Kjellsson, I.M. Koszalka, M. Lange, C. Lique, G.A. MacGilchrist, R. Marsh, G.C. Mayorga Adame, R. McAdam, F. Nencioli, C.B. Paris, M.D. Piggott, J.A. Polton, S. Rùhs, S.H. Shah, M.D. Thomas, J. Wang, P.J. Wolfram, L. Zanna, and J.D. Zika, 2016. Lagrangian ocean analysis: Fundamentals and practices. *Ocean Modelling*, revised.
- 2017 Clark, M.T., N. Heath, M.A. Bourassa, and E.P. Chassignet, 2016. Quantification of Stokes drift as a mechanism for surface oil advection in the Gulf of Mexico. *J. Geophys. Oceanogr.*, revised.
- 2017 Deremble, B., W.K. Dewar, and E.P. Chassignet, 2016. Vorticity dynamics near sharp topographic features. *J. Mar. Res.*, in press.
- 2017 Treguier, A.M., E.P. Chassignet, A. Le Boyer, and N. Pinardi, 2016. Modeling and forecasting the "weather of the ocean" at the mesoscale. *J. Mar. Res.*, *Special issue "The Sea"*, in press.
- 2016 Hiester, H.R., S.L. Morey, D.S. Dukhovskoy, E.P. Chassignet, V.H. Kourafalou, and C. Hu, 2016. A topological approach for quantitative comparisons of ocean model fields to satellite ocean color data. *Method. Oceanogr.*, **17**, 232-250, doi:10.1016/j.mio.2016.09.005.
- 2016 Rosburg, K.C., K.A. Donohue, and E.P. Chassignet, 2016. Three-dimensional model-observation intercomparison in the Loop Current region. *Dyn. Atmos. Oceans*, **76**, 283-305, doi:10.1016/j.dynatmoce.2016.05.001.
- 2016 Xu, X., P.B. Rhines, and E.P. Chassignet, 2016. Temperature-salinity structure of the North Atlantic circulation and associated heat and freshwater transports. *J. Climate*, **29**, 7723-7741, doi:10.1175/JCLI-D-15-0798.1.
- 2016 Griffies, S., G. Danabasoglu, P. Durack, A. Alistair, C. Böning, E.P. Chassignet, E. Curchitser, J. Deshayes, H. Drange, B. Fox-Kemper, P. Gleckler, J. Gregory, H. Haak, R. Hallberg, H. Hewitt, D. Holland, T. Ilyina, Y. Komuro, J. Krasting, W. Large, S. Marsland, S. Masina, T. McDougall, J. Orr, A. Pirani, F. Qiao, R. Stouffer, K. Taylor, H. Tsujino, P. Uotila, M. Valdivieso, M. Winton, S. Yeager, V. Balaji, J. Jungclaus, A.M. Treguier, and A.J.G. Nurser, 2016. OMIP contribution to CMIP6: Experimental and diagnostic protocol for the physical component of the Ocean Model Intercomparison Project. *Geosci. Model Dev.*, **9**, 3231-3296, doi:10.5194/gmd-2016-77.
- 2016 Özgökmen, T.M., E.P. Chassignet, C. Dawson, D. Dukhovskoy, G. Jacobs, J. Ledwell, O. Garcia-Pinada, I. MacDonald, S.L. Morey, M. Olascoaga, A.C. Poje, M. Reed, and J. Skancke, 2016. Over what area did the oil and gas spread during the 2010 Deepwater Horizon oil spill? *Oceanography*, **29**(3):96–107, <http://dx.doi.org/10.5670/oceanog.2016.74>.
- 2016 Tseng, Y., H. Lin, H. Chen, K. Thomspson, M. Bentsen, C. Böning, A. Bozec, C. Cassou, E.P. Chassignet, C.H. Chow, G. Danabasoglu, S. Danilov, R. Farneti, P.G. Fogli, Y. Fujii, S.M. Griffies, M. Illicak, T. Jung, S. Masina, A. Navarra, L. Patara, B.L. Samuels, M. Scheinert, D. Sidorenko, C.-H. Sui, H. Tsujino, S. Valcke, A. Voltaire, and Q. Wang, 2016. North and Equatorial Pacific Ocean circulation in the CORE-II hindcast simulations. *Ocean Modelling*, **104**, 143-170, doi:10.1016/j.ocemod.2016.06.003.
