

## Martha's Vineyard Coastal Observatory: Conference Abstracts and Proceedings

2011

Boyles, C. A., A. P. Rosenberg and Q. Zhang (2011). Underwater acoustic communication channel characterization in the presence of bubbles and rough sea surfaces, in OCEANS, 2011 IEEE, 1 - 8 DOI: 10.1109/Oceans-Spain.2011.6003516

Fredericks, J. J., E. Terray, D. Symonds, J. Bosch, G. Voulgaris and T. Cook (2011). Enabling quality assessment through web services, in IEEE/OES 10th Current, Waves and Turbulence Measurements (CWTM) 107 - 112 DOI: 10.1109/CWTM.2011.5759535

Haines, S., R. Crout, J. Bosch, W. Burnett, J. Fredericks, D. Symonds and J. Thomas (2011). A summary of quality control tests for waves and in situ currents and their effectiveness, in IEEE/OES 10th Current, Waves and Turbulence Measurements (CWTM), 100 - 106 DOI: 10.1109/CWTM.2011.5759534

Tomasi, B., J. Preisig, G. B. Deane and M. Zorzi (2011). A study on the wide-sense stationarity of the underwater acoustic channel for non-coherent communication systems, in 11th European Wireless Conference- Sustainable Wireless Technologies (European Wireless), 1 - 6 [http://ieeexplore.ieee.org/xpl/freeabs\\_all.jsp?arnumber=5898076&abstractAccess=no&userType=](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=5898076&abstractAccess=no&userType=).

### 2010

Cazzanti, L., D. Egnor, G. S. Edelson and A. Das (2010). Improved multipath robustness of DFH modulation in the underwater acoustic channel, in OCEANS 2010, 1-6 DOI: 10.1109/OCEANS.2010.5664088

Fengzhong, Q., C. Xiang, D. Pan and Y. Liuqing (2010). Iterative MLSE for MIMO underwater acoustic channels, in OCEANS 2010, 1-5 DOI: 10.1109/OCEANS.2010.5664399

Hunter-Cevera, K. R., H. M. Sosik, M. Neubert, R. Olsen and A. Solow (2010). Coastal Synechococcus growth rates from cell size distributions and a matrix population model, in The 95th ESA Annual Meeting, PS104-117 [http://eco.confex.com/eco/2010/preliminaryprogram/abstract\\_26916.htm](http://eco.confex.com/eco/2010/preliminaryprogram/abstract_26916.htm).

Margelowsky, G., D. Foster, P. Traykovski and J. A. Felzenberg (2010). Determination of bedform resolution necessary to accurately resolve the flow field by comparing numerical simulations with field data, in American Geophysical Union, Fall Meeting 2010, abstract #OS51B-1292.

Morozov, A. K., L. E. Freitag and J. C. Preisig (2010). Joint channel estimation and data recovery for high-rate underwater acoustic communications with multi-carrier modulation, in Proceedings of the Fifth ACM International Workshop on UnderWater Networks, 1-4 DOI: 10.1145/1868812.1868821.

Morozov, A. K., L. E. Freitag and J. C. Preisig (2010). Multi-carrier modulation for high-rate underwater acoustic communications, in Wireless Communication Systems (ISWCS), 2010 7th International Symposium on, 11-15 DOI: 10.1109/ISWCS.2010.5624279

Sosik, H. M. and R. J. Olson (2010). Diatom community structure: Seasonal and interannual variability on the New England Shelf in 2010 AGU Ocean Sciences Meeting <http://md1.csa.com/partners/viewrecord.php?requester=gs&collection=ENV&recid=13546427>.

### 2009

Bosch, J., J. Fredericks, M. Botts, T. Cook, S. Haines, P. Bogden and E. Bridger (2009). Applying Open Geospatial Consortium's Sensor Web Enablement to address real-time oceanographic data quality, secondary data use, and long-term preservation, in Oceans 2009, MTS/IEEE, 1-6.

Lewis, M. D., R. W. Gould, R. A. Arnone, P. E. Lyon, P. M. Martinolich, R. Vaughan, A. Lawson, T. Scardino, W. Hou, W. Snyder, R. Lucke, M. Corson, M. Montes and C. Davis (2009). The Hyperspectral Imager for the Coastal Ocean (HICO): Sensor and data processing overview, in OCEANS 2009, MTS/IEEE Biloxi - Marine Technology for Our Future: Global and Local Challenges, 1-9.

