



WHOI Contributions to the Scientific Literature Monthly Activity Report

Articles Received in April 2000

MBL/WHOI Library
Woods Hole, MA 02543

Anderson, Steven P., Richard Trask, Robert A. Weller, Will Ostrom, Bryan Way, Bradford Butman, Mark Grosenbaugh, Jason Gobat, and Walter Paul.

Measuring temperature and velocity variability from a horizontal mooring.

In: *Proceedings of the IEEE Sixth Working Conference on Current Measurements, Bahia Hotel, San Diego, CA, March 11-13, 1999,*

Steven P. Anderson, Eugene A. Terry, Judith A. Rizoli White, and Albert J. Williams, 3rd, eds. IEEE, Piscataway, NJ, :139-143, 1999.

Department of WHOI Author: PO and AOPE.

Contribution Number: **NONE**

Andrews, J. T., L. Keigwin, and A. E. Jennings.

Abrupt deglaciation events and Holocene palaeoceanography from high-resolution cores, Cartwright Saddle, Labrador Shelf, Canada.

J.Quat.Sci., 14(5):383-397, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Bachmayer, R., L. L. Whitcomb, and M. A. Grosenbaugh.

Four quadrant finite dimensional thruster model.

Proc.Int.Offshore Polar Eng.Conf., 2:399-406, 1999.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

Bachmayer, Ralf, Louis L. Whitcomb, and Mark A. Grosenbaugh.

Accurate four-quadrant nonlinear dynamical model for marine thrusters: Theory and experimental validation. *IEEE J.Ocean.Eng.*, 25(1):146-159, 2000.

Department of WHOI Author: AOPE.

Contribution Number: **9883**

Ballard, Robert D.

The Eternal Darkness: A Personal History of Deep-Sea Exploration, Princeton University Press, Princeton, New Jersey, 368 pp., 2000.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

Ballard, Robert D.

High-tech search for Roman shipwrecks. *Nat. Geogr.*, 193(4):32-41, 1998.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

Barrett, D. S., M. S. Triantafyllou, D. K. P. Yue, M. A. Grosenbaugh, and M. J. Wolfgang.

Drag reduction in fish-like locomotion. *J. Fluid Mech.*, 392:183-212, 1999.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

Billups, K., A. C. Ravelo, J. C. Zachos, and R. D. Norris.

Link between oceanic heat transport, thermohaline circulation, and the Intertropical Convergence Zone in the early Pliocene Atlantic.

Geology, 27(4):319-322, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Bower, Amy S., Heather D. Hunt, and James F. Price.

Character and dynamics of the Red Sea and Persian Gulf outflows.

J. Geophys. Res., 105(C3):6387-6414, 2000.

Department of WHOI Author: PO.

Contribution Number: **9548**

Broecker, W. S., E. Clark, D. C. McCorkle, I. Hajdas, G. Bonani.

Core top ^{14}C ages as a function of latitude and water depth on the Ontong-Java plateau. *Paleoceanography*, 14(1):13-22, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Broecker, W. S., E. Clark, D. C. McCorkle, P. Tsung-Hung, I. Hajdas, and G. Bonani.

Evidence for a reduction in the carbonate ion content of the deep sea during the course of the Holocene. *Paleoceanography*, 14(6):744-752, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Canales, J. Pablo.

Using seismic waves to “see” a slice of the oceanic crust.

Oceanus, 41(2):30-31, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Cannat, Mathilde, Anne Briais, Christine Deplus, Javier Escartin, Jennifer Georgen, Jian Lin, Serguei Mercouriev, Christine Meyzen, Mark Muller, Gaud Pouliquen, Aline Rabain, Pedro da Silva.

Mid-Atlantic Ridge-Azores hotspot interactions: Along-axis migration of a hotspot-derived event of enhanced magmatism 10 to 4 Ma ago.

Earth Planet.Sci.Lett., 173:257-269, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Clift, Peter and Jerzy Blusztajn.

The trace-element characteristics of Aegean and Aeolian volcanic arc marine tephra. *J.Volcan.Geotherm. Res.*, 92:321-347, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **9918**

Coburn, Joseph, L., Jr., Roy D. Gaul, and William L. Hurley.

Design of a swath coastal research vessel. *Oceans '99*, 1:526-542, 1999.

Department of WHOI Author: ADMIN.

Contribution Number: **NONE**

Cortijo, Elsa, Scott J. Lehman, Lloyd D. Keigwin, Mark Chapman, Didier Paillard, and Laurent Labeyrie.

