



WHOI Contributions to the Scientific Literature Monthly Activity Report

Articles Received in December 2003

MBLWHOI Library
Woods Hole, MA 02543

Note: Access to online articles may be limited to the Woods Hole scientific community

Alt, J. C., and W. Bach

Alteration of the oceanic crust: Subsurface rock-water interaction. In: *Energy and Mass Transfer in Marine Hydrothermal Systems*. P.E. Halbach, V. Tunnicliffe, and J. R. Hein, eds. Berlin: Dahlem University Press, :7-27, 2003.
Department of WHOI Author: MCG.

Bach, Wolfgang, and Katrina Edwards

Iron and sulfide oxidation within the basaltic ocean crust: Implications for chemolithoautotrophic microbial biomass production. *Geochim.Cosmochim.Acta*, 67:3871-3887, 2003.
Department of WHOI Author: MCG.
Contribution Number: **10676**
[Link to online article](#)

Baco, Amy R., and Craig R. Smith

High species richness in deep-sea chemoautotrophic whale skeleton communities.
Mar.Ecol.Prog.Ser., 260:109-114, 2003.
Department of WHOI Author: BIO.
[Link to online article](#)

Barth, J. A., T. J. Cowles, P. M. Korso, R. K. Shearman, A. Huyer, and R. L. Smith
Injection of carbon from the shelf to offshore beneath the euphotic zone in the California Current. *J.Geophys.Res.*, 107(C6),3057,doi:10.1029/2001JC000956,, 2002.
Department of WHOI Author: PO.
[Link to online article](#)

Benfield, Mark C., Andone C. Lavery, Peter H. Wiebe, Charles H. Greene, Timothy K. Stanton, and Nancy J. Copley
Distributions of physonect siphonulae in the Gulf of Maine and their potential as important sources of acoustic scattering. *Can.J.Fish.Aquat.Sci.*, 60:759-772, 2003.
Department of WHOI Author: AOPE. BIO.
Contribution Number: **10922**

Blackwell, S., J. Case, S. Glenn, J. Kohut, M. Moline, M. Purcell, O. Schofield, and C. Von Alt
A new AUV platform for studying near shore bioluminescence structure. In: *Bioluminescence & Chemiluminescence: Progress & Current Applications*. Philip E Stanley and Larry J Kricka, eds. Riveredge, NJ: World Scientific, :197-200, 2002.
Department of WHOI Author: AOPE.

Buesseler, Ken O., Martin Hasselov, and Minhan Dai
Comment on: "Trace metal levels in uncontaminated groundwater of a coastal watershed: Importance of colloidal forms". *Environ.Sci.Technol.*, 37:657-658, 2003.
Department of WHOI Author: MCG.

Buynevich, Ilya V.
Subsurface evidence of a pre-1846 beach [sic] across Menauhant Barrier, Cape Cod, Massachusetts. *Shore Beach*, 71(3):3-6, 2003.
Department of WHOI Author: GEOL.
Contribution Number: **10912**

Chen, Chanhsheng, Hedong Liu, and Robert C. Beardsley
An unstructured grid, finite-volume, three-dimensional, primitive equations ocean model: Application to coastal ocean and estuaries. *J.Atmos.Ocean.Technol.*, 20:159-186, 2003.
Department of WHOI Author: PO.

Chu, Dezhang, Kenneth G. Foote, Lawrence C. Hufnagle, Jr., Terence R. Hammar, Stephen P. Liberatore, Kenenth C. Baldwin, Larry A. Mayer, and Andrew McLeod
Calibrating a 90-kHz multibeam sonar. *Oceans '03*, :1633-1636, 2003.
Department of WHOI Author: AOPE.
Contribution Number: **10986**

Clift, Peter D., Hans Schouten, and Amy E. Draut

A general model of arc-continent collision and subduction polarity reversal from Taiwan and the Irish Caledonides. In: *Intra-Oceanic Subduction Systems: Tectonic and Magmatic Processes*. R. D. Larter and P. T. Leat, eds. London: The Geological Society, :81-98, 2003.

Department of WHOI Author: GEOL.