### 2008

Ganju, N. K., C. R. Sherwood and R. P. Signell (2008). Coupled wave-hydrodynamic modeling over sorted grain size features (rippled scour depressions) on the inner shelf, in American Geophysical Union, Fall Meeting 2008, abstract #OS23A-1256 DOI: 2008AGUFMOS23A1256G.

Nilsson, E., A. Rutgersson and P. P. Sullivan (2008). Flux attenuation due to Sensor Displacement over Sea, in 18th AMS Symposium on Boundary Layers and Turbulence, P7.3 [http://ams.confex.com/ams/18BLT/techprogram/paper\\_139594.htm](http://ams.confex.com/ams/18BLT/techprogram/paper_139594.htm).

Sherwood, C. R. and N. K. Ganju (2008). Observations of bottom boundary-layer dynamics at the edge of a sorted grain-size feature on the inner shelf, in American Geophysical Union, Fall Meeting 2008, abstract #OS34A-07 DOI: 2008AGUFMOS34A..07S.

Sosik, H. M., S. J. Lentz and R. J. Olson (2008). Biological and physical forcing of picophytoplankton on the New England Shelf: New insights from submersible flow cytometry at the Martha's Vineyard Coastal Observatory, in American Geophysical Union, Fall Meeting 2008, abstract #OS32B-02 DOI: 2008AGUFMOS32B..02S.

Williams, A. J. (2008). AT, an Acoustic Transmissometer, in IEEE/OES 9th Working Conference on Current Measurement Technology (CMTTC), 50-55 DOI: 10.1109/CCM.2008.4480843

Wilson, S. J., B. Baschek and G. Deane (2008). Oceanic gas bubble measurements using an acoustic bubble spectrometer, in American Geophysical Union, Fall Meeting 2008, abstract #OS33C-1372 DOI: 2008AGUFMOS33C1372W.

## 2007

Given, H. K., S. Banahan and S. Williams (2007). The U.S. National Science Foundation's Ocean Observatories Initiative at preliminary design, in OCEANS 2007 1 - 8 DOI: 10.1109/OCEANS.2007.4449198

Gross-Colzy, L., S. Colzy, R. Frouin and P. Henry (2007). A general ocean color atmospheric correction scheme based on principal components analysis: Part I. Performance on Case 1 and Case 2 waters in Coastal Ocean Remote Sensing, 6680 DOI: DOI: 10.1117/12.738508.

Hristov, T. S. (2007). Surface wave modulation of atmospheric refractivity and remote sensing over the ocean, in 15th Conference on Air-Sea Interaction, 11.3 [http://ams.confex.com/ams/15isa14m/techprogram/paper\\_125423.htm](http://ams.confex.com/ams/15isa14m/techprogram/paper_125423.htm).

Mahrt, L. (2007). Improvement of the bulk formula in weak-wind conditions, in 15th Conference on Air-Sea Interaction, 13.1 <http://ams.confex.com/ams/pdfpapers/125497.pdf>.

## 2006

Borel, C. C. (2006). Inversion of atmospheric parameters from sky radiance measurements with a sun photometer, in IEEE International Conference Geoscience and Remote Sensing Symposium, IGARSS '06., 585-588 DOI: 10.1109/IGARSS.2006.154

Boyle, J. P., M. Herman and J. D. DePasqua (2006). Measurement of net ocean surface heat flux, solar irradiance and near-surface temperature using a novel surface contact Lagrangian buoy, in 16th Symposium on Boundary Layers and Turbulence and 13th Conference on Interactions of the Sea and Atmosphere, 1 - 6 DOI: 10.1109/OCEANS.2006.306953

Edson, J. B., C. Fairall and P. Sullivan (2006). Evaluation and continued improvements to the TOGA COARE 3.0 bulk flux algorithm using CBLAST data, in 27th Conference on Hurricanes and Tropical Meteorology, 7C.1 [http://ams.confex.com/ams/27Hurricanes/techprogram/paper\\_108533.htm](http://ams.confex.com/ams/27Hurricanes/techprogram/paper_108533.htm).

