



WHOI Contributions to the Scientific Literature Monthly Activity Report

Articles Received in April 1999

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Anderson, D. M.

Systems for identifying brown tide.

In: *Proceedings of the Brown Tide Summit, October 20-21, 1995*,
A. McElroy, ed. New York Sea Grant Institute, NY, :57-63, 1996.

Department of WHOI Author: BIO.

Contribution Number: **NONE**

Anderson, Donald M. and David J. Garrison.

The ecology and oceanography of harmful algal blooms.

Limnol. Oceanogr., 42(5, part 2):1009-1305, 1997.

Department of WHOI Author: BIO.

Contribution Number: **NONE**

Austin, T. C. and R. Stokey.

Relative acoustic tracking. *Sea Technol.*, 39(3):21-27, 1998.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

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

A four quadrant finite dimensional thruster model. *Oceans '98*, 2:660-666, 1998.

Department of WHOI Author: AOPE.

Contribution Number: **9749**

Baggeroer, A. B., T. G. Birdsall, C. Clark, J. A. Colosi, B. D. Cornuelle, D. Costa, B. D. Dushaw, M. Dzieciuch, A. M. Forbes, C. Hill, B. M. Howe, J. Marshall, D. Menemenlis, J. A. Mercer, K. Metzger, W. Munk, R. C. Spindel, R. C. Stammer, P. F. Worcester, and C. Wunsch

Ocean climate changes; comparison of acoustic tomography, satellite altimetry, and modelling. *Science*, 281:1327-1332, 1998.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

Barbieri, Elena, Deborah Hughes, Rebecca Ericson, and Andreas Teske.

Are Gamma Proteobacteria the predominant symbionts in the squid *Loligo Pealei*. In: *New Developments in Marine Biotechnology*. Y. Legal and H. Halvorson, eds. Plenum Press, New York, :285-289, 1998.

Department of WHOI Author: BIO.

Contribution Number: **9651**

Benfield, M. C., P. H. Wiebe, T. K. Stanton, C. S. Davis, S. M. Gallager, and C. H. Greene.

Estimating the spatial distribution of zooplankton biomass by combining Video Plankton Recorder and single-frequency acoustic data.

Deep-Sea Res. II, 45(7):1175-1199, 1998.

Department of WHOI Author: BIO.

Contribution Number: **9718**

Bisagni, J. J., R. C. Beardsley, C. M. Ruhsam, J. P. Manning, and W. J. Williams.

Historical and recent evidence of Scotian Shelf water on southern Georges Bank. *Deep-Sea Res.*, 43(7-8):1439-1471, 1996.

Department of WHOI Author: PO.

Contribution Number: **NONE**

Bishop, Christine A., P. Ng, K. E. Pettit, S. W. Kennedy, J. J. Stegeman, R. J. Norstrom, and R. J. Brooks.

Environmental contamination and development abnormalities in eggs and hatchlings of the common snapping turtle (*Chelydra serpentina serpentina*) from the Great Lakes-St. Lawrence River basin (1989-91).

Environ.Pollut., 101:143-156, 1998.

Department of WHOI Author: BIO.

Contribution Number: **NONE**

Brink, K. H.

Science and the policy making process. *Mar.Tech.Soc.J.*, 32(3):94-95, 1998.

Department of WHOI Author: PO.

Contribution Number: **NONE**

Buck, John R., James C. Preisig, and Kathleen E. Wage.

A unified framework for mode filtering and the maximum *a posteriori* mode filter.
J.Acoust.Soc.Am., 103(4):1813-1824, 1998.
Department of WHOI Author: AOPE.
Contribution Number: **9456**

Bucklin, Ann, Sara B. Smolenack, Alyssa M. Bentley, and Peter H. Wiebe.

Gene flow patterns of the euphausiid, *Meganyctiphanes norvegica*, in the NW Atlantic based on mtDNA sequences for cytochrome b and cytochrome oxidase I.
J.Plankton Res., 19(11):1763-1781, 1997.
Department of WHOI Author: BIO.
Contribution Number: **9318**

Buesseler, Ken O.

The isotopic signature of fallout plutonium in the North Pacific.
J.Environ.Radioact., 36(1):69-83, 1997.
Department of WHOI Author: MCG.
Contribution Number: **9298**

Butman, Cheyl Ann, Cabell S. Davis.