- 2016 Gonçalves, R.C., M. Iskandarani, A. Srinivasan, W.C. Thacker, E.P. Chassignet, and O.M. Knio, 2016. A framework to quantify uncertainty in simulations of oil transport in the ocean. *J. Geophys. Res.*, **121**, 2058-2077, doi:10.1002/2015JC011311.
- 2016 Wang Q., M. Illicak, R. Gerdes, H. Drange, Y. Aksenov, D. Bailey, M. Bentsen, A. Biastoch, A. Bozec, C. Böning, C. Cassou, E.P. Chassignet, A.C. Coward, B. Curry, G. Danabasoglu, S. Danilov, E. Fernandez, P.G. Fogli, Y. Fujii, S.M. Griffies, D. Iovino, A. Jahn, T. Jung, W.G. Large, C. Lee, C. Lique, J. Lu, S. Masina, A.J.G. Nurser, C. Roth, D. Salas y Melia, B.L. Samuels, P. Spence, H. Tsujino, S. Valcke, A. Voltaire, X. Wang, and S.G. Yeager, 2016. An assessment of the Arctic Ocean in a suite of interannual CORE-II simulations. Part I: Sea ice and solid freshwater. *Ocean Modelling*, **99**, 110-132, doi:10.1016/j.ocemod.2015.12.008.
- 2016 Wang Q., M. Illicak, R. Gerdes, H. Drange, Y. Aksenov, D. Bailey, M. Bentsen, A. Biastoch, A. Bozec, C. Böning, C. Cassou, E.P. Chassignet, A.C. Coward, B. Curry, G. Danabasoglu, S. Danilov, E. Fernandez, P.G. Fogli, Y. Fujii, S.M. Griffies, D. Iovino, A. Jahn, T. Jung, W.G. Large, C. Lee, C. Lique, J. Lu, S. Masina, A.J.G. Nurser, C. Roth, D. Salas y Melia, B.L. Samuels, P.

- Spence, H. Tsujino, S. Valcke, A. Voltaire, X. Wang, and S.G. Yeager, 2016. An assessment of the Arctic Ocean in a suite of interannual CORE-II simulations. Part II: Liquid freshwater. *Ocean Modelling*, **99**, 86-109, doi:10.1016/j.ocemod.2015.12.009.
- 2016 Ilicak, M., H. Drange, Q. Wang, R. Gerdes, Y. Aksenov, D. Bailey, M. Bentsen, A. Biastoch, A. Bozec, C. Böning, C. Cassou, E.P. Chassignet, A.C. Coward, B. Curry, G. Danabasoglu, S. Danilov, E. Fernandez, P.G. Fogli, Y. Fujii, S.M. Griffies, D. Iovino, A. Jahn, T. Jung, W.G. Large, C. Lee, C. Lique, J. Lu, S. Masina, A.J.G. Nurser, C. Roth, D. Salas y Melia, B.L. Samuels, P. Spence, H. Tsujino, S. Valcke, A. Voltaire, X. Wang, and S.G. Yeager, 2016. An assessment of the Arctic Ocean in a suite of interannual CORE-II simulations. Part III: Hydrography and fluxes. *Ocean Modelling*, **100**, 121-141, doi:10.1016/j.ocemod.2016.02.004, in press.
- 2016 Dukhovskoy, D.S., P.G. Myers, G. Platov, M.-L. Timmermans, A. Proshutinsky, B. Curry, J.L. Bamber, E.P. Chassignet, X. Hu, C.M. Lee, and R. Somavilla, 2016. Greenland freshwater pathways in the sub-Arctic Seas from model experiments with passive tracers. *J. Geophys. Res.*, **121**, 877-907, doi:10.1002/2015JC011290.
