

CURRICULUM VITAE

JAMES BEARER EDSON

Senior Scientist
Woods Hole Oceanographic Institution
Applied Ocean Physics & Engineering
266 Woods Hole Road, MS #12
Woods Hole, MA 02543

Tel: (508) 289-2935
Fax: (508) 457-2194
Email: jedson@whoi.edu

EDUCATION

Ph D. Meteorology, The Pennsylvania State University, University Park, PA, 1989
B.S. Physics, Dickinson College, Carlisle, PA, 1984

RESEARCH INTERESTS

My research interests lie in boundary layer meteorology with a focus on surface layer turbulence and air-sea interaction. My specific research in these fields involve spectral analysis, turbulent fluxes, surface layer scaling, measurement techniques, instrumentation, motion correction, flux parameterization, water vapor and gas exchange, transfer coefficients, wind-wave interaction, and turbulent transport of evaporating sea-spray.

EXPERIENCE

February, 2018 – Present	Senior Scientist, Woods Hole Oceanographic Institution
August, 2014 – January, 2018	Professor and Head, Marine Sciences, University of Connecticut
August, 2009 – July, 2014	Professor, UConn
August, 2006 – July, 2009	Associate Professor with Tenure, UConn
January, 2005 – July, 2006	Associate Professor, UConn
July, 2005 – January, 2018	Adjunct Scientist, WHOI
April, 1999 - December, 2004	Associate Scientist with Tenure, WHOI
February, 1995 - March, 1999	Associate Scientist, WHOI
January, 1991 - January, 1995	Assistant Scientist, WHOI
September, 1989 - December, 1990	Visiting Scientist, LMTTD/ENSM; Nantes, France
Summer, 1986	Visiting Scientist, Risø National Laboratory; Roskilde, Denmark

PROFESSIONAL SOCIETIES

Member, American Meteorological Society
Member, American Geophysical Union

REFEREED PUBLICATIONS

- 1987 Mestayer, P.G., J.B. Edson, C.W. Fairall, S.E. Larsen, and D.E. Spiel, "Turbulent transport and evaporation of droplets generated at an air-water interface", *Turbulent Shear Flows*, 6, 129-147.
- 1990 Fairall, C.W., J.B. Edson, S.E. Larsen, and P.G. Mestayer, "Inertial-dissipation air-sea flux measurements: A prototype system using realtime spectral computations," *J. Atmos.*