Small-scale pattern and processes in benthic and planktonic invertebrates.
Available:http://www.joss.ucar.edu/joss_psg/project/oce_workshop/oeuvre/butman_davis.html. (last updated 26 January 1998).
Department of WHOI Author: BIO.
Contribution Number: **NONE**

Canfield, D. E., and A. Teske.

Late Proterozoic rise in atmospheric oxygen concentration inferred from phylogenetic and sulphur-isotope studies. *Nature*, 382(6587):127-132, 1996.
Department of WHOI Author: BIO.
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, and Pedro da Silva.

Sud Acores cruise: Variation in magma supply and the past segmentation of the MAR in the Lucky Strike-FAMOUS and Oceanographer FZ regions.
InterRidge News, 7(2):31-33, 1998.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Cantrell, S. M., J. Joy-Schlezing, J. J. Stegeman, D. E. Tillitt, and D. E. Hannink.
Correlation of 2, 3, 7, 8-tetrachlorodibenzo-p-dioxin-induced apoptotic cell death in the embryonic vasculature with embryotoxicity. *Toxicol.Appl.Pharmacol.*, 184(1):24-34, 1998.

Department of WHOI Author: BIO.

Contribution Number: **NONE**

Caron, D. A. and B. B. Ward.

Functional significance of marine microbial diversity.

Available:http://www.joss.ucar.edu/joss_psg/project/oce_workshop/oeuvre/caron_ward.html (last updated 20 January 1998), 1998.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Caswell, Hal, Masami Fujiwara, and Solange Brault.

Declining survival probability threatens the North Atlantic right whale.

Proc.Nat.Acad.Sci.USA(Popu.Biol.), 96:3308-3313, 1999.

Department of WHOI Author: BIO.

Contribution Number: **9852**

Chapman R. D., L. K. Shay, H. C. Graber, J. B. Edson, a. Karachintsev, C. L. Trump, and D. B. Ross.

On the accuracy of HF radar surface current measurements: Intercomparisons with ship-based sensors. *J.Geophys.Res.C:Oceans*, 102(C8):18737-18748, 1997.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

Chapman, David C.

Dense water formation beneath a time-dependent coastal polynya.

J.Phys.Oceanogr., 29:807-820, 1999.

Department of WHOI Author: PO.

Contribution Number: **9714**

Chen, Y. John and Jian, Lin.

Mechanisms for the formation of ridge-axis topography at slow-spreading ridges:

A lithospheric-plate flexural model. *Geophys.J.Int.*, 136:8-18, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Churchill, J. H.

Sediment resuspension by bottom fishing gear. In: *Effects of Fishing Gear on the Sea Floor of New England*, Eleanor M. Dorsey and Judith Pedersen, eds.

Conservation Law Foundation, Boston, MA, :134-137, 1998.

Department of WHOI Author: PO.

Contribution Number: **NONE**

Clift, Peter D. and J. Godfrey Fitton.

Trace and rare earth element chemistry of volcanic ashes from sites 918 and 919: Implications for Icelandic volcanism. In: *Proc.Ocean Drill.Prog.,Sci.Res.* A. D. Saunders, H. C. Larsen, and S. W. Wise, Jr., eds., Ocean Drilling Program, College Station, TX, 152:67-84, 1998.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Clough, L. M., W. G. Ambrose, Jr., C. J. Ashjian, D. Piepenburg, P. E. Renaud, and S. L. Smith.

Meroplankton abundance in the Northeast Water Polynya: Insights from oceanographic parameters and benthic abundance patterns.
J.Mar.Sys., 10(1-4):343-357, 1997.
Department of WHOI Author: BIO.
Contribution Number: **NONE**

Colosi, J. A.

Random media effects in long-range acoustic propagation in the ocean. In: *Monte Carlo Simulations in Oceanography: Proceedings 'Aha Huliko'a Hawaiian Winter Workshop, University of Hawaii at Manoa, January 14-17, 1997.* Peter Muller and Diane Henderson, eds. School of Ocean and Earth Science and Technology, Honolulu, HI, :157-166, 1997.
Department of WHOI Author: AOPE.
Contribution Number: **NONE**

Colosi, J. A. and S. M. Flatte.

Mode coupling by internal waves for multimegameter acoustic propagation in the ocean. *J.Acoust.Soc.Am.*, 100(6):3607-3620, 1996.
Department of WHOI Author: AOPE.
Contribution Number: **NONE**

Colosi, John A. and Michael G. Brown.