Changes in meridional temperatuer and salinity gradients in the North Atlantic Ocean (30°- 72°N) during the last interglacial period.

Paleoceanography, 14(1):23-33, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

De Vargas, C., R. Norris, L. Zaninetti, S. W. Gibb, J. Pawlowski.

Molecular evidence of cryptic speciation in the planktonic foraminifers and their relation to oceanic provinces. *Proc.Natl.Acad.Sci.USA*, 96(6):2864-2868, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

DeGrandpre, M. D., T. R. Hammar, C. D. Wirick.

Short-term δCO_2 and O_2 dynamics in California coastal waters. *Deep-Sea Res.II*, 45:1557-1575, 1998.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

Dickey, Tommy, Dan Frye, Joe McNeil, Derek Manov, Norm Nelson, David Sigurdson, Hans Jannasch, David Siegel, Tony Michaels, and Rod Johnson.
Upper-ocean temperature response to hurricane Felix as measured by the Bermuda testbed mooring. *Mon. Weather Rev.*, 126:1195-1201, 1998.
Department of WHOI Author: AOPE.
Contribution Number: **NONE**

Driscoll, N. W., W. D. Spencer, and D. G. Aubrey.
Implementation and Design of a Shallow Water Imaging System. Woods Hole Oceanographic Institution, Woods Hole, MA, 10 pp., 1998.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Edwards, Katrina J., Philip L. Bond, Thomas M. Gihring, and Jillian F. Banfield.
An archaeal Fe-oxidizing exxtreme acidophile important in acid mine drainage. *Science*, 287(5459):1796-1799, 2000.
Department of WHOI Author: MCG.
Contribution Number: **NONE**

Evans, Robert.
A current affair. *Oceanus*, 41(2):32-33, 1998.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Fornari, D., A. Bradley, S. Humphris, B. Walden, A. Duester, R. Catanach, E. Snow, A. Bowen, R. Elder, W. Sellers, J. "Pat" Hickey, R. Williams.
Inductively coupled link (ICL) temperature probes for hot hydrothermal fluid sampling from ROV Jason and DSV Alvin. *Ridge Events*, 8(1):26-30, 1997.
Department of WHOI Author: GEOL. and AOPE.
Contribution Number: **NONE**

Fornari, D. J., T. Shank, K. L. Von Damm, T. K. P. Gregg, M. Lilley, G. Levai, A. Bray, R. M. Haymon, M. R. Perfit, and R. Lutz.
Time-series temperature measurements at high-temperature hydrothermal vents, East Pacific Rise 9°49'-51'N: Evidence for monitoring a crustal cracking event. *Earth Planet.Sci.Lett.*, 160(3-4):419-431, 1998.
Department of WHOI Author: GEOL.
Contribution Number: **9652**

Fornari, Dan and Tracy Gregg.
Axial summit caldera and axial summit graben: A reply. *Ridge Events*, 8(1):12-19, 1997.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

- Fries, J. Stephen, Cheryl Ann Butman, and Robert A. Wheatcroft.**
Ripple formation induced by biogenic mounds. *Mar.Geol.*, 159:287-302, 1999.
Department of WHOI Author: AOPE.
Contribution Number: **9530**
- Fryer, P., D. J. Fornari and M. R. Perfit.**
Future research directions in deep submergence science.
Mar.Technol.Soc.J., 33(4):74-79, 2000.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**
- Gobat, Jason I. and Mark A. Grosenbaugh.**
The dynamics of shallow water oceanographic moorings: Experimental and numerical results. *Oceans '99*, 1:107-112, 1999.
Department of WHOI Author: AOPE.
Contribution Number: **9972**
- Gobat, Jason I. And Mark A. Grosenbaugh.**
Modeling the mechanical and flow-induced noise on the surface suspended acoustic receiver. In: *Proceedings of the 1997 Oceans Conference, Part 2, Halifax, Nova Scotia, Canada*. IEEE, Piscataway, NJ, 2:748-754, 1997.
Department of WHOI Author: AOPE.
Contribution Number: **NONE**
- Grosenbaugh, Mark A. and Jason I. Gobat.**
Full-scale dynamic measurements of a shallow-water oceanographic surface mooring. *Proc.Int. Offshore Polar Eng. Conf.*, 2:699-705, 1999.
Department of WHOI Author: AOPE.
Contribution Number: **NONE**
- Hemming, N. Gary, Richard J. Reeder, and Stanley R. Hart.**
Growth-step-selective incorporation of boron on the calcite surface.
Geochim.Cosmochim.Acta, 62(17):2915-2922, 1998.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**
- Hemming, S. R., W. S. Broecker, W. D. Sharp, G. C. Bond, R. H. Gwiazda, J. F. McManus, M. Klas, I. Hajdas.**
Provenance of Heinrich layers in core V28-82, northeastern Atlantic: $^{40}\text{Ar}/^{39}\text{Ar}$ ages of ice-rafted hornblende, Pb isotopes in feldspar grains, and Nd-Sr-Pb isotopes in the fine sediment fraction. *Earth Planet.Sci.Lett.*, 164:317-333, 1998.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Herranz, Pedro, Maria Ballesteros, Juan Acosta, Carlos Palomo, Araceli Munoz, and Elazar Uchupi.