- 2015 Danabasoglu, G., S.G. Yeager, W.M. Kim, E. Behrens, M. Bentsen, D. Bi, A. Biastoch, R. Bleck, C. Böning, A. Bozec, V.M. Canuto, C. Cassou, E.P. Chassignet, A.C. Coward, S. Danilov, N. Diansky, H. Drange, R. Farneti, E. Fernandez, P.G. Fogli, G. Forget, Y. Fujii, S.M. Griffies, A. Gusev, P. Heimbach, A. Howard, T. Jung, M. Kelley, W.G. Large, A. Leboissetier, J. Lu, G. Madec, S.J. Marsland, S. Masina, A. Navarra, A.J.G. Nurser, A. Pirani, A. Romanou, D. Salas y Melia, B.L. Samuels, M. Scheinert, D. Sidorenko, S. Sun, A.-M. Treguier, H. Tsujino, P. Uotila, S. Valcke, A. Voltaire, and Q. Wang, 2015. North Atlantic simulations in Coordinated Ocean-ice Reference Experiments phase II (CORE-II). Part II: Inter-Annual to Decadal Variability. *Ocean Modelling*, **97**, 65-90, doi:10.1016/j.ocemod.2015.11.007.
- 2015 Xu, X., P.B. Rhines, E.P. Chassignet, and W.J. Schmitz Jr., 2015. Spreading of Denmark Strait overflow water in the western subpolar North Atlantic: Insights from eddy-resolving simulations with a passive tracer. *J. Phys. Oceanogr.*, **45**, 2913-2932, doi:10.1175/JPO-D-14-017.
- 2015 Brassington, G.B., M.J. Martin, H.L. Tolman, S. Akella, M. Balmaseda, C.R.S. Chambers, E.P. Chassignet, J.A. Cummings, Y. Drillet, P.A.E.M. Janssen, P. Laloyaux, D. Lea, A. Mehra, I. Mirouze, H. Ritchie, G. Samson, P.A. Sandery, G.C. Smith, M. Suarez, and R. Todling, 2015. Progress and challenges in short- to medium-range coupled prediction. *J. Oper. Oceanogr.*, **8**:sup2, s239-s258, doi:10.1080/1755876X.2015.104987.
- 2015 Downes, S.M., R. Farneti, P. Uotila, S.M. Griffies, S.J. Marsland, D. Bailey, E. Behrens, M. Bentsen, D. Bi, A. Biastoch, C. Böning, A. Bozec, V.M. Canuto, E.P. Chassignet, G. Danabasoglu, S. Danilov, N. Diansky, H. Drange, P.G. Fogli, A. Gusev, A. Howard, M. Ilicak, T. Jung, M. Kelley, W.G. Large, A. Leboissetier, M. Long, J. Lu, S. Masina, A. Mishra, A. Navarra, A.J.G. Nurser, L. Patara, B.L. Samuels, D. Sidorenko, P. Spence, H. Tsujino, Q. Wang, and S.G. Yeager, 2015. An assessment of Southern Ocean water masses and sea ice during 1988-2007 in a suite of inter-annual CORE-II simulations. *Ocean Modelling*, **94**, 67-94, doi:10.1016/j.ocemod.2015.07.022.
- 2015 Farneti R., S.M. Downes, S.M. Griffies, S.J. Marsland, E. Behrens, M. Bentsen, D. Bi, A. Biastoch, C. Böning, A. Bozec, V.M. Canuto, E.P. Chassignet, G. Danabasoglu, S. Danilov, N. Diansky, H. Drange, P.G. Fogli, A. Gusev, R.W. Hallberg, A. Howard, M. Ilicak, T. Jung, M. Kelley, W.G. Large, A. Leboissetier, M. Long, J. Lu, S. Masina, A. Mishra, A. Navarra, A.J.G. Nurser, L. Patara, B.L. Samuels, D. Sidorenko, H. Tsujino, P. Uotila, Q. Wang, and S.G. Yeager, 2015. An assessment of Antarctic Circumpolar Current and Southern Ocean Meridional Overturning Circulation during 1958-2007 in a suite of inter-annual CORE-II simulations. *Ocean Modelling*, **93**, 84-120, doi:10.1016/j.ocemod.2015.07.009.
- 2015 Dukhovskoy, D.S., R.R. Leben, E.P. Chassignet, C. Hall, S.L. Morey and R. Nedbor-Gross, 2015. Characterization of the uncertainty in the Gulf of Mexico loop current description using a multidecadal numerical simulation and altimeter observations. *Deep-Sea Res. I*, **100**, 140-158, doi:10.1016/j.dsr.2015.01.005.