Efficient numerical simulation of stochastic internal-wave-induced sound-speed perturbation fields. *J.Acoust.Soc.Am.*, 1038(4):2232-2235, 1998.
Department of WHOI Author: AOPE.
Contribution Number: **9374**

Curran, Daniel.

Aging Russian nuclear submarine problems. *Submar.Rev.*, :74-77, 1997.
Department of WHOI Author: MPC.
Contribution Number: **9491**

Curran, Daniel A.

Remembering VADM Charles A. Lockwood, Jr.. *Submar.Rev.*, :98-107, 1998.
Department of WHOI Author: MPC.
Contribution Number: **NONE**

DeGrandpre, Michael D., Terrance R. Hammar, and Creighton D. Wirick.

Studies of coastal CO₂ and O₂ dynamics using moored autonomous sensors.
In: *Proceedings, Ocean Community Conference '98, The Marine Technology Society Annual Conference, November 16-19, 1998, Baltimore, MD.* Marine Technology Society, Washington, DC, 2:797-801, 1998.
Department of WHOI Author: AOPE.
Contribution Number: **NONE**

Dick, Henry J. B.

Indian Ocean's Atlantis bank yields deep-earth insight. *Oceanus*, 31:29-32, 1998.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Dickey, T., D. Frye, H. Jannasch, E. Boyle, D. Manov, D. Sigurdson, J. McNeil, M. Stramska, A. and Michaels, N. Nelson.

Initial results from the Bermuda testbed mooring program. *Deep-Sea Res.I*, 45(4/5):771-794, 1998.
Department of WHOI Author: AOPE. BIOL.
Contribution Number: **NONE**

Donohoue, Kathleen A., Gwyneth E. Hufford, and Michael S. McCartney.

Sources and transport of the Deep Western Boundary Current east of the Kerguelen Plateau. *Geophys.Res.Lett.*, 26(7):851-854, 1999.
Department of WHOI Author: PO.
Contribution Number: **9834**

Doutt, James A., George V. Frisk, and Hugh Martel.

Using GPS at sea to determine the range between a moving ship and a drifting buoy to centimeter-level accuracy. *Oceans '98*, 3:1344-1347, 1998.
Department of WHOI Author: AOPE.
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Drahushuk, Adam T., Barbara P. McGarrigle, Kristin E. Larsen, John J. Stegeman, and James R. Olson.

Detection of CYP1A1 protein in human liver and induction by TCDD in precision-cut liver slices incubated in dynamic organ culture.
Carcinogenesis, 19(8):1361-1368, 1998.
Department of WHOI Author: BIO.
Contribution Number: **NONE**

Driscoll, N. W. and G. H. Haug.

A short circuit in thermohaline circulation: A cause for northern hemisphere glaciation? *Science*, 282:436-438, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **9795**

Driscoll, N.W. and G. D. Karner.

Three-dimensional quantitative modeling of clinoform development.

Mar.Geol., 154:383-398, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **9634**

Driscoll, Neal W. and Garry D. Karner.

Lower crustal extension across the Northern Carnarvon basin, Australia: Evidence for an eastward dipping detachment. *J.Geophys.Res.*, 103(B3):4975-4991, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **9575**

Driscoll, Neal W. and John B. Diebold.

Deformation of the Caribbean region: One plate or two?

Geology, 26(11):1043-1046, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **9754**

Druffel, Ellen R. M., Sheila Griffin, Susumu Honjo, and Steven J. Manganini.

Evidence of old carbon in the deep water column of the Panama Basin from natural radiocarbon measurements. *Geophys.Res.Lett.*, 25(10):1733-1736, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Duda, Timothy F. and David C. Jacobs.

Stress/shear correlation: Internal wave/wave interaction interaction and energy flux in the upper ocean. *Geophys.Res.Lett.*, 25(11):1919-1922, 1998.

Department of WHOI Author: AOPE.

Contribution Number: **9451**

Ertl, Robin P., John J. Stegeman, and Gary W. Winston.

Induction time course of cytochromes P450 by phenobarbital and 3-methylcholanthrene pretreatment in liver microsomes of Alligator mississippiensis.

Biochem.Pharmacol., 55:1513-1521, 1998.

Department of WHOI Author: BIO.