Morphology of Emile Baudot Escarpment (Balearic Sea). In: *2nd Assembleia Luso-Espanhola de Geodesia e Geofisica, Lagos (Algarve, Portugal) 8-12 de Fevereiro*, :661-662, 2000.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Hooft, E. E. E., R. S. Detrick, D. R. Toomey, J. A. Collins, and J. Lin.

Crustal thickness and structure along three contrasting spreading segments of the Mid-Atlantic Ridge, 33.5°- 35°N. *J.Geophys.Res.*, 105(B4):8205-8226, 2000.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Hosom, David, Robert Weller, Geoff Allsup, Steve Anderson, and Richard Trask.

Upgraded vector measuring current meter. *Oceans '99*, 1:377-381, 1999.

Department of WHOI Author: PO.

Contribution Number: **NONE**

Humphris, Susan E. and Thomas McCollom.

The cauldron beneath the seafloor. *Oceanus*, 41(2):18-21, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Irish, J. D., R. C. Beardsley, W. W. Williams, and K. H. Brink.

Long-term moored observations on Georges Bank as part of the U. S. GLOBEC Northwest Atlantic/Georges Bank program. *Oceans '99*, 1:273-278, 1999.

Department of WHOI Author: AOPE. P.O.

Contribution Number: **9957**

Irish, James D., Peter Traykovski, and James F. Lynch.

Acoustic observations of a fluid mud layer transporting sediment on the Northern California shelf. *Oceans '99*, 3:1134-1137, 1999.

Department of WHOI Author: AOPE.

Contribution Number: **9956**

Karner, Garry D. and Neal W. Driscoll.

Tectonic and stratigraphic development of the West African and eastern Brazilian margins; insights from quantitative basin modelling. In: *The Oil and Gas Habitats of the South Atlantic*. Nick R. Cameron, Raymond H. Bate, and Val S. Clure, eds. Geological Society Special Publication 153:11-40, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Keigwin, L. D., D. Rio, and G. D. Acton.

Init. Rep. Deep Sea Drill. Proj., 172, 949 pp., 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Klein, M., H.-G. Stosch, and N. Shimizu.

Experimental partitioning of high field strength and rare earth elements between clinopyroxene and garnet in andesitic to tonalitic systems.

Geochim. Cosmochim. Acta, 64(1):99-115, 2000.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Kroon, D., R. D. Norris, and A. Klaus.

Drilling Blake Nose; the search for evidence of extreme Palaeogene-Cretaceous climates and extraterrestrial event. *Geology Today*, 14(6):222-226, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Kurz, Mark D. and D. Geist.

Dynamics of the Galapagos hotspot from helium isotope geochemistry.

Geochim. Cosmochim. Acta, 63(23/24):4139-4156, 1999.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Kuwabara, James S., Alexander Van Geen, Daniel C. McCorkle, and Joan M. Bernhard.

Dissolved sulfide distributions in the water column and sediment pore waters.

Geochim. Cosmochim. Acta, 63(15):2199-2209, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Licciardi, J. M., M. D. Kurz, P. U. Clark, and E. J. Brook.

Calibration of cosmogenic ${}^3\text{He}$ production rates from Holocene lava flows in Oregon, USA, and effects of the Earth's magnetic field.

Earth Planet. Sci. Lett., 172:261-271, 1999.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Lin, Jian.

Hitting the hotspots. *Oceanus*, 41(2):34-37, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Lynch-Stieglitz, Jean, William B. Curry, and Niall Slowey.

Weaker Gulf Stream in the Florida Straits during the last glacial maximum.