Farrar, J. T., C. Zappa, R. Weller and A. T. Jessup (2006). Sea surface temperature signatures of oceanic internal waves in low winds, in 27th Conference on Hurricanes and Tropical Meteorology, P11.2 [http://ams.confex.com/ams/27Hurricanes/techprogram/paper\\_108016.htm](http://ams.confex.com/ams/27Hurricanes/techprogram/paper_108016.htm).

Feng, H., D. Vandemark, R. Morrison and H. Sosik (2006). Satellite ocean color and aerosol validation at Martha's Vineyard Coastal Observatory, in OCEANS 2006, 1-5 DOI: 10.1109/OCEANS.2006.306845

Fredericks, J. J., R. Groman, E. Hobart, J. Krauspe and J. M. Allen (2006). Martha's Vineyard Coastal Observatory - real-time information management for a coastal ocean observing system, in OCEANS 2006 1 - 5 DOI: 10.1109/OCEANS.2006.306843

Jiang, H. and P. A. Traykovski (2006). Direct comparison between numerical simulation and field observation for turbulent flow over large wave orbital scale ripples, in American Geophysical Union, Fall Meeting 2006, abstract #OS41C-0610 DOI: 2006AGUFMOS41C0610J.

Plueddemann, A. J. (2006). Wind, waves and Langmuir circulation during CBLAST-Low, in 27th Conference on Hurricanes and Tropical Meteorology, 7C.4 [http://ams.confex.com/ams/27Hurricanes/techprogram/paper\\_107758.htm](http://ams.confex.com/ams/27Hurricanes/techprogram/paper_107758.htm).

Sullivan, P. P., J. B. Edson, T. W. Horst, J. C. Wyngaard and M. Kelly (2006). Subfilter scale fluxes in the marine surface layer: Results from the Ocean Horizontal Array Turbulence Study (OHATS). 17th Symposium on Boundary Layers and Turbulence, American Meteorological Society, 4.1 [http://ams.confex.com/ams/BLTAGFBioA/techprogram/paper\\_110884.htm](http://ams.confex.com/ams/BLTAGFBioA/techprogram/paper_110884.htm).

Sullivan, P. P., J. B. Edson, T. W. Horst, J. C. Wyngaard and M. Kelly (2006). Subfilter scale fluxes in the marine surface layer: Results from the Ocean Horizontal Array Turbulence Study (OHATS), in 17th Symposium on Boundary Layers and Turbulence, 4.1 [http://ams.confex.com/ams/BLTAGFBioA/techprogram/paper\\_110884.htm](http://ams.confex.com/ams/BLTAGFBioA/techprogram/paper_110884.htm).

Sullivan, P. P., J. B. Edson, T. Hristov and J. C. McWilliams (2006). Momentum flux structures and statistics in low-wind marine surface layers: Observations and large-eddy simulations, in 27th Conference on Hurricanes and Tropical Meteorology, 7C.6 [http://ams.confex.com/ams/27Hurricanes/techprogram/paper\\_108577.htm](http://ams.confex.com/ams/27Hurricanes/techprogram/paper_108577.htm).

Sun, J., S. P. Burns, J. B. Edson, D. Khelif, L. Mahrt, D. Vickers and T. Hristov (2006). Contributions of swell to air-sea interactions under weak wind conditions, in 27th Conference on Hurricanes and Tropical Meteorology, 7C.2 [http://ams.confex.com/ams/27Hurricanes/techprogram/paper\\_108593.htm](http://ams.confex.com/ams/27Hurricanes/techprogram/paper_108593.htm).

---

Traykovski, P. (2006). A time dependent model for seafloor ripples, in American Geophysical Union, Fall Meeting 2006, abstract #OS22B-05 DOI: 2006AGUFMOS22B..05T.

Vichers, D. and L. Mahrt (2006). Observations of velocity variance in the stable boundary layer, in 17th Symposium on Boundary Layers and Turbulence and the 27th Conference on Agricultural and Forest Meteorology, JP4.9  
[http://ams.confex.com/ams/BLTAqFBioA/techprogram/paper\\_110861.htm](http://ams.confex.com/ams/BLTAqFBioA/techprogram/paper_110861.htm).

Vickers, D. and L. Mahrt (2006). Evaluation of air-sea bulk formula, in 27th Conference on Hurricanes and Tropical Meteorology, 7C.3  
[http://ams.confex.com/ams/27Hurricanes/techprogram/paper\\_107284.htm](http://ams.confex.com/ams/27Hurricanes/techprogram/paper_107284.htm).