- Oceanic Tech.*, 7, 425-453. doi: [https://doi.org/10.1175/1520-0426\(1990\)007%3C0425:IDASFM%3E2.0.CO;2](https://doi.org/10.1175/1520-0426(1990)007%3C0425:IDASFM%3E2.0.CO;2)
- 1990 Mestayer, P.G., S.E. Larsen, C.W. Fairall, and J.B. Edson, "Turbulence sensor dynamic calibration using realtime spectral computations," *J. Atmos. Oceanic Tech.*, 7, 841-851. doi: [https://doi.org/10.1175/1520-0426\(1990\)007%3C0841:TSDCUR%3E2.0.CO;2](https://doi.org/10.1175/1520-0426(1990)007%3C0841:TSDCUR%3E2.0.CO;2).
- 1991 Edson, J.B., C.W. Fairall, S.E. Larsen, and P.G. Mestayer, "A study of the inertial-dissipation technique for computing air-sea fluxes," *J. Geophys. Res.*, 96, 10689-10711.
- 1993 Larsen, S.E., J.B. Edson, C.W. Fairall, and P.G. Mestayer, "Measurement of temperature spectra by a sonic anemometer," *J. Atmos. Oceanic Tech.*, 10, 345-354. doi: [https://doi.org/10.1175/1520-0426\(1993\)010%3C0345:MOTSBA%3E2.0.CO;2](https://doi.org/10.1175/1520-0426(1993)010%3C0345:MOTSBA%3E2.0.CO;2).
- 1994 Edson, J.B. and C.W. Fairall, "Spray droplet modeling, I: Lagrangian model simulation of the turbulent transport of evaporating droplets," *J. Geophys. Res.*, 99, 25295-25311.
- 1994 Oost, W.A., C.W. Fairall, J.B. Edson, S.D. Smith, R.J. Anderson, J.A.B. Wills, J.B. Katsaros, and J. DeCosmo, "Flow distortion calculations and their application in HEXMAX," *J. Atmos. Oceanic Tech.*, 11, 366-386. doi: [https://doi.org/10.1175/1520-0426\(1994\)011%3C0366:FDCATA%3E2.0.CO;2](https://doi.org/10.1175/1520-0426(1994)011%3C0366:FDCATA%3E2.0.CO;2).
- 1995 Andreas, E.L., J.B. Edson, E.C. Monahan, M. Rouault, and S.D. Smith, "The spray contribution to net evaporation from the sea: A review of recent progress," *Boundary-Layer Meteorol.*, 72, 3-52.
- 1995 Lakehal, D., P.G. Mestayer, J.B. Edson, S. Anquetin, and J.-F. Sini, "Eulero-Lagrangian simulation of raindrop trajectories and impacts within the urban canyon," *Atmos. Environ.*, 29, 3501-3517.
- 1995 Larsen, S.E., J.B. Edson, P. Hummelshøj, N.O. Jensen, G. deLeeuw, and P.G. Mestayer, "Dry deposition of particles to ocean surfaces," *Ophelia*, 42, 193-204.
- 1995 Sikora, T.D., G.S. Young, R.C. Beal and J.B. Edson, "On the use of spaceborne synthetic aperture radar imagery of the sea surface in detecting the presence and structure of the convective marine atmospheric boundary layer," *Mon. Weather. Rev.*, 123, 3623-3632. doi: [https://doi.org/10.1175/1520-0493\(1995\)123%3C3623:UOSSAR%3E2.0.CO;2](https://doi.org/10.1175/1520-0493(1995)123%3C3623:UOSSAR%3E2.0.CO;2).
- 1996 Edson, J.B., S. Anquetin, P.G. Mestayer, and J.F. Sini, "Spray droplet modeling II: An interactive Eulerian-Lagrangian model of evaporating spray droplets," *J. Geophys. Res.*, 101, 1279-1294.
- 1996 Fairall, C.W., E.F. Bradley, J.S. Godfrey, J.B. Edson, G.S. Young, and G.A. Wick, "Cool skin and warm layer effects on the sea surface temperature," *J. Geophys. Res.*, 101, 1295-1308.
- 1996 Fairall, C. W., E. F. Bradley, D.P. Rogers, J. B. Edson, and G. S. Young, "Bulk parameterization of air-sea fluxes for TOGA COARE," *J. Geophys. Res.*, 101, 3747-3764.
- 1996 Mahrt, L., D. Vickers, J. Howell, J. Højstrup, J.M. Wilczak, J.B. Edson, and J.E. Hare, "Sea surface drag coefficients in RASEX," *J. Geophys. Res.*, 101, 14327-14335.
- 1997 Chapman, R.D., L.K. Shay, H.C. Graber, J.B. Edson, A. Karachintsev, C. Trump, and D. B. Ross, "On the accuracy of HF radar surface current measurements: Intercomparison with ship-based sensors," *J. Geophys. Res.*, 102, 18737-18748.
- 1997 Fairall, C.W., A.B. White, J.B. Edson, and J.E.Hare, "Integrated shipboard measurements of the marine boundary layer," *J. Atmos. Oceanic Tech.*, 14, 338-359. doi: [https://doi.org/10.1175/1520-0426\(1997\)014%3C0338:ISMOTM%3E2.0.CO;2](https://doi.org/10.1175/1520-0426(1997)014%3C0338:ISMOTM%3E2.0.CO;2).