Contribution Number: **10772**

Coco, Giovanni, T. K. Burnet, B. T. Werner, and Steve Elgar

Test of self-organization in beach cusp formation. *J.Geophys.Res.*, 108(C3),3101,doi:10.1029/2002JC001496, 2003.

Department of WHOI Author: AOPE.

[Link to online article](#)

Delaney, J., P. Beauchamp, M. McNutt, C. Barnes, A. Chave, and J. Madden

Project NEPTUNE: An interactive regional cabled ocean observatory in the northeast Pacific. *Oceans '03*, :1038-1042, 2003.

Department of WHOI Author: AOPE.

Dickson, Robert R., Ruth Curry, and Igor Yashayaev

Recent changes in the North Atlantic. *Phil.Trans.R.Soc.Lond.A*, 361:1917-1934, 2003.

Department of WHOI Author: PO.

[Link to online article](#)

Dilling, Lisa, Scott C. Doney, Jae Edmonds, Kevin R. Gurney, Robert Harriss, David Schimel, Britton Stephens, and Gerald Stokes

The role of carbon cycle observations and knowledge in carbon management.

Annu.Rev.Energy Environ., 28:521-558, 2003.

Department of WHOI Author: MCG.

Contribution Number: **10883**

[Link to online article](#)

Draut, Amy E., Maureen E. Raymo, Jerry F. McManus, and Delia W. Oppo

Climate stability during the Pliocene warm period. *Paleoceanography*,

18(4),1078,doi:10.1029/2003PA000889, 2003.

Department of WHOI Author: GEOL.

Contribution Number: **10955**

[Link to online article](#)

Evans, Rob L., and Dan Lizarralde

Geophysical evidence for karst formation associated with offshore groundwater transport: An example from North Carolina. *Geochem.Geophys.Geosyst.*, 4,1069,doi:10.1029/2003GC000510, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Fredriksson, David W., James D. Irish, M. Robinson Swift, and Barbaros Celikkol

The heave response of a central spar fish cage. *J.Offshore Mech.Arct.Eng*, 125(4):242-248, 2003.

Department of WHOI Author: AOPE.

Frisk, George V.

The relationship between low-frequency phase rate and source-receiver motion in shallow water: Theory and experiment. In: *17th International Congress on Acoustics, Rome, Italy, September 2-7, 2001*. New York, NY: ICA, 2:20-21, 2001.

Department of WHOI Author: AOPE.

Frye, Daniel, Uri ten Brink, Walter Paul, Kenneth Peal, and Keith von der Heydt

Real-time seismic data from the coastal ocean. *Oceans '03*, :81-85, 2003.

Department of WHOI Author: AOPE.

Gaetani, Glenn A., and Timothy L. Grove

Experimental constraints on melt generation in the mantle wedge. In: *The Subduction Factory*. J. Eiler, ed. Washington, DC: American Geophysical Union, :107-134, 2003.

Department of WHOI Author: GEOL.

Godeaux, J. E. A., and G. R. Harbison

On some pelagic doliolid tunicates (Thaliacea, doliolida) collected by a submersible off the eastern North American coast. *Bull.Mar.Sci.*, 72:589-612, 2003.

Department of WHOI Author: BIO.

Gonfiantini, Roberto, Sonia Tonarini, Manfred Groning, Alessandra Adorni-Braccesi, Assad S. Al-Ammar, Marcus Astner, Sebastien Bachler, Ramon M. Barnes, Randy L. Bassett, Alain Cocherie, Annette Deyhle, Andrea Dini, Giorgio Ferrara, Jerome Gaillardet, Judith Grimm, Catherine Guerrot, Urs Krahenbuhl, Graham Layne, Damien Lemarchand, et al

Intercomparison of boron isotope and concentration measurements. Part II: Evaluation of results. *Geostand.Newsl.*, 27:41-57, 2003.

Department of WHOI Author: GEOL.

Green, Rebecca E., Heidi M. Sosik, and Robert J. Olson

Contributions of phytoplankton and other particles to inherent optical properties in New England continental shelf waters. *Limnol.Oceanogr.*, 48:2377-2391, 2003.