Contribution Number: **NONE**

**Feng, Ming, Mark A. Merrifield, Robert Pinkel, Peter Hacker,
Albert J. Plueddemann, Eric Firing, Roger Lukas, and Charles Eriksen.**

Semidiurnal tides observed in the western equatorial Pacific during the Tropical Ocean-Global Atmosphere Coupled Ocean-Atmosphere Response Experiment.

J. Geophys. Res., 103(C5):10253-10272, 1998.

Department of WHOI Author: PO.

Contribution Number: **NONE**

Fragoso, Nuno M., Joanne L. Parrott, Mark E. Hahn, and Peter V. Hodson.

Chronic retene exposure causes sustained induction of CYP1A activity and protein in rainbow trout (*Oncorhynchus mykiss*).

Environ. Toxicol. Chem., 17(11):2347-2353, 1998.

Department of WHOI Author: BIO.

Contribution Number: **9567**

Freitag, L., M. Johnson, and J. Preisig.

Acoustic communications for UUVs. *Sea Tech.*, 39(6):65-71, 1998.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

**Freitag, Lee, Matthew Grund, Sandipa Singh, Samuel Smith, Reed Christenson,
Larry Marquis, and Josko Catipovic.**

Birdirectional coherent acoustic communication system for underwater vehicles.

Oceans '98, I:482-486, 1998.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

Fujioka, Kantaro, Hitoshi Chiba, Takeshi Naganuma, Harue Masuda, Tamotsu Oomori, Peter Rona, Brian Tucholke, Takemi Ishihara, Kazuhiro Kato, Suyoung Lee, Darryl Green, and Misumi Aoki.

Hydrothermal processes and architecture of the slow-spreading MAR at TAG and Rainbow hydrothermal fields and Dante's dome megamullion site (Mode '98 Leg).

InterRidge News, 7(2):18-23, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Gaines, Arthur G.

Cape Poge Bay: A threatened sea grass lagoon. In: *An Overview of the Cape Poge Bay Natural System, Issues Related to Its Continued Functioning as a Scallop Fishery and Protected Area; Principal Threats to Its Environmental Integrity; New Nutrient Analyses of Water Samples; Future Information and Monitoring Needs*, Woods Hole Oceanographic Institution, Woods Hole, MA:56-61, 1998.

Department of WHOI Author: MPC.

Contribution Number: **NONE**

Gawarkiewicz, Glen, Timothy G. Ferdelman, Thomas M. Church, and George W. Luther III.

Shelfbreak frontal structure on the continental shelf north of Cape Hatteras.

Cont.Shelf Res., 16(14):1751-1773, 1996.

Department of WHOI Author: PO.

Contribution Number: **8822**

Gobat, Jason I. and Mark A. Grosenbaugh.

WHOI cable: Time domain numerical modeling of moored and towed oceanographic systems. *Oceans '98*, 3:1681-1685, 1998.

Department of WHOI Author: AOPE.

Contribution Number: **9732**

Goldsborough, R., B. Allen, and R. Stokey.

'High-res' electronic still camera. *Sea Technol.*, 39(2):65-75, 1998.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

Gonzalez-Gil, Sonsoles, Bruce A. Keafer, Raffael V. M. Jovine, Angeles Aguilera , Songhui Lu, and Donald M. Anderson.

Detection and quantification of alkaline phosphatase in single cells of phosphorus-starved marine phytoplankton. *Mar.Ecol.Prog.Ser.*, 164:21-35, 1998.

Department of WHOI Author: BIO.

Contribution Number: **9581**

Gordon, Lee Williams.

'Sleepy sensor' synchronization for autonomous deployments.

Sea Technol., 39(2):96-97, 1998.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

Grassle, J. Frederick, Scott Glenn, and Chris von Alt.

Ocean observing systems for marine habitats. In: *Proceedings, Ocean Community Conference '98, The Marine Technology Society Annual Conference, November 16-19, 1998, Baltimore, MD.*

Marine Technology Society, Washington, DC, 1:567-570, 1998.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

Greene, Charles H. and Peter H. Wiebe.

Acoustic visualization of three-dimensional animal aggregations in the ocean.

In: *Animal Groups in Three Dimensions.* J. K. Parrish and W. M. Hamner, eds.

Cambridge University Press, Cambridge, England, :61-67, 1997.

Department of WHOI Author: BIO.