- 2015 Nguyen, T.T., S.L. Morey, D.S. Dukhovskoy, and E.P. Chassignet, 2015. Non-local impacts of the Loop Current on cross-slope near-bottom flow in the northeastern Gulf of Mexico. *Geophys. Res. Lett.*, **42**, doi:10.1002/2015GL063304.
- 2015 Jones, C.S., C. Cenedese, E.P. Chassignet, P.F. Linden, and B.R. Sutherland, 2015. Gravity current propagation up a valley. *J. Fluid Mech.*, **762**, 417-434, doi:10.1017/jfm.2014.627.
- 2014 Todd, A.C., S.L. Morey, and E.P. Chassignet, 2015. Circulation dynamics and cross-shelf transport mechanisms in the Florida Big Bend, *J. Mar. Res.*, **72**, 445-475.
- 2014 Arruda, W., V. Zharkov, B. Deremble, D. Nof, and E.P. Chassignet, 2014. A new model of current retroflexion applied to the westward protrusion of the Agulhas. *J. Phys. Oceanogr.*, **44**, 3118-3138.
- 2014 Wu, Z., E.P. Chassignet, F. Ji, and J. Huang, 2014. Reply to 'Spatiotemporal patterns of warming'. *Nature Climate Change*, **4**, 846-848, doi:10.1038/nclimate2374.
- 2014 Zavala-Romero, O., A. Ahmed, E.P. Chassignet, J. Zavala-Hidalgo, A.F. Eguiarte, and A. Meyer-Baese, 2014. OWGIS: An Open Source Java web application to build self-contained WebGIS sites. *Environ. Model. Softw.*, **62**, 210-220, doi:10.1016/j.envsoft.2014.08.029.
- 2014 Nedbor-Gross, R., D.S. Dukhovskoy, M.A. Bourassa, S.L. Morey, and E.P. Chassignet, 2014. Investigation of the relationship between the Yucatan Channel transport and the Loop Current area in a multi-decadal numerical simulation. *Mar. Technol. Soc. J.*, **48**(4), 15-26, doi:10.4031/MTSJ.48.4.8.
- 2014 Coleman, F.C., J.P. Chanton, and E.P. Chassignet, 2014. Ecological Connectivity in Northeastern Gulf of Mexico - The Deep-C Initiative. *International Oil Spill Conference Proceedings: May 2014*, **2014**(1), 1972-1984, doi: <http://dx.doi.org/10.7901/2169-3358-2014.1.1972>.
- 2014 Xu, X., E.P. Chassignet, W.E. Johns, W.J. Schmitz Jr., and E.J. Metzger, 2014. Intraseasonal to interannual variability of the Atlantic meridional overturning circulation from eddy-resolving simulations and observations. *J. Geophys. Res.*, **119**, doi:10.1002/2014JC009994.
- 2014 Chassignet, E.P., X. Xu, and G. Danabasoglu, 2014. Overflow parameterisations in climate models. *CLIVAR Exchanges*, **19**(2), 34-37.
- 2014 Arbic, B.K., M.C. Buijsman, E.P. Chassignet, S.T. Garner, S.R. Jayne, E.J. Metzger, J.G. Richman, J.F. Shriver, P.G. Timko, D.S. Trossman, and A.J. Wallcraft, 2014. Inserting tides and topographic wave drag into high-resolution eddy simulations. *CLIVAR Exchanges*, **19**(2), 30-33.
- 2014 Chassignet, E.P., J.G. Richman, E.J. Metzger, X. Xu, P.G. Hogan, B.K. Arbic, and A.J. Wallcraft, 2014. HYCOM high-resolution eddy simulations. *CLIVAR Exchanges*, **19**(2), 22-25.
- 2014 Ji, F., Z. Wu, J. Huang, and E.P. Chassignet, 2014. Evolution of land surface air temperature trend. *Nature Climate Change*, doi:10.1038/nclimate2223.