Zappa, C. J., A. T. Jessop, J. T. Farrar and R. A. Weller (2006). Coherent structures in ocean skin temperature variability, in 27th Conference on Hurricanes and Tropical Meteorology, 7C.8 [http://ams.confex.com/ams/27Hurricanes/techprogram/paper\\_108734.htm](http://ams.confex.com/ams/27Hurricanes/techprogram/paper_108734.htm).

## 2005

Goff, J. J., C. (2005). Maximum likelihood resampling of noisy, spatially correlated data, in American Geophysical Union, Fall Meeting 2005, abstract #OS32C-04 DOI: 2005AGUFMOS32C..04G.

Richardson, M. D., P. Traykovski, A. C. Trembanis and C. T. Friedrichs (2005). Real-time observations and predictions of scour burial at the Martha's Vineyard Coastal Observatory in 149th Meeting: Acoustical Society of America, 117, 2471-2471.

Trembanis, A. C. T., P. A. (2005). Ripple and morphologic behavior of sorted bedforms, in American Geophysical Union, Spring Meeting 2005, abstract #OS23B-01 DOI: 2005AGUSMOS23B..01T.

## 2004

Edson, J. B., R. F. Crofoot, W. R. McGillis and C. J. Zappa (2004). Investigations of flux-profile relationships in the marine atmospheric surface layer during CBLAST, in 16th Symposium on Boundary Layers and Turbulence, 8.2  
[http://ams.confex.com/ams/BLTAIRSE/techprogram/paper\\_78615.htm](http://ams.confex.com/ams/BLTAIRSE/techprogram/paper_78615.htm).

Farrar, J. T., C. J. Zappa, R. A. Weller and A. T. Jessup (2004). Subsurface expressions of sea surface temperature variability under low winds, in 16th Symposium on Boundary Layers and Turbulence, P8.1  
[http://ams.confex.com/ams/BLTAIRSE/techprogram/paper\\_78126.htm](http://ams.confex.com/ams/BLTAIRSE/techprogram/paper_78126.htm).

Fewings, M. R., S. J. Lentz, J. H. Trowbridge and A. J. Plueddemann (2004). The heat balance and the breakdown of density stratification on the New England Inner Shelf during fall 2003, in American Geophysical Union, Fall Meeting 2004, abstract #OS32B-04 DOI: 2004AGUFMOS32B..04F.

Frew, N. M., L. A. Houghton and W. E. Witzell Jr. (2004). Variability of surface film distributions in a coastal ocean regime, in 16th Symposium on Boundary Layers and Turbulence and the Coupled Boundary Layer Air-Sea Transfer Experiment, 8.7  
[http://ams.confex.com/ams/BLTAIRSE/techprogram/paper\\_78749.htm](http://ams.confex.com/ams/BLTAIRSE/techprogram/paper_78749.htm).

Hatton, K. A., D. L. Foster, P. Traykovski and H. D. Smith (2004). Scour and burial of submerged mines in wave conditions, in American Geophysical Union, Fall Meeting 2004, abstract #OS21B-1222 DOI: 2004AGUFMOS21B1222H.

Olson, R. J., H. M. Sosik and A. Shalapyonok (2004). A new submersible imaging-in-flow instrument to monitor nano- and microplankton: Imaging FlowCytobot, in American Geophysical Union, Fall Meeting 2004, abstract #OS42A-04 DOI: 2004AGUFMOS42A..04O.

Plueddemann, A. J. (2004). Langmuir circulation and its relation to surface forcing during CBLAST, in 16th Symposium on Boundary Layers and Turbulence, 8.9 [http://ams.confex.com/ams/BLTAIRSE/techprogram/paper\\_78793.htm](http://ams.confex.com/ams/BLTAIRSE/techprogram/paper_78793.htm).

Richardson, M. D., E. F. Braithwaite, III, S. Griffin, J. Bradley and C. T. Friedrichs (2004). Real-time characterization of mine scour burial at the Martha's Vineyard Coastal Observatory, in 6th International Symposium on Technology and the Mine Problem  
<http://handle.dtic.mil/100.2/ADA429287>

Sosik, H. M., R. J. Olson and A. Shalapyonok (2004). Phytoplankton dynamics on the New England Inner Shelf: Time series observations at the Martha's Vineyard Coastal Observatory, in American Geophysical Union, Fall Meeting 2004, abstract #OS41E-04 DOI: 2004AGUFMOS41E..04S.