- 1997 Hare, J.E., T. Hara, J.B. Edson, and J.M. Wilczak, "A similarity analysis of the structure of air flow over surface waves," *J. Phys. Oceanogr.*, 27, 1018-1037. doi: [https://doi.org/10.1175/1520-0485\(1997\)027%3C1018:ASAOTS%3E2.0.CO;2](https://doi.org/10.1175/1520-0485(1997)027%3C1018:ASAOTS%3E2.0.CO;2).
- 1997 Frederickson, P., K.L. Davidson, and J.B. Edson, "A study of wind stress determination methods from a ship and an offshore tower," *J. Atmos. Oceanic Tech.*, 14, 822-834. doi: [https://doi.org/10.1175/1520-0426\(1997\)014%3C0822:ASOWSD%3E2.0.CO;2](https://doi.org/10.1175/1520-0426(1997)014%3C0822:ASOWSD%3E2.0.CO;2).
- 1997 Vandemark, D., J.B. Edson, and B. Chapron, "Altimeter estimations of sea surface wind stress for light to moderate winds," *J. Atmos. Oceanic Tech.*, 14, 716-722. doi: [https://doi.org/10.1175/1520-0426\(1997\)014%3C0716:AEOSSW%3E2.0.CO;2](https://doi.org/10.1175/1520-0426(1997)014%3C0716:AEOSSW%3E2.0.CO;2).
- 1998 Edson, J.B., A. A. Hinton, K. E. Prada, J.E. Hare, and C.W. Fairall, "Direct covariance flux estimates from mobile platforms at sea," *J. Atmos. Oceanic Tech.*, 15, 547-562. doi: [https://doi.org/10.1175/1520-0426\(1998\)015%3C0547:DCFEFM%3E2.0.CO;2](https://doi.org/10.1175/1520-0426(1998)015%3C0547:DCFEFM%3E2.0.CO;2)
- 1998 Edson, J. B., and C.W. Fairall, "Similarity relationships in the marine atmospheric surface layer for terms in the TKE and scalar variance budgets," *J. Atmos. Sci.*, 55, 2311-2328. doi: [https://doi.org/10.1175/1520-0469\(1998\)055%3C2311:SRITMA%3E2.0.CO;2](https://doi.org/10.1175/1520-0469(1998)055%3C2311:SRITMA%3E2.0.CO;2)
- 1998 Hara, T., E.J. Bock, J.B. Edson, and W.R. McGillis, "Observations of short wind waves in coastal waters," *J. Phys. Oceanogr.*, 28, 1425-1438. doi: [https://doi.org/10.1175/1520-0485\(1998\)028%3C1425:OOSWWI%3E2.0.CO;2](https://doi.org/10.1175/1520-0485(1998)028%3C1425:OOSWWI%3E2.0.CO;2).
- 1998 Mahrt, L., D. Vickers, J. Edson, J. Sun, J. Højstrup, J. Hare, and J.M. Wilczak, "Heat flux in the coastal zone," *Bound.-Layer Meteorol.*, 86, 421-446.