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## FUNDED RESEARCH

Influence of Outcropping on Latitude Jet Separation in Multi-Layer Primitive Equation Numerical Model. Co-Principal Investigator with Bleck	NSF	6/15/91- 5/31/94	\$153,500
North Atlantic Modeling with a Multi-Layer Primitive Equation Numerical Model. Principal Investigator	ONR	10/1/92- 9/30/94	\$125,656

Heat Fluxes in a Coupled Atmosphere Atlantic Ocean Model in Response to Variation in Imposed Temperature Gradients. Co-Principal Investigator with O'Brien	DOE	7/1/92- 6/30/96	\$281,647
Isopycnal Modeling Work in the Context of the World Ocean Circulation Experiment Co-Principal Investigator with Bleck	NSF	12/15/92- 11/30/98	\$850,000
Vortex Interactions with External Effects Co-Principal Investigator with Dewar and Meacham (FSU)	NSF	6/1/94- 5/31/98	\$240,000
Influence of Coastline Orientation and Bottom Topography on Jet Separation/DAMEE-NAB Principal Investigator	ONR	10/1/94- 9/30/96	\$306,706
Satellite Data Assimilation in Miami Ocean Model Co-Principal Investigator with Mariano, Bleck and Halliwell	NASA	4/1/95- 3/31/98	\$308,999
Analysis and Modeling of RAFOS Float Trajectories in the Deep Western Boundary Current off the Bahamas Co-Principal Investigator with Leaman and Griffa	NSF	6/1/95- 5/31/97	\$102,999
Feedback in a Coupled Atlantic Ocean-Global Atmosphere Co-Principal Investigator with O'Brien and Rooth	NOAA	4/1/95- 3/31/97	\$113,674
Modeling the Meridional Overturning Circulation (MOC) in the North Atlantic: Seasonal to Decadal Variability Principal Investigator	NSF	8/15/96- 1/31/02	\$330,000
Numerical Investigation of the Stability in Time and Space of the Gulf Stream Separation Co-Principal Investigator with Özgökmen	NSF	8/1/97- 7/31/00	\$249,000
Basin-Scale Modeling of the North Atlantic Using the Miami Isopycnic Coordinate Ocean Model (MICOM) Principal Investigator	ONR	10/1/96- 9/30/98	\$374,950
Use of Tracers in Classifying Climate Relevant North Atlantic Circulation Transients Co-Principal Investigator with Rooth and Bleck	NOAA	7/1/96 - 6/30/02	\$280,000
Ocean Modeling and Parameterization Principal Investigator	NSF	9/1/97- 9/30/98	\$20,000
Lagrangian Statistics in a High Resolution 1/12 Degree Ocean Numerical Model Co-Principal Investigator with Griffa and Garraffo	NSF	8/1/98- 7/31/02	\$344,000
MICOM-Based Nowcast/Forecast Systems for Coastal/Open Ocean Regions Principal Investigator	ONR	10/1/98- 9/30/02	\$912,899
Vortex Interactions with Abrupt Topography Principal Investigator	NSF	4/15/99- 3/31/02	\$187,000

HYCOM Consortium for Data Assimilative Ocean Modeling Principal Investigator	ONR	10/1/99- 9/30/04	\$1,545,475
Planning for a coupled Physical-Biological Modeling Node Of (Phase A) National Ocean Partnership Program Proposal Principal Investigator	URI	9/1/99- 12/31/99	\$6,226
Analysis and Validation of a Mechanism that Generates Strong Mid-Depth Currents and a Deep Cyclonic Gyre in the Gulf of Mexico Principal Investigator	FSU	11/1/99- 9/30/04	\$185,022
Collaborative Research: Observations and Models of Upper Ocean Water Mass Formation and Evolution In the Western North Atlantic Principal Investigator	NSF	4/15/00- 3/31/05	\$377,123
HYCOM Data Assimilation and WEB Outreach Principal Investigator	ONR	3/25/02 9/30/04	\$20,000
Further Developments of the HYbrid Coordinate Ocean Model (HYCOM) Principal Investigator	ONR	10/1/02- 9/30/04	\$259,273
U.S. GODAE: Global Ocean Prediction with the HYbrid Coordinate Ocean Model (HYCOM) Principal Investigator	NOAA	7/1/03- 6/31/06	\$302,100