Department of WHOI Author: BIO.

Contribution Number: **10769**

Greene, C. H., A. J. Pershing, A. Conversi, B. Planque, C. Hannah, D. Sameoto, E. Head, P. C. Smith, P. C. Reid, J. Jossi, D. Mountain, M. C. Benfield, P. H. Wiebe, and E. Durbin

Trans-Atlantic responses of *Calanus finmarchicus* populations to basin-scale forcing associated with the North Atlantic Oscillation. *Prog.Oceanogr.*, 58:301-312, 2003.

Department of WHOI Author: BIO.

[Link to online article](#)

Grove, Timothy L., Linda T. Elkins-Tanton, Stephen W. Parman, Nilanjan Chatterjee, Othmar Muentener, and Glenn A. Gaetani

Fractional crystallization and mantle-melting controls on calc-alkaline differentiation trends. *Contrib.Mineral.Petrol.*, 145:515-533, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Hammar, Terence R., Kenneth G. Foote, and Stephen P. Liberatore

Advances in developing a high-frequency sonar calibration facility. *Oceans '03*, :1622-1624, 2003.

Department of WHOI Author: AOPE.

Contribution Number: **10987**

Han, S. M., and H. Benaroya

Vibration of a compliant tower in three-dimensions. *J.Sound Vib.*, 250:675-709, 2002.

Department of WHOI Author: AOPE.

Hanghoj, K., M. Storey, and O. Stecher

An isotope and trace element study of the East Greenland Tertiary Dyke Swarm: Constraints on temporal and spatial evolution during continental rifting. *J.Petrol.*, 44:2081-2112, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Harding, Karin C., Tero Harkonen, and Jesus Pineda

Estimating quasi extinction risk of European harbour seals: Reply to Lonergan & Harwood (2003). *Ecol.Lett.*, 6:894-897, 2003.

Department of WHOI Author: BIO.

[Link to online article](#)

Heusser, L., and D. Oppo

Millennial- and orbital-scale climate variability in southeastern United States and in the subtropical Atlantic during Marine Isotope Stage 5: Evidence from pollen and isotopes in ODP Site 1059. *Earth Planet.Sci.Lett.*, 214:483-490, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Hirth, Greg, and David Kohlstedt

Rheology of the upper mantle and the mantle wedge: A view from the experimentalists. In: *The Subduction Factory*. J. Eiler, ed. Washington, DC: American Geophysical Union, :83-105, 2003.

Department of WHOI Author: GEOL.

Holbrook, W. Steven, Pedro Paramo, Scott Pearce, and Raymond W. Schmitt

Thermohaline fine structure in an oceanographic front from seismic reflection profiling. *Science*, 301:821-824, 2003.

Department of WHOI Author: PO.

[Link to online article](#)

Hopper, John R., Trine Dahl-Jensen, W. Steven Holbrook, Hans Christian Larsen, Dan Lizarralde, Jun Korenaga, Graham M. Kent, and Peter B. Kelemen

Structure of the SE Greenland margin from seismic reflection and refraction data: Implications for nascent spreading center subsidence and asymmetric crustal accretion during North Atlantic opening. *J.Geophys.Res.*, 108(B5),2269,doi:10.1029/2002JB001996, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Hunt, John M., R. Paul Philip, and Keith A. Kvenvolden

Early developments in petroleum geochemistry. *Org.Geochem.*, 33:1025-1052, 2002.

Department of WHOI Author: MCG.

[Link to online article](#)

Iglesias-Rodriguez, M. Debora, Christopher W. Brown, Scott C. Doney, Joan Kleypas, Dorota Kolper, Zbigniew Kolper, Paul K. Hayes, and Paul G. Falkowski

Representing key phytoplankton functional groups in ocean carbon cycle models: Coccolithophores. *Global Biogeochem.Cycles*, 16,1100,doi:10.1029/2001GB001454, 2002.

Department of WHOI Author: MCG.