- 2000 Fairall, C. W., J. E. Hare, J. B. Edson, and W. R. McGillis, "Parameterization and micrometeorological measurement of air-sea gas transfer," *Bound.-Layer Meteorol.*, 96, 63-105.
- 2001 Mahrt, L., D. Vickers, J. Edson, J.M. Wilczak, and J. Hare, "Vertical structure of turbulence in offshore flow during RASEX," *Bound.-Layer Meteorol.*, 100, 47-61.
- 2001 McGillis, W. R., J. B. Edson, J. E. Hare, and C. W. Fairall, "Direct covariance air-sea CO₂ fluxes," *J. Geophys. Res.*, 106, 16729-16745.
- 2001 McGillis, W. R., J. B. Edson, J. D. Ware, J. W. H. Dacey, J. E. Hare, C. W. Fairall, R. Wanninkhof, "Carbon dioxide flux techniques performed during GasEx-98," *J. Marine Chem.*, 75, 267-280.
- 2002 Austin, T., J. Edson, W. McGillis, M. Purcell, R. Petitt, M. McElroy, J. Ware, C. Grant, and S Hurst, "A network-based telemetry architecture developed for the Martha's Vineyard coastal observatory," *IEEE J. Oceanic Eng.*, 27, 228-234.
- 2002 Edson, J. B., A. C. Chave, M. D. Dhanak and F. D. Duennebie, "Guest Editorial," *IEEE J. Oceanic Eng.*, 27, 145-145. doi: <https://doi.org/10.1109/JOE.2002.1002468>.
- 2003 Lentz, S., K. Shearman, S. Anderson, A. Plueddemann, and J. Edson, "Evolution of stratification over the New England shelf during the Coastal Mixing and Optics study, August 1996 - June 1997," *J. Geophys. Res.*, 108, 1-14.
- 2003 Fairall, C. W., E. F. Bradley, J. E. Hare, A. A. Grachev, and J. B. Edson, "Bulk parameterization of air-sea fluxes: Updates and verification for the COARE algorithm," *J. Climate*, 16, 571-591. doi: [https://doi.org/10.1175/1520-0442\(2003\)016%3C0571:BPOASF%3E2.0.CO;2](https://doi.org/10.1175/1520-0442(2003)016%3C0571:BPOASF%3E2.0.CO;2)
- 2003 Grachev, A. A., C. W. Fairall, J. E. Hare, J. B. Edson, and S. D. Miller, "Wind Stress Vector over Ocean Waves," *J. Phys. Oceanogr.*, 33, 2408-2429. doi: [https://doi.org/10.1175/1520-0485\(2003\)033%3C2408:WSVOOW%3E2.0.CO;2](https://doi.org/10.1175/1520-0485(2003)033%3C2408:WSVOOW%3E2.0.CO;2)