The Partnership for Advancing Interdisciplinary Global Modeling Principal Investigator	NSF	8/15/04- 8/14/05	\$121,967
Collaborative Research: Gravity Current Entrainment Climate Process Team Co-Principal Investigator with Özgökmen and Peters	NSF	10/1/03- 9/30/08	\$167,787
Response of the Gulf of Mexico Loop Current to Variability in Remote Forcing Co-Principal Investigator with Cherubin and Johns	NSF	9/1/03- 8/31/06	\$388,792
U.S. GODAE: Global Prediction with the Hybrid Coordinate Ocean Model (HYCOM) Principal Investigator	ONR	6/3/04- 9/30/08	\$443,089
Production and Assessment of a Multi-Sensor Enhanced Surface Temperature Analysis for GODAE Principal Investigator	NASA	6/1/04- 5/31/09	\$9,966
GODAE Summer School Principal Investigator	NSF	8/15/04- 8/14/05	\$20,000
A Storage Area Network Principal Investigator	ONR	4/1/05- 3/31/07	\$194,622
Ocean Modeling and Prediction	NRL	4/10/01-	\$537,778



Co-Principal Investigator with O'Brien		4/09/06	
Regional Assessment of Climate Impacts Co-Principal Investigator with O'Brien	NOAA	6/01/01- 5/31/07	\$3,146,500
Risk Reduction for Agriculture Specialty Crops Co-Principal Investigator with O'Brien	UF	3/01/03- 12/31/11	\$361,000
Decision Support System for Reducing Ag Risks Co-Principal Investigator with O'Brien	USDA	9/01/03 – 8/31/08	\$3,371,427
US RV Surface Meteorology Data Center Co-Principal Investigator with Smith and Bourassa	WHOI	6/01/04 – 6/30/09	\$450,000
Satellite Data for Climate Change Analysis Co-Principal Investigator with O'Brien and La Row	U. of Alabama	9/15/04 – 6/14/07	\$100,000
Coastal Climatology Products Co-Principal Investigator with O'Brien	U. of Georgia	9/24/04 – 4/30/07	\$13,112
The Influence of the Mediterranean Outflow Water Principal Investigator	NSF	3/01/06- 5/31/10	\$661,898
Global Ocean Prediction with HYCOM Principal Investigator	ONR	9/30/08- 1/31/10	\$401,105
Multi-Sensor Improved Sea Surface Temperature Principal Investigator	NASA	3/01/06 – 2/28/09	\$114,932
A Storage Area Network for Ocean Prediction Principal Investigator	ONR	4/27/06 – 3/31/07	\$194,622
An Applied NOAA Research Center at COAPS Co-Principal Investigator with O'Brien and Bourassa	NOAA	6/01/06 – 5/31/11	\$4,176,990
Extending the PRIDE-Live Access Server Principal Investigator	PMEL	8/01/06 – 9/30/07	\$12,000
Ocean Modeling and Prediction Co-Principal Investigator with O'Brien	NRL	8/28/06 – 8/27/11	\$995,000
Parameterization of Ocean Overflows Principal Investigator	NSF	8/31/06- 8/31/08	\$51,978
Northern Gulf of Mexico Cooperative Institute Co-Principal Investigator with Dewar	NOAA	11/01/06 – 12/30/11	\$2,457,325
Global Ocean Prediction with HYCOM Principal Investigator	ONR	2/01/07- 1/31/12	\$2,156,665
Wildfire Prediction and Asset Accountability Principal Investigator	Aegis	9/30/07- 1/31/08	\$322,425
Southeast Region Progress Review Principal Investigator	ONR	5/01/07 – 6/15/07	\$2,298

Incorporation of HYCOM into the CCSM Co-Principal Investigator with Yin	DOE	8/15/07 – 08/14/12	\$540,647
Agulhas Rings Pathways Co-Principal Investigator with Nof	NSF	5/01/08 – 04/30/11	\$200,348
Arctic Ocean Model Intercomparison Co-Principal Investigator with Dukhovskoy	NSF	9/01/08 – 8/31/11	\$90,000
Embedding a Forward Model of Tides Co-Principal Investigator with Arbic	U Texas	1/01/09 – 9/30/11	\$39,243
Toward a Global HYCOM Ocean Prediction System Principal Investigator	ONR	1/28/09 – 1/31/14	\$2,156,665
Effects of Small-Scale Bathymetric Roughness Co-Principal Investigator with Arbic	ONR	5/01/09 – 2/31/10	\$81,997