[Link to online article](#)

Irish, James D., and David W. Fredriksson

Telemetering environmental monitoring buoy and mooring. *Oceans '03*, :2589-2595, 2003.
Department of WHOI Author: AOPE.
Contribution Number: **10984**

Jech, J. Michael, Dezhang Chu, Kenneth G. Foote, Terence R. Hammar, and Lawrence C. Hufnagle, Jr.

Calibrating two scientific echo sounders. *Oceans '03*, :1625-1629, 2003.
Department of WHOI Author: AOPE.
Contribution Number: **10983**

Jech, J. Michael, Kenneth G. Foote, Dezhang Chu, and Stephen P. Liberatore

Comparing two scientific echo sounders. *Oceans '03*, :1630-1632, 2003.
Department of WHOI Author: AOPE.
Contribution Number: **10985**

Jewett, Stephen C., Max K. Hoberg, Thomas A. Dean, Bruce R. Woodin, and John J. Stegeman

Authors response. *Mar. Environ. Res.*, 55:463-468, 2003.
Department of WHOI Author: BIO.
[Link to online article](#)

Johnson, Carl G., Glenn S. Fryinger, Robert K. Nelson, Richard B. Gaines, Naohiko Ohkouchi, Christopher M. Reddy, and Timothy I. Eglinton

Innovative methods for determining alkenone unsaturation indices. *J. Mar. Chem.*, 83:5-22, 2003.
Department of WHOI Author: MCG.
Contribution Number: **10901**
[Link to online article](#)

Kelemen, Peter B., Jennifer L. Rilling, E. M. Parmentier, Luc Mehl, and Bradley R. Hacker

Thermal structure due to solid-state flow in the mantle wedge beneath arcs. In: *The Subduction Factory*. J. Eiler, ed. Washington, DC: American Geophysical Union, :293-311, 2003.
Department of WHOI Author: GEOL.

Kelemen, Peter B., Gene M. Yogodzinski, and David W. Scholl

Along-strike variation in the Aleutian Island arc: Genesis of high Mg# andesite and implications for continental crust. In: *The Subduction Factory*. J. Eiler, ed. Washington, DC: American Geophysical Union, :223-286, 2003.
Department of WHOI Author: GEOL.

Kleiven, H. F., E. Jansen, W. B. Curry, D. A. Hodell, and K. Venz

Atlantic Ocean thermohaline circulation changes on orbital to suborbital timescales during the mid-Pleistocene. *Paleoceanography*, 18(1),1008,doi:10.1029/2001PA000629, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Kuever, J., S. M. Sievert, H. Stevens, T. Brinkhoff, and G. Muyzer

Microorganisms of the oxidative and reductive part of the sulphur cycle at a shallow-water hydrothermal vent in the Aegean Sea (Milos, Greece). *Cah.Biol.Mar.*, 43:413-416, 2002.

Department of WHOI Author: BIO.

[Link to online article](#)

Lee, Jae Il, Peter D. Clift, Graham Layne, Joel Blum, and Ali Athar Khan

Sediment flux in the modern Indus River inferred from the trace element composition of detrital amphibole grains. *Sediment.Geol.*, 160:243-257, 2003.

Department of WHOI Author: GEOL.

Contribution Number: **10829**

[Link to online article](#)

Lentz, S. J.

A climatology of salty intrusions over the continental shelf from Georges Bank to Cape Hatteras. *J.Geophys.Res.*, 108(C10),3326,doi:10.1029/2003JC001859, 2003.

Department of WHOI Author: PO.

Contribution Number: **10904**

[Link to online article](#)

Lesnoff, M., P. Ezanno, and H. Caswell

Sensitivity analysis in periodic matrix models: A postscript to Caswell and Trevisan. *Math.Comput.Model.*, 37:945-948, 2003.

Department of WHOI Author: BIO.

Meinen, Christopher S., Douglas S. Luther, D. Randolph Watts, Alan D. Chave, and Karen L. Tracey

Mean stream coordinates structure of the Subantarctic Front: Temperature, salinity, and absolute velocity. *J.Geophys.Res.*, 108(C8),3263,doi:10.1029/2002JC001545, 2003.

Department of WHOI Author: AOPE.