Sullivan, P. P., J. B. Edson, J. C. McWilliams and C.-H. Moeng (2004). Large-eddy simulations and observations of wave-driven boundary layers, in 16th Symposium on Boundary Layers and Turbulence, 8.2 <http://ams.confex.com/ams/pdfpapers/78119.pdf>.

Sun, J., S. Burns, L. Mahrt, D. Vickers, D. Khelif and H. H. Jonsson (2004). Characteristics of air-sea interaction in surface and wave layers during CBLAST\_LOW, in 16th Symposium on Boundary Layers and Turbulence and the 13th Conference on Interactions of the

Sea and Atmosphere,J2.10 [http://ams.confex.com/ams/BLTAIRSE/techprogram/paper\\_77997.htm](http://ams.confex.com/ams/BLTAIRSE/techprogram/paper_77997.htm).

Thompson, D. R., F. M. Monaldo, J. T. Farrar, R. A. Weller, T. M. Elfouhaily and T. K. Grimmer (2004). Comparison of high-resolution wind maps from SAR imagery with in situ measurements from the ONR CBLAST experiments, in IEEE International Geoscience and Remote Sensing Symposium, IGARSS '04 Proceedings DOI: 10.1109/IGARSS.2004.1368939.

Traykovski, P., M. D. Richardson, J. A. Goff, L. Mayer and R. Wilkins (2004). Mine burial experiments at the Martha's Vineyard Coastal Observatory, in Proceedings of the 6th International Symposium on Technology and the Mine Problem., 8 <http://www.stormingmedia.us/33/3385/A338524.html>.

Trowbridge, J. H., G. Gerbi, J. B. Edson and G. Terray (2004). Momentum and heat fluxes across the air-sea interface during CBLAST-Low, in 16th Symposium on Boundary Layers and Turbulence; and The Coupled Boundary Layer Air-Sea Transfer Experiment 8.1 [http://ams.confex.com/ams/BLTAIRSE/techprogram/paper\\_78723.htm](http://ams.confex.com/ams/BLTAIRSE/techprogram/paper_78723.htm).

Wang, S., Q. Wang, J. B. Edson and R. F. Crofoot (2004). COAMPS™ fog forecast during 2003 CBLAST-Low, in 16th Symposium on Boundary Layers and Turbulence,8.10 [http://ams.confex.com/ams/BLTAIRSE/techprogram/paper\\_78782.htm](http://ams.confex.com/ams/BLTAIRSE/techprogram/paper_78782.htm).

Wang, S., Q. Wang, Z. Gao, J. B. Edson, R. Weller, A. and C. Helmis (2004). Evaluation of COAMPS™ Real Time Forecast for CBLAST-Low Summer Experiments 2002/2003, in 16th Symposium on Boundary Layers and Turbulence,P8.2 [http://ams.confex.com/ams/BLTAIRSE/techprogram/paper\\_78760.htm](http://ams.confex.com/ams/BLTAIRSE/techprogram/paper_78760.htm).

## 2003

Elmore, P. A. and M. D. Richardson (2003). Assessing scour model performance with experimental data OCEANS 2003. Proceedings 4: 2350 - 2354. DOI: 10.1109/OCEANS.2003.178279

Hints, E. J., A. A. Roberts and W. T. Rawlins (2003). Ozone over the coastal ocean of Chesapeake Bay and New England, in American Geophysical Union, Fall Meeting 2003,abstract #A51D-0705 DOI: 2003AGUFM.A51D0705H.

Kraft, B. J., L. Mayer, P. G. Simpkin and J. A. Goff (2003). In situ measurement of geoacoustic sediment properties: An example from the ONR Mine Burial Program, Martha's Vineyard Coastal Observatory, in The Journal of the Acoustical Society of America,113, p. 2318 <http://link.aip.org/link/?JAS/113/2318/1>.