Impact of Moored Turbines on the Florida Current Principal Investigator	FAU	6/01/09 – 6/30/11	\$305,830
Wind Field Reconstruction for Hurricanes Co-Principal Investigator with Powell	ARCADIS	6/08/09 – 8/30/09	\$55,400
Decision Support System for Reducing Ag Risks Co-Principal Investigator with O'Brien	USDA	8/15/09 – 8/14/11	\$2,334,384
The Death of Agulhas Rings Co-Principal Investigator with Nof	NSF	9/15/09 – 8/31/12	\$417,479
A Land of Flowers in a Latitude of Deserts Co-Principal Investigator with Misra	USGS	2/17/10 – 3/1/12	\$499,950
Resolving Chemical Properties and Extent of Crude Oil in the Deepwater Horizon Spill Principal Investigator	FIO	8/13/10 – 8/12/12	\$220,000
BP Earth System Modeling Principal Investigator	NGI	11/15/10 – 12/31/12	\$168,000
Impact of Bottom Boundary Layer Drag and Topographic Wave Drag on the Eddy General Circulation Co-Principal Investigator with Arbic	NSF	7/1/11 – 8/31/12	\$29,778
Impact of Moored Turbines on the Florida Current Principal Investigator	FAU	8/25/11 – 6/30/12	\$70,000
Ocean Modeling and Prediction Principal Investigator	NRL	7/20/11 – 7/19/16	\$2,499,994
Deep-C: Deep Sea to Coast Connectivity in the Eastern Gulf of Mexico Principal Investigator	GRI	9/1/11 – 12/31/14	\$20,245,000
Incorporating Climate Change Effects into Next Generation Coastal Inundation Decision Support Systems	UF / NOAA	9/1/11 – 8/31/15	\$390,000

Co-Principal Investigator with LaRow

Increasing Our Understanding of the Interaction Between Physical and Ecological Processes in the Gulf of Mexico and Caribbean Principal Investigator	MSU	8/1/12 – 7/31/16	\$100,000
Data Assimilative Ocean Hindcast for Oil Spill Risk Analysis in the Gulf of Mexico Principal Investigator	BOEM	8/17/12 – 2/28/15	\$149,091
Bias Characterization and Hurricane Initialization Using ATMS, SSMIS and AMSR-2 Co-Principal Investigator with Zou	MSU	11/1/12 – 10/31/15	\$750,680
Multimodel Ensembles for Hurricane Forecasts Principal Investigator	CIMAS	7/1/11 – 12/31/12	\$83,418
A Storage Area Network for HYCOM Ocean Prediction System Principal Investigator	ONR	11/1/11 – 08/31/15	\$512,370
Accelerated Prediction of the Polar Ice and Global Ocean (APPIGO) Principal Investigator	ONR	9/1/13 – 9/30/16	\$222,335
An Integration and Evaluation Framework for ESPC Couples Models Principal Investigator	ONR	12/1/13 – 11/30/16	\$223,335
Ocean Eddies – Topographic Interactions Along the Brazilian Coast Co-Principal Investigator with Deremble	NSF	9/1/14 – 8/31/17	\$496,752
Variability and Coherence of the Atlantic Meridional Overturning Circulation Co-Principal Investigator with Xu	CIMAS	8/1/14 – 7/31/15	\$58,890
Increasing Our Understanding of the Interaction Between Physical and Ecological Processes in the Gulf of Mexico and Caribbean Co-Principal Investigator with Morey	MSU	7/1/14 – 6/31/16	\$123,662
Evaluation and Diagnosis of the Atlantic Meridional Overturning Circulation 3D Structure in Climate Models Co-Principal Investigator with Xu	NOAA	8/1/15 – 7/31/18	\$321,201
Ocean and Sea Ice and their Interactions Around Greenland and the West Antarctic Peninsula in Forced Fine-Resolution Global Simulations Principal Investigator	DOE	8/1/15 – 7/31/18	\$224,964
Subpolar-Subtropical Connectivity of the North Atlantic Circulation Co-Principal Investigator with Xu	NSF	9/15/15 – 8/31/18	\$451,170

Variability and Coherence of the Atlantic Meridional  
Overturning Circulation  
Co-Principal Investigator with Xu

CIMAS 10/1/15 – \$116,958  
9/30/17