[Link to online article](#)

Meyer, Joel N., Deena M. Wassenberg, Sibel I. Karchner, Mark E. Hahn, and Richard T. Di Giulio

Expression and inducibility of aryl hydrocarbon receptor pathway genes in wild-caught killifish (*Fundulus heteroclitus*) with different contaminant-exposure histories.

Environ.Toxicol.Chem., 22:2337-2343, 2003.

Department of WHOI Author: BIO.

Contribution Number: **10838**

Montesi, Laurent G. J., and Maria T. Zuber

Spacing of faults at the scale of the lithosphere and localization instability: 2. Application to the Central Indian Basin. *J.Geophys.Res.*, 108(B2),2111,doi:10.1029/2002JB001924, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Montesi, Laurent G. J., and Greg Hirth

Grain size evolution and the rheology of ductile shear zones: From laboratory experiments to postseismic creep. *Earth Planet.Sci.Lett.*, 211:97-110, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Morozov, Andrey, and John Colosi

Entropy of acoustical beams in a random ocean. *Oceans '03*, :558-563, 2003.

Department of WHOI Author: AOPE.

Niehoff, B.

Gonad morphology and oocyte development in *Pseudocalanus* spp. in relation to spawning activity. *Mar.Biol.*, 143:759-768, 2003.

Department of WHOI Author: BIO.

Contribution Number: **10882**

[Link to online article](#)

Palenik, B., B. Brahamsha, F. W. Larimer, M. Land, L. Hauser, P. Chain, J. Lamerdin, W. Regala, E. E. Allen, J. McCarren, I. Paulsen, A. Dufresne, F. Partensky, E. A. Webb, and J. B. Waterbury

The genome of a motile marine *Synechococcus*. *Nature*, 424:1037-1042, 2003.

Department of WHOI Author: BIO.

[Link to online article](#)

Pecher, Ingo A., W. Steven Holbrook, Mrinal K. Sen, Daniel Lizarralde, Warren T. Wood, Deborah R. Hutchinson, William P. Dillon, Hartley Hoskins, and Ralph A. Stephen

Seismic anisotropy in gas-hydrate- and gas-bearing sediments on the Blake Ridge, from a walkaway vertical seismic profile. *Geophys.Res.Lett.*, 30(14),1733,doi:10.1029/2003GL017477, 2003.

Department of WHOI Author: CIS. GEOL.

[Link to online article](#)

Pedlosky, Joseph, and Jim Thomson

Baroclinic instability of time-dependent currents. *J.Fluid Mech.*, 490:189-215, 2003.

Department of WHOI Author: PO.

Contribution Number: **10870**

[Link to online article](#)

Pelekanakis, Milica Stojanovic, and Lee Freitag

High rate acoustic link for underwater video transmission. *Oceans '03*, :1091-1097, 2003.

Department of WHOI Author: AOPE.

Perfit, Michael R., Johnson R. Cann, Daniel J. Fornari, Jennifer Engels, Deborah K. Smith, W. Ian Ridley, and Margo H. Edwards

Interaction of sea water and lava during submarine eruptions at mid-ocean ridges. *Nature*, 426:62-65, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Ravizza, G., and B. Peucker-Ehrenbrink

Chemostratigraphic evidence of Deccan volcanism from the marine osmium isotope record. *Science*, 302:1392-1395, 2003.

Department of WHOI Author: MCG.

Contribution Number: **11040**

[Link to online article](#)

Reagan, M. K., K. W. W. Sims, J. Erich, R. B. Thomas, H. Cheng, R. L. Edwards, G. D. Layne, and L. Ball

Time-scales of differentiation from mafic parents to rhyolite in North American continental arcs. *J.Petrol.*, 44:1703-1726, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Reddy, Christopher M., Li Xu, and Rod O'Connor

Using radiocarbon to apportion sources of polycyclic aromatic hydrocarbons in household soot. *Environ.Forensics*, 4:191-197, 2003.

Department of WHOI Author: MCG. GEOL.