- 2003 Beardsley, R. C., S. J. Lentz, R. A. Weller, R. Limeburner, J. D. Irish, and J. B. Edson, "Surface forcing on the southern flank of Georges Bank, February–August 1995," *J. Geophys. Res.*, *108*, C118007, doi: <https://doi.org/10.1029/2002JC001359>.
- 2004 Hints, E. J., J. W. H. Dacey, W. R. McGillis, J. B. Edson, C. J. Zappa, and H. J. Zemmeling, "Sea-to-air fluxes from measurements of the atmospheric gradient of dimethylsulfide and comparison with simultaneous relaxed eddy accumulation measurements," *J. Geophys. Res.*, *109*, C01026, doi: <https://doi.org/10.1029/2002JC001617>.
- 2004 McGillis, W. R., J. B. Edson, C. J. Zappa, J. D. Ware, S. P. McKenna, E. A. Terray, J. E. Hare, C. W. Fairall, W. Drennan, M. Donelan, M. D. DeGrandpre, R. Wanninkhof, and R. A. Feely, "Air-sea CO₂ exchange in the equatorial Pacific," *J. Geophys. Res.*, *109*, C08S08, doi: <https://doi.org/10.1029/2003JC001960>.
- 2004 Ward, B., R. Wanninkhof, W. R. McGillis, A. T. Jessup, M. D. DeGrandpre, J. E. Hare, and J. B. Edson, "Biases in the air-sea flux of CO₂ resulting from ocean surface temperature gradients," *J. Geophys. Res.*, *109*, C08S08, doi: <https://doi.org/10.1029/2003JC001800>.
- 2004 Edson, J. B., C. J. Zappa, J. A. Ware, W. R. McGillis, and J. E. Hare, "Scalar flux profile relationships over the open ocean," *J. Geophys. Res.*, *109*, C08S09, doi: <https://doi.org/10.1029/2003JC001960>.
- 2004 Hare, J. E., C. W. Fairall, W. R. McGillis, J. B. Edson, B. Ward, and R. Wanninkhof, "Evaluation of the NOAA/COARE air-sea gas transfer parameterization using GasEx data," *J. Geophys. Res.*, *109*, C08S11, doi: <https://doi.org/10.1029/2003JC001831>.
- 2004 Frew, N. M., E. J. Bock, U. Schimpf, T. Hara, H. Haußecker, J. B. Edson, W. R. McGillis, R. K. Nelson, S. P. McKenna, B. M. Uz, and B. Jähne, "Air-sea gas transfer: Its dependence on wind stress, small-scale roughness and surface films," *J. Geophys. Res.*, *109*, C08S17, doi: <https://doi.org/10.1029/2003JC002131>.
- 2006 Dorman, C. E., C. A. Friehe, D. Khelif, A. Scotti, J. Edson, R. C. Beardsley, R. Limeburner, and S. S. Chen, "Winter atmospheric conditions over the Japan/East Sea: The structure and impact of severe cold-air outbreaks," *Oceanography*, *19*, 96-109.
- 2006 Helmis, C. G., Q. Wang, G. Katsouvas, Z. Gao, C. H. Halios, J. A. Kalogiros, S. Wang, G. Sgouros, J. Edson, "On the Turbulent Structure of the Marine Atmospheric Boundary Layer from CBLAST Nantucket Measurements," *Global NEST J.*, *8*, 210-217.
- 2007 Edson, J., T. Crawford, J. Crescenti, T. Farrar, N. Frew, G. Gerbi, C. Helmis, T. Hristov, D. Khelif, A. Jessup, H. Jonsson, M. Li, L. Marht, W. McGillis, A. Plueddemann, L. Shen, E. Skyllingstad, T. Stanton, P. Sullivan, J. Sun, J. Trowbridge, D. Vickers, S. Wang, Q. Wang, R. Weller, J. Wilkin, A. J. Williams, D. K. P. Yu. And C. Zappa, "The coupled boundary layers and air-sea transfer experiment in low winds," *Bull. Amer. Meteor. Soc.*, *88*, 341-356. doi: <https://doi.org/10.1175/BAMS-88-3-341>.
- 2007 Zappa C. J., W. R. McGillis, P. A. Raymond, J. B. Edson, E. J. Hints, H. J. Zemmeling, J. W. H. Dacey, D. T. Ho, "Environmental turbulent mixing controls on air-water gas exchange in marine and aquatic systems," *Geophys. Res. Lett.*, *34*, L10601, doi: <https://doi.org/10.1029/2006GL028790>.
- 2008 Gerbi, G. P., J. H. Trowbridge, J. B. Edson, A. J. Plueddemann, E. A. Terray, and J. J. Fredericks, "Measurement of momentum and heat transfer across the air-sea interface," *J. Phys. Oceanogr.*, *38*, 1054-1072. doi: <https://doi.org/10.1175/2007JPO3739.1>.