Maffei, A., A. Chave, J. Bailey, A. Bradley, X. Garcia, H. Gelman, S. Lerner and F. Sonnichsen (2003). A modular gigabit ethernet backbone for NEPTUNE and other ocean observatories, in The 3rd International Workshop on Scientific Use of Submarine Cables and Related Technologies, 191-196 DOI: 10.1109/SSC.2003.1224140

Williams, A. J., III, J. J. Fredericks, E. Hobart, M. S. Carson, C. Tierney and A. Waterbury (2003). Observatory measurements of waves and current in Proceedings of the IEEE/OES Seventh Working Conference on Current Measurement Technology, 257 - 263 DOI: 10.1109/CCM.2003.1194325.

## 2002

Buynevich, I. V., R. L. Evans, S. G. Schock, R. H. Wilkens, J. A. Goff, P. A. Traykovski, C. Jenkins, G. Quentin, P. Beaujean, J. Wulf, C. Vaczo, H. Nieto and H. Gittings (2002). Geometry and sedimentary characteristics of a submerged proglacial spring-sapping valley, offshore Martha's Vineyard, Massachusetts, in American Geophysical Union, Fall Meeting 2002,abstract #OS61A-0186 DOI: 2002AGUFMOS61A0186B.

Goff, J. A., L. Mayer, B. Schwab, P. Traykovski, R. Wilkins, C. Jenkins, B. Kraft, R. Evans and I. Buynevich (2002). Site survey of the Martha's Vineyard Coastal Observatory: Backscatter, grain size and temporal evolution of rippled scour depressions, in American Geophysical Union, Fall Meeting 2002,abstract #OS61A-0181 DOI: 2002AGUFMOS61A0181G.

Kraft, B. J., L. A. Mayer, P. Simpkin, J. A. Goff, B. Schwab and C. Jenkins (2002). In situ measurement of sediment properties and relationship to backscatter: An example from the ONR Mine Burial Program, Martha's Vineyard Coastal Observatory, in American Geophysical Union, Fall Meeting 2002,abstract #OS61A-0182 DOI: 2002AGUFMOS61A0182K.

Mayer, L. A., R. Raymond, G. Glang and L. Huff (2002). Resolving the ripples (and a mine): High-resolution multibeam survey of Martha's Vineyard ONR mine burial program field area, in American Geophysical Union, Fall Meeting 2002,abstract #OS61A-0183.

Richardson, M. D. and P. Traykovski (2002). Real-time observations of mine burial at the Martha's Vineyard Coastal Observatory, in 5th International Symposium on Technology and the Mine Problem.

Traykovski, P. R., M. D. (2002). Observations of bedforms and mine burial processes at the Martha's Vineyard Coastal Observatory. American Geophysical Union, Fall Meeting 2002, abstract #OS61A-0184 DOI: 2002AGUFMOS61A0184T.

## 2001

Clark, H. L. (2001). New seafloor observatory networks in support of ocean science research, in OCEANS, 2001. MTS/IEEE Conference and Exhibition,1, 245-250 DOI: 10.1109/OCEANS.2001.968733

Edson, J. B. (2001). The Coupled Boundary Layers and Air-Sea Transfer (CBLAST) Experiments at the Martha's Vineyard Coastal Observatory, in American Geophysical Union, Fall Meeting 2001,abstract #OS32B-0482 DOI: 2001AGUFMOS32B0482E.

Petit, R., T. C. Austin, J. Edson, W. McGillis, M. Purcell and M. McElroy (2001). The Martha's Vineyard Coastal Observatory: Architecture, installation, and operation, in American Geophysical Union, Fall Meeting 2001,abstract #OS31D-02 DOI: 2001AGUFMOS31D..02P.

2000

Austin, T., J. Edson, W. McGillis, C. von Alt, M. Purcell, R. Petitt, M. McElroy, J. Ware and R. Stokey (2000). The Martha's Vineyard Coastal Observatory: a long term facility for monitoring air-sea processes, in OCEANS 2000 MTS/IEEE Conference and Exhibition 3, 1937 - 1941 DOI: 10.1109/OCEANS.2000.882223.

*Last updated: January 7, 2015*

Copyright ©2007 Woods Hole Oceanographic Institution, All Rights Reserved.

Mail: Woods Hole Oceanographic Institution, 266 Woods Hole Road, Woods Hole, MA 02543, USA.

E-Contact: [info@whoi.edu](mailto:info@whoi.edu); press relations: [media@whoi.edu](mailto:media@whoi.edu), tel. (508) 457-2000

Problems or questions about the site, please contact [webdev@whoi.edu](mailto:webdev@whoi.edu)