Contribution Number: **10992**

Roberts, David L., and Andrew R. Solow

Flightless birds - When did the dodo become extinct? *Nature*, 426:245, 2003.

Department of WHOI Author: MPC.

[Link to online article](#)

Roberts, S., W. Bach, R. A. Binns, D. A. Vank, C. J. Yeats, D. A. H. Teagle, K. Blacklock, J. S. Blusztajn, A. J. Boyce, M. J. Cooper, N. Holland, and B. McDonald

Contrasting evolution of hydrothermal fluids in the PACMANUS system, Manus Basin: The Sr and S isotope evidence. *Geology*, 31:805-808, 2003.

Department of WHOI Author: MCG. GEOL.

Rothman, Daniel, H., John M. Hayes, and Roger E. Summons

Dynamics of the Neoproterozoic carbon cycle. *Proc.Natl.Acad.Sci.U.S.A.*, 100:8124-8129, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Sarrazin, Jozee, Christian Levesque, S. Kim Juniper, and Margaret K. Tivey

Mosaic community dynamics on Juan de Fuca Ridge sulfide edifices: Substratum, temperature and implications for trophic structure. *Cah.Biol.Mar.*, 43:275-279, 2002.

Department of WHOI Author: MCG.

[Link to online article](#)

Schander, Christoffer, and Kenneth M. Halanych

DNA, PCR and formalinized animal tissue - a short review and protocols. *Org.Divers.Evol.*, 3:195-205, 2003.

Department of WHOI Author: BIO.

Contribution Number: **10866**

Schulze, Anja, and Kenneth M. Halanych

Siboglinid evolution shaped by habitat preference and sulfide tolerance. *Hydrobiologia*, 496:199-205, 2003.

Department of WHOI Author: BIO.

Contribution Number: **10675**

Seewald, Jeffrey S.

Organic-inorganic interactions in petroleum-producing sedimentary basins. *Nature*, 426:327-333, 2003.

Department of WHOI Author: MCG.

[Link to online article](#)

Seewald, Jeffrey, Anna Cruse, and Peter Saccocia

Aqueous volatiles in hydrothermal fluids from the Main Endeavour Field, northern Juan de Fuca Ridge: Temporal variability following earthquake activity. *Earth Planet.Sci.Lett.*, 216:575-590, 2003.

Department of WHOI Author: MCG.

Contribution Number: **10991**

[Link to online article](#)

Seyfried, W. E., Jr., J. S. Seewald, M. E. Berndt, Kang Ding, and D. I. Foustoukos

Chemistry of hydrothermal vent fluids from the Main Endeavour Field, northern Juan de Fuca Ridge: Geochemical controls in the aftermath of June 1999 seismic events. *J.Geophys.Res.*, 108(B9),2429,doi:10.1029/2002JB001957, 2003.

Department of WHOI Author: MCG.

[Link to online article](#)

Shimeta, Jeff, Carl L. Amos, Stace E. Beaulieu, and Stephanie L. Katz

Resuspension of benthic protists at subtidal coastal sites with differing sediment composition. *Mar.Ecol.Prog.Ser.*, 259:103-115, 2003.

Department of WHOI Author: AOPE.

Contribution Number: **10837**

[Link to online article](#)

Shulman, Igor, Steven H. D. Haddock, Dennis J. McGillicuddy, Jr., Jeffrey D. Paduan, and W. Paul Bissett

Numerical modeling of bioluminescence distributions in the coastal ocean.

J.Atmos.Ocean.Technol., 20:1060-1068, 2003.

Department of WHOI Author: AOPE.

[Link to online article](#)

Sigman, Daniel M., Scott J. Lehman, and Delia W. Oppo

Evaluating mechanisms of nutrient depletion and ¹³C enrichment in the intermediate-depth Atlantic during the last ice age. *Paleoceanography*, 18(3),1072,doi:10.1029/2002PA000818, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Smallwood, David A., and Louis L. Whitcomb

Preliminary identification of a dynamical plant model for the Jason 2 underwater robotic vehicle. *Oceans '03*, :688-695, 2003.

Department of WHOI Author: AOPE.