Nature, 402(6762):644-648, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

McManus, James, William M. Berelson, Gary P. Klinkhammer, Kenneth S. Johnson, Kenneth H. Coale, Robert F. Anderson, Niraj Kumar, David J. Buridge, Douglas E. Hammond, Hans J. Brumsack, Daniel C. McCorkle, and Ahmed Rushdi.

Geochemistry of barium in marine sediments: Implications for its use as a paleoproxy. *Geochim.Cosmochim.Acta*, 62(21/22):3453-3473, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

McManus, Jerry F., Delia W. Oppo, and James L. Cullen.

A 0.5-million-year record of millenial-scale climate variability in the North Atlantic. *Science*, 283:971-975, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Mincks, Sarah L., Stephen M. Bollens, Laurence P. Madin, Erich Horgan, Mari Butler, Patricia M. Kremer, and James E. Craddock.

Distribution, abundance, and feeding ecology of decapods in the Arabian Sea, with implications for vertical flux. *Deep-Sea Res.II*, 47:1475-1516, 2000.

Department of WHOI Author: BIO.

Contribution Number: **9849**

Morrison, Archie T., III and Albert J. Williams, 3rd.

Location and recovery of lost instruments using acoustic targets.

Oceans '99, 3:1429-1434, 1999.

Department of WHOI Author: AOPE.

Contribution Number: **9949**

Mullineaux, Lauren and Donal Manahan.

Deep-sea diaspora. *Oceanus*, 41(2):6-9, 1998.

Department of WHOI Author: BIO.

Contribution Number: **NONE**

Munoz, A., J. Acosta, C. Palomo, P. Herranz, J. L. Sanz, J. Molinero, R. Gomez, M. A. Becares, E. Uchupi.

Datos batimeetricos y sismicos en el ambito de la investigacion de la zona economica exclusiva Espanola. In: *1st Asamblea Hispano-Portuguesa de Geodesia y Geofisica, IX Asamblea Espanola de Geodesia y Geofisica, Almeria, Spain, Paper 16; Section S07*, 11 pp., 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Norris, Richard D., Byong-Kwon Park, Sunh-Ho Kang, and Boo-Keun Khim.

Stable isotope and ecological habitat of planktonic foraminifera adjacent to the ice edge in the western Weddell Sea. *Geos.J.*, 2(2):88-98, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Nuss, Wendell A., John M. Bane, William T. Thompson, Teddy Holt, Clive E. Dorman, F. Martin Ralph, Richard Rotunno, Joseph B. Klemp, William C. Skamarock, Roger M. Samelson, Audrey M. Rogerson, Chris Reason, and Peter Jackson.

Coastally trapped wind reversals: Progress toward understanding.

Bull.Am.Meteorol.Soc., 81(4):719-743, 2000.

Department of WHOI Author: PO.

Contribution Number: **NONE**

Park, Young-Gyu.

The stability of thermohaline circulation in a two-box model.

J.Phys.Oceanogr., 29(12):3101-3110, 1999.

Department of WHOI Author: PO.

Contribution Number: **9441**

Paul, Walter, Jim Irish, Jason Gobat, Mark Grosenbaugh.

Coastal mooring design: Taut elastomeric and chain catenary surface buoy moorings. *Oceans '99*, 1:419-426, 1999.

Department of WHOI Author: AOPE.

Contribution Number: **9958**

Plueddemann, A. J., E. A. Terray, and R. Merewether.

Design and performance of a self-contained, fan-beam ADCP. In: *Proceedings of the IEEE Sixth Working Conference on Current Measurements, Bahia Hotel, San Diego, CA, March 11-13, 1999*, Steven P. Anderson, Eugene A. Terry, Judith A. Rizoli White, and Albert J. Williams, 3rd, eds. IEEE, Piscataway, NJ, :54-59, 1999.

Department of WHOI Author: PO. And AOPE.

Contribution Number: **NONE**

Poore, R. Z., Lisa Osterman, W. B. Curry, and R. L. Phillips.

Late Pleistocene and Holocene meltwater events in the western Arctic Ocean.
Geology, 27(8):759-762, 1999.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Pride, Carol, Robert Thunell, Daniel Sigman, Lloyd Keigwin, Mark A. Altabet, and E. Tappa.

Nitrogen isotopic variations in the Gulf of California since the last deglaciation; response to global climate change. *Paleoceanography*, 14(3):397-409, 1999.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Rapp, R. P., N. Shimizu, M. D. Norman, and G. S. Applegate.