- 2008 Sullivan, P. P., J. B. Edson, T. Hristov, and J. C. McWilliams, "Large eddy simulations and observations of atmospheric marine boundary layers above non-equilibrium surface waves," *J. Atmos. Sci.*, 65, 1225-1245. doi: <https://doi.org/10.1175/2007JAS2427.1>.
- 2008 Weller, R., F. Bradley, J. Edson, C. Fairall, I. Brooks, J. Yelland, and W. Pascal, "Sensors for physical fluxes at the sea surface: energy, heat, water, salt," *Ocean Sci. Discuss.*, 5, 327-373.
- 2008 Edson, J. B., M. D. DeGrandpre, N. Frew, and W. R. McGillis, "Investigations of air-sea gas exchange in the CoOP coastal air-sea chemical flux program," *Oceanography*, 21, 34-45.
- 2008 Miller, S., C. Friehe, T. Hristov, and J. Edson, "Platform motion effects on measurements of turbulence and air-sea exchange over the open ocean," *J. Atmos. Oceanic Tech.*, 25, 1683-1694. doi: <https://doi.org/10.1175/2008JTECHO547.1>.
- 2009 Skyllingstad, E. D., and J. B. Edson, "Large-eddy simulation of moist convection during a cold-air outbreak over the gulf stream," *J. Atmos. Sci.*, doi: <https://doi.org/10.1175/2008JAS2755.1>
- 2009 Marshall, J., A. Andersson, N. Bates, W. Dewar, S. Doney, J. Edson, R. Ferrari, G. Forget, D. Fratantoni, M. Gregg, T. Joyce, K. Kelly, S. Lozier, R. Lumpkin, G. Maze, J. Palter, R. Samelson, K. Silverthorne, E. Skyllingstad, F. Straneo, L. Talley, L. Thomas, J. Toole and R. Weller, "The CLIMODE field campaign: Observing the cycle of convection and restratification over the Gulf Stream," *Bull. Amer. Meteor. Soc.*, 90, 1337-1350. doi: <https://doi.org/10.1175/2009BAMS2706.1>.
- 2011 Edson, J.B., C. W. Fairall, L. Bariteau, C. J. Zappa, A. Cifuentes-Lorenzen, W. M. McGillis, S. Pezoa, J.E. Hare and D. Helmig, "Direct-covariance measurement of CO₂ gas transfer velocity during the 2008 Southern Ocean Gas Exchange Experiment: Wind speed dependency," *J. Geophys. Res.*, 116, C00F10, doi: <https://doi.org/10.1029/2011JC007022>.
- 2011 Ho, D. T., C. L. Sabine, D. Hebert, D. S. Ullman, R. Wanninkhof, R. C. Hamme, P. G. Strutton, B. Hales, J. B. Edson, and B. R. Hargreaves, "Southern Ocean Gas Exchange Experiment: Setting the Stage," *J. Geophys. Res.*, 116, C00F08, doi: <https://doi.org/10.1029/2010JC006852>.
- 2011 Fairall, C. W., M. Yang, L. Bariteau, J. B. Edson, D. Helmig, W. McGillis, S. Pezoa, J. E. Hare, B. Huebert, and B. Blomquist, "Implementation of the COARE algorithm with O₃, CO₂ and DMS," *J. Geophys. Res.*, 116, C00F09, doi: <https://doi.org/10.1029/2010JC006884>.
- 2012 Weller R. A., Bigorre, S. P., J. Lord, J. D. Ware and J. B. Edson, "A surface mooring for air-sea interaction research in the Gulf Stream. Part 1: Mooring design and instrumentation," *J. Atmos. Ocean. Tech.*, 29, 1363-1376. doi: <https://doi.org/10.1175/JTECH-D-12-00060.1>.
- 2012 Flügge, M., J. B. Edson, J. Reuder, "Sensor Movement Correction for Direct Turbulence Measurements in the Marine Atmospheric Boundary Layer," *Energy Procedia*, 24, 159-165.
- 2013 Bigorre, S, R. A. Weller, J. Lord, J. B. Edson and J. D. Ware, "A surface mooring for air-sea interaction research in the Gulf Stream. Part 2: Analysis of the observations and their accuracies," *J. Atmos. Oceanic Tech.*, 30, 450-469. doi: <https://doi.org/10.1175/JTECH-D-12-00078.1>.
- 2013 Edson, J. B., V. Jampana, R. A. Weller, S. Bigorre, A. J. Plueddemann, C. W. Fairall, S.