Sosolik, C. E., J. R. Hampton, A. C. Lavery, B. H. Cooper, and J. B. Martson

Thermally enhanced neutralization in hyperthermal energy ion scattering. *Phys.Rev.Lett.*, 90,013201:1-4, 2003.

Department of WHOI Author: AOPE.

[Link to online article](#)

Steele, John, and Porter Hoagland

Are fisheries "sustainable"? *Fish.Res.*, 64:1-3, 2003.

Department of WHOI Author: MPC.

Contribution Number: **11004**

[Link to online article](#)

Steele, John H., and Andrew R. Beet

Marine protected areas in 'non-linear' ecosystems. *Proc.R.Soc.Lond.Ser.B.Biol.Sci.*, 270:S230-S233, 2003.

Department of WHOI Author: MPC.

Contribution Number: **10965**

[Link to online article](#)

Stix, J., G. D. Layne, and S. N. Williams

Mechanisms of degassing at Nevado del Ruiz volcano, Columbia. *J.Geol.Soc.London*, 160:507-522, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Stojanovic, M., and L. Freitag

Acquisition of direct sequence spread spectrum acoustic communication signals. *Oceans '03*, :279-286, 2003.

Department of WHOI Author: AOPE.

Straub, Susanne M., and Graham D. Layne

Decoupling of fluids and fluid-mobile elements during shallow subduction: Evidence from halogen-rich andesite melt inclusions from the Izu arc volcanic front.

Geochem.Geophys.Geosyst., 4,9004,doi:10.1029/2002GC000349, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Sullivan, Matthew B., John B. Waterbury, and Sallie W. Chisholm

Cyanophages infecting the oceanic cyanobacterium *Prochlorococcus*. *Nature*, 424:1047-1051, 2003.

Department of WHOI Author: BIO.

[Link to online article](#)

Sweeney, Erin N., Dennis J. McGillicuddy, and Ken O. Buesseler

Biogeochemical impacts due to mesoscale eddy activity in the Sargasso Sea as measured at the Bermuda Atlantic Time-series Study (BATS). *Deep-Sea Res. II*, 50:3017-3039, 2003.

Department of WHOI Author: AOPE. MCG.

Contribution Number: **10791**

[Link to online article](#)

Tarrant, Ann M., C. H. Blomquist, P. H. Lima, M. J. Atkinson, and S. Atkinson

Metabolism of estrogens and androgens by scleractinian corals. *Comp. Biochem. Physiol. B*, 136:473-485, 2003.

Department of WHOI Author: BIO.

[Link to online article](#)

Thwaites, Fred, and Kurt Polzin

Structural design considerations of a profiling free vehicle used to measure ocean turbulence. In: *IEEE/OES 7th Working Conference on Current Measurement Technology*, :231-236, 2003.

Department of WHOI Author: AOPE. PO.

Contribution Number: **10859**

Tittlemier, Sheryl A., Sean W. Kennedy, Mark E. Hahn, Christopher M. Reddy, and Ross J. Norstrom

Naturally produced halogenated dimethyl bipyrrroles bind to the aryl hydrocarbon receptor and induce cytochrome P4501A and porphyrin accumulation in chicken embryo hepatocytes.

Environ. Toxicol. Chem., 22:1622-1631, 2003.

Department of WHOI Author: BIO. MCG.

Contribution Number: **10823**

Tivey, Margaret Kingston, Albert M. Bradley, Terrence M. Joyce, and David Kadko

Insights into tide-related variability at seafloor hydrothermal vents from time-series temperature measurements. *Earth Planet. Sci. Lett.*, 202:693-707, 2002.

Department of WHOI Author: MCG. PO.

Contribution Number: **10729**

[Link to online article](#)

Tivey, Maurice A., Hans Schouten, and Martin C. Kleinrock

A near-bottom magnetic survey of the Mid-Atlantic Ridge axis at 26°N: Implications for the tectonic evolution of the TAG segment. *J.Geophys.Res.*, 108(B5),2277,doi:10.1029/2002JB001967, 2003.

Department of WHOI Author: GEOL.