Reaction between slab-derived melts and peridotite in the mantle wedge: experimental constraints at 3.8 Gpa. *Chem.Geol.*, 160:335-356, 1999.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Richardson, P. L., A. S. Bower, and W. Zenk.

A census of Meddies tracked by floats. *Prog.Oceanogr.*, 45:209-250, 2000.
Department of WHOI Author: PO.
Contribution Number: **9910**

Schouten, Hans, Maurice A. Tivey, Daniel J. Fornari, and James R. Cochran.

Central anomaly magnetization high: Constraints on the volcanic construction and architecture of seismic layer 2A at a fast-spreading mid-ocean ridge, the EPR at 9°30'-50'N. *Earth Planet.Sci.Lett.*, 169:37-50, 1999.
Department of WHOI Author: GEOL.
Contribution Number: **9875**

Sessions, Alex L., Thomas W. Burgoyne, Arndt Schimmelmann, and John M. Hayes.

Fractionation of hydrogen isotopes in lipid biosynthesis.
Org.Geochem., 30:1193-1200, 1999.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Sherrell, Robert M., M. Paul Field, and Greg Ravizza.

Uptake and fractionation of rare earth elements on hydrothermal plume particles at 9°45'N, East Pacific Rise.
Geochim.Cosmochim.Acta, 63(11/12):1709-1722, 1999.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Shimizu, Nobu, ed.

A group of papers in honor of Claude Allegre on his sixtieth birthday.

Geochim.Cosmochim.Acta, 63(23/24):4005-4179, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Singh, H., F. Weyer, J. Howland, A. Duester, D. Yoerger, and A. Bradley.

Quantitative stereo imaging from the Autonomous Benthic Explorer (ABE).

Oceans '99, 1:52-57, 1999.

Department of WHOI Author: AOPE.

Contribution Number: **9212**

Sobolev, Nikolay V., Gregory A. Snyder, Lawrence a. Taylor, Randall A. Keller, Emilya S. Yefimova, Vladimir N. Sobolev, and Nobumichi Shimizu.

Extreme chemical diversity in the mantle during eclogitic diamond formation; evidence from 35 garnet and 5 pyroxene inclusions in a single diamond.

Int.Geol.Rev., 40(7):567-578, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Sohn, Robert A., John A. Hildebrand, and Spahr C. Webb.

Postdrifting seismicity and a model for the 1993 diking event on the CoAxial Segment, Juan de Fuca Ridge. *J.Geophys.Res.B*, 103(5):9867-9877, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Stojanovic, M., L. Freitag, and M. Johnson.

Channel-estimation-based adaptive equalization of underwater acoustic signals.

Oceans '99, 2:590-595, 1999.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

Stokey, Roger P. and Thomas C. Austin.

Sequential, long baseline navigation for REMUS, an autonomous underwater vehicle. *Proc. SPIE Int.Soc.Opt.Eng.*, 3711:212-219, 1999.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

Takazawa, E., F. A. Frey, N. Shimizu, and M. Obata.

Whole rock compositional variations in an upper mantle peridotite (Horoman, Hokkaido, Japan): Are they consistent with a partial melting process?.

Geochim.Cosmochim.Acta, 64(4):695-716, 2000.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

ten Brink, Uri S., Nobumichi Shimizu, and Philipp C. Molzer.

Plate deformation at depth under Northern California; slap gap or stretched slab?

Tectonics, 18(6):1084-1098, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Terray, Eugene A., Blair H. Brumley, and Brandon Strong.

Measuring waves and currents with an upward-looking ADCP. In: *Proceedings of the IEEE Sixth Working Conference on Current Measurements, Bahia Hotel, San Diego, CA, March 11-13, 1999*, Steven P. Anderson, Eugene A. Terry, Judith A. Rizoli White, and Albert J. Williams, 3rd, eds. IEEE, Piscataway, NJ, :66-71, 1999.

Department of WHOI Author: AOPE.

Contribution Number: **9879**

Thwaites, F. T. and A. J. Williams, 3rd.

BASS measurements of currents, waves, stress and turbulence in the North Sea bottom-boundary layer. In: *Proceedings of the IEEE Sixth Working Conference on Current Measurements, Bahia Hotel, San Diego, CA, March 11-13, 1999*, Steven P. Anderson, Eugene A. Terry, Judith A. Rizoli White, and Albert J. Williams, 3rd, eds. IEEE, Piscataway, NJ, :231-345, 1999.