- D. Miller, L. Mahrt, D. Vickers, and H. Hersbach, "On the exchange of momentum over the open ocean," *J. Phys. Oceanogr.*, 43, 1589–1610. doi: <https://doi.org/10.1175/JPO-D-12-0173.1>
- 2013 Cifuentes-Lorenzen, A., J. B. Edson, C. J. Zappa, and L. Bariteau, "Measurement of Directional Wave Spectra over the Open Ocean from a Research Vessel during the Southern Ocean Gas Exchange Experiment 2008," *J. Atmos. Oceanic Tech.*, 30, 2907–2925. doi: <https://doi.org/10.1175/JTECH-D-12-00181.1>.
- 2013 Paskyabi, M. B., M. Flügge, J. B. Edson, J. Reuder, "Wave-induced Characteristics of Atmospheric Turbulence Flux Measurements," *Energy Procedia*, 35, 102–112.
- 2014 Moum, J. N., S. P. de Szoeke, W. D. Smyth, J. B. Edson, H. L. DeWitt, A. J. Moulin, E. J. Thompson, C. J. Zappa, S. A. Rutledge, R. H. Johnson and C. W. Fairall, "Air-Sea Interactions from Westerly Wind Bursts during the November 2011 MJO in the Indian Ocean," *Bull. Amer. Meteor. Soc.*, 95, 1185–1199. doi: <http://dx.doi.org/10.1175/BAMS-D-12-00225.1>.
- 2014 Bloomquist, B. W., B. J. Huebert, C. W. Fairall, B. Ludovic, J. B. Edson, J. E. Hare and W. R. McGillis, "Advances in Air-Sea CO₂ Flux Measurement by Eddy Correlation," *Bound.-Layer Meteorol.*, 152, 245–276. doi: <https://doi.org/10.1007/s10546-014-9926-2>.
- 2015 de Szoeke, S. P., J. B. Edson, J. R. Marion, C. W. Fairall, and L. Bariteau, "The MJO and Air-Sea Interaction in TOGA COARE and DYNAMO," *J. Climate*, 28, 597–622. doi: <http://dx.doi.org/10.1175/JCLI-D-14-00477.1>
- 2015 Farrar, J. T., L. Rainville, A. J. Plueddemann, W. S. Kessler, C. Lee, B. A. Hodges, R. W. Schmitt, J. B. Edson, S. C. Riser, C. C. Eriksen, and D. M. Fratantoni. "Salinity and Temperature Balances at the SPURS Central Mooring during Fall and Winter," *Oceanography*, 28, 56–65.
- 2015 Chen, S., M. Flatau, T. G. Jensen, T. Shinoda, J. Schmidt, P. May, J. Cummings, M. Liu, P. E. Ciesielski, C. W. Fairall, R.-C. Lien, D. B. Baranowski, N.-H. Chi, S. de Szoeke, and J. Edson, "A Study of CINDY/DYNAMO MJO Suppressed Phase," *J. Atmos. Sci.*, 72, 3755–3779. doi: <http://dx.doi.org/10.1175/JAS-D-13-0348.1>
- 2016 Mahrt, L., E. L. Andreas, J. B. Edson, D. Vickers, J. Sun, and E. G. Patton, "Coastal Zone Surface Stress with Stable Stratification," *J. Phys. Oceanogr.*, 46, 95–105. doi: <http://dx.doi.org/10.1175/JPO-D-15-0116.1>
- 2016 Lombardo, K., E. Sinsky, Y. Jia, M. M. Whitney and J. Edson, "Sensitivity of Simulated Sea Breezes to Initial Conditions in Complex Coastal Regions," *Mon. Wea. Rev.*, 144, 1299–1320. doi: <http://dx.doi.org/10.1175/MWR-D-15-0306.1>
- 2016 Plagge, A., J. B. Edson, and D. Vandemark, "In Situ and Satellite Evaluation of Air-Sea Flux Variation near Ocean Temperature Gradients," *J. Climate*, 29, 1583–1602. doi: <http://dx.doi.org/10.1175/JCLI-D-15-0489.1>
- 2016 Flügge, M., M. B. Paskyabi, J. Reuder, J. B. Edson, and A. J. Plueddemann. "Comparison of Direct Covariance Flux Measurements from an Offshore Tower and a Buoy," *J. Atmos. Oceanic Tech.*, 33, 873–890. doi: <http://dx.doi.org/10.1175/JTECH-D-15-0109.1>
- 2017 Lombardo, K., E. Sinsky, J. Edson, M. M. Whitney and Y. Jia, "Sensitivity of Offshore Surface Fluxes and Sea Breezes to Sea Temperature Spatial Distribution," *Bound.-Layer Meteorol.*, published online, <http://dx.doi.org/10.1007/s10546-017-0313-7>.
- 2017 Brumer, S. E., C. J. Zappa, B. Blomquist, C. W. Fairall, A. Cifuentes-Lorenzen, J. B. Edson, and I. M. Brooks, "Wave-related Reynolds Number Parameterizations of CO₂ and

DMS Transfer Velocities,” *Geophys. Res. Lett.*, 44 (19).
<http://dx.doi.org/10.1002/2017GL074979>.

PhD DISSERTATION

1989 Edson, J. B., *Lagrangian Model Simulation of the Turbulent Transport of Evaporating Jet Droplets*. The Pennsylvania State University, University Park, PA, 141 pp.

February 2018