Contribution Number: **10878**

[Link to online article](#)

Utada, H., T. Koyama, H. Shimizu, and A. D. Chave

A semi-global reference model for electrical conductivity in the mid-mantle beneath the north Pacific region. *Geophys.Res.Lett.*, 30(4),1194,doi:10.1029/2002GL016092, 2003.

Department of WHOI Author: AOPE.

[Link to online article](#)

Visscher, Pieter T., Laura K. Baumgartner, Daniel H. Buckley, Daniel R. Rogers, Mary E. Hogan, Christopher D. Raleigh, Kendra A. Turk, and David J. Des Marais

Dimethyl sulphide and methanethiol formation in microbial mats: Potential pathways from biogenic signatures. *Environ.Microbiol.*, 5:296-308, 2003.

Department of WHOI Author: MCG.

von Alt, Christopher, Ben Allen, Thomas Austin, Ned Forrester, Lee Freitag, Robert Goldsborough, Michael Grund, Michael Purcell, and Roger Stokey

Semi-autonomous mapping system. *Oceans '03*, :1709-1717, 2003.

Department of WHOI Author: AOPE.

Webster, S. E., and A. D. Bowen

Feasibility analysis of an 11,000 m vehicle with a fiber optic microcable link to the surface. *Oceans '03*, :2469-2474, 2003.

Department of WHOI Author: AOPE.

Wells, Brian K., Simon R. Thorrold, and Cynthia M. Jones

Stability of elemental signatures in the scales of spawning weakfish, *Cynoscion regalis*.

Can.J.Fish.Aquat.Sci., 60:361-369, 2003.

Department of WHOI Author: BIO.

Wiebe, P. H., and J. L. Reid

A tribute to Martin V. Angel and Robert L. Smith for their years as Co-Editors of Progress in Oceanography. *Prog.Oceanogr.*, 56:3-5, 2003.

Department of WHOI Author: BIO.

[Link to online article](#)

Williams, Albert J., III, Janet J. Fredericks, Edward Hobart, Matthew S. Carson, Colin Tierney, and Andrew Waterbury

Observatory measurements of waves and current. In: *IEEE 7th Working Conference on Current Measurement Technology, March 13-15, 2003, San Diego, CA*. New York, NY: IEEE, :257-263, 2003.

Department of WHOI Author: AOPE.

Contribution Number: **10864**

Williams, Albert J., III, and Archie Todd Morrison, III

Electronic crosstalk and linearity in the acoustic travel-time current meter, MAVS. *Oceans '03*, :1510-1515, 2003.

Department of WHOI Author: AOPE.

Contribution Number: **10974**

Xiao, Xiaohui, Wenlu Zhu, and Brian Evans

Deformation mechanisms and failure modes in solnhofen limestone. In: *Soil and Rock America, Proceedings of the 39th U.S. Rock Mechanics Symposium, M.I.T., Cambridge, MA, June 21-June 26, 2003*, :453-458, 2003.

Department of WHOI Author: GEOL.

Zedler, S. E., T. D. Dickey, S. C. Doney, J. F. Price, X. Yu, and G. L. Mellor

Analyses and simulations of the upper ocean's response to Hurricane Felix at the Bermuda Testbed Mooring site: 13-23 August 1995. *J.Geophys.Res.*, 107(C12),3232, doi:10.1029/2001JC000969, 2002.

Department of WHOI Author: MCG.

[Link to online article](#)

Zhu, Wenlu, Patrick Baud, and Teng-fong Wong

Dilatancy and post-yielding behavior in porous sandstones: A new loading path. In: *Soil and Rock America, Proceedings of the 39th U.S. Rock Mechanics Symposium, M.I.T., Cambridge, MA, June 21-June 26, 2003*, :437-444, 2003.

Department of WHOI Author: GEOL.

Zhu, Wenlu, and Greg Hirth

A network model for permeability in partially molten rocks. *Earth Planet.Sci.Lett.*, 212:407-416, 2003.

Department of WHOI Author: GEOL.

[Link to online article](#)

Compiled by: Ann Devenish
MBLWHOI Library
library@whoi.edu
January 2, 2004