Department of WHOI Author: AOPE.

Contribution Number: **9862**

Tivey, M. and A. Takeuchi.

A submersible study of the western intersection of the Mid-Atlantic ridge and Kane fracture zone (WMARK). *Mar.Geophys.Res.*, 20(3):195-218, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Tivey, Margaret Kingston.

How to build a black smoker chimney. *Oceanus*, 41(2):22-26, 1998.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Toole, J. M., K. W. Doherty, D. E. Frye, S. P. Liberatore.

Velocity measurements from a moored profiling instrument. In: *Proceedings of the IEEE Sixth Working Conference on Current Measurements, Bahia Hotel, San Diego, CA, March 11-13, 1999*, Steven P. Anderson, Eugene A. Terry, Judith A. Rizoli White, and Albert J. Williams, 3rd, eds. IEEE, Piscataway, NJ, :144-149, 1999.

Department of WHOI Author: PO. AOPE.

Contribution Number: **NONE**

Van Orman, James a., Timothy L. Grove, and Nobumichi Shimizu.

Uranium and thorium diffusion in diopside.

Earth Planet.Sci.Lett., 160:505-519, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

White, Sheri N. and Alan D. Chave.

ALISS in wonderland. *Oceanus*, 41(2):14-17, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Wiggert, J. D., B. H. Jones, T. D. Dickey, K. H. Brink, R. A. Weller, J. Marra, and L. A. Codispoti.

The northeast monsoon's impact on mixing, phytoplankton biomass and nutrient cycling in the Arabian Sea. *Deep-Sea Res.II*, 47:1353-1385, 2000.

Department of WHOI Author: PO.

Contribution Number: **NONE**

Williams, Albert J., 3rd.

Benthic "weather" current meter array. In: *Proceedings of the IEEE Sixth Working Conference on Current Measurements, Bahia Hotel, San Diego, CA, March 11-13, 1999*, Steven P. Anderson, Eugene A. Terry, Judith A. Rizoli White, and Albert J. Williams, 3rd, eds. IEEE, Piscataway, NJ, :236-240, 1999.

Department of WHOI Author: AOPE.

Contribution Number: **9855**

Williams, Albert J., 3rd and Caleb Beckford.

Reynolds stress resolution from a modular acoustic velocity sensor.

Oceans '99, 1:386-390, 1999.

Department of WHOI Author: AOPE.

Contribution Number: **9951**

Wolfe, Cecily J., Frank L. Vernon, III, and Abdullah Al-Amri.

Shear-wave splitting across western Saudi Arabia; the pattern of upper mantle anisotropy at a Proterozoic shield. *Geophys.Res.Lett.*, 26(6):779-782, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Wolfgang, J. J., J. M. Anderson, M. A. Grosenbaugh, D. K. P. Yue, and M. S. Triantafyllou.

Near-body flow dynamics in swimming fish.

J.Exp.Biol., 202(17):2303-2327, 1999.

Department of WHOI Author: AOPE.

Contribution Number: **10002**

**Woodhouse, O. B., G. Ravizza, K. Kenison Falakner, P. J. Statham, and
B. Peucker-Ehrenbrink.**

Osmium in seawater: Vertical profiles of concentration and isotopic composition in the eastern Pacific Ocean. *Earth Planet.Sci.Lett.*, 173:223-233, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

**Yoerger, Dana R., Albert M. Bradley, Barrie B. Walden, Hanumant Singh, and
Ralf Bachmayer.**

Surveying a subsea lava flow using the Autonomous Benthic Explorer (ABE).
Int.J.Syst.Sci., 29(10):1031-1044, 1999.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

**Zhang, Shuliang, Albert J. Plueddemann, Steven P. Anderson, and
Robert A. Weller.**

Surface fluxes and their influence on sea surface temperature in the western equatorial Pacific during the Coupled Ocean-Atmosphere Response Experiment.
J.Geophys.Res., 105(C3):6341-6357, 2000.

Department of WHOI Author: PO.

Contribution Number: **9978**

Zhu, W., B. Evans, and Y. Bernabe.

Densification and permeability reduction in hot-pressed calcite: A kinetic model.
J.Geophys.Res., 104(B11):25501-25512, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Zhu, Wenlu and Teng-Fong Wong.

Network modeling of the evolution of permeability and dilatancy in compact rock.
J.Geophys.Res., 104(2):2963-2971, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Compiled by: Maureen Carragher
MBL/WHOI Library
library@whoi.edu
May 3, 2000