Contribution Number: **NONE**

Groman, R. C.

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Elsevier Science Ltd., (7-8), 1996.

Department of WHOI Author: BIO.

Contribution Number: **NONE**

Groman, Robert C. and Peter H. Wiebe.

Data management in the U.S. GLOBEC Georges Bank program. In: *Proceedings, Ocean Community Conference '98, The Marine Technology Society Annual Conference, November 16-19, 1998, Baltimore, MD.*

Marine Technology Society, Washington, DC, 2:807-812, 1998.

Department of WHOI Author: BIO.

Contribution Number: **NONE**

Gustafsson, D., K. O. Buesseler, and P. M. Gschwend.

On the integrity of cross-flow filtration for collecting marine organic colloids.

Mar.Chem., 55(1/2):99-111, 1996.

Department of WHOI Author: MCG.

Contribution Number: **9145**

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An assessment of the relative importance of horizontal and vertical transport of particle-reactive chemicals in the coastal ocean.

Cont.Shelf Res., 18(7):805-829, 1998.

Department of WHOI Author: AOPE.

Contribution Number: **NONE**

Gustafsson, Orjan.

Settling removal rates of PCBs into the Northwestern Atlantic derived from $^{238}\text{U}^{234}\text{Th}$ disequilibria. *Environ.Sci.Technol.*, 31(12):3544-3550, 1997.

Department of WHOI Author: MCG.

Contribution Number: **9545**

Gustafsson, Orjan, Phil M. Gschwend, and Ken O. Buesseler.

Using ^{234}Th disequilibria to estimate the vertical removal rates of polycyclic aromatic hydrocarbons from the surface ocean. *Mar.Chem.*, 57(1/2):11-23, 1997.

Department of WHOI Author: MCG.

Contribution Number: **9431**

Hahn, M. E., S. I. Karchner, M. A. Shapiro, and S. A. Perera.

The aryl hydrocarbon receptor in early vertebrates.

Mar.Enviroin.Res., 46(1-5):41-44, 1998.

Department of WHOI Author: BIO.

Contribution Number: **9461**

Hahn, Mark E.

Mechanisms of innate and acquired resistance to dioxin-like compounds.
Rev.Toxicol., Ser.B, 2(5-6):395-443, 1998.
Department of WHOI Author: BIO.
Contribution Number: **9676**

Halanych, Kenneth M.

Lagomorphs misplaced by more characters and fewer taxa.
Sys.Biol., 47(1):138-146, 1998.
Department of WHOI Author: BIO.
Contribution Number: **NONE**

Hall, Melinda M., Pearn P. Niiler, and William J. Schmitz, Jr.

Circulation in the eastern North Pacific: Results from a current meter array along 152°W. *Deep-Sea Res.*, 44(7):1127-1146, 1997.
Department of WHOI Author: PO.
Contribution Number: **8746**

Halpern, David, Michael Freilich, and Robert A. Weller.

Arabian Sea surface winds and ocean transports determined from ERS-1 scatterometer. *J.Geophys.Res.*, 103(C4):7799-7805, 1998.
Department of WHOI Author: PO.
Contribution Number: **9410**

Hanson, Kurt A., Tetsu Hara, Erik J. Bock, and Andrey B. Karachintsev.

Estimate of directional surface wave spectra from a towed research catamaran. *J.Atmos.Ocean.Technol.*, 14(6):1467-1482, 1997.
Department of WHOI Author: AOPE.
Contribution Number: **9311**

Hara, Tetsu, Erik J. Bock, James B. Edson, and Wade McGillis.

Observation of short wind waves in coastal waters.
J.Phys.Oceanogr., 28(7):1425-1438, 1998.
Department of WHOI Author: AOPE.
Contribution Number: **9562**

Harbison, G. R.

The parasites and predators of Thaliacea. *In: The Biology of Pelagic Tunicates*, Q. Bone, ed. Oxford University Press Oxford England, :187-214, 1998.
Department of WHOI Author: BIO.
Contribution Number: **NONE**

Hill, A. E., B. M. Hickey, F. A. Shillington, P. T. Strub, K. H. Brink, E. D. Barton, and A. C. Thomas.

Eastern boundaries coastal segment (E). In: *The Sea: The Global Coastal Ocean: Regional Studies and Syntheses*. Allan R. Robinson and Kenneth H. Brink, eds. John Wiley & Sons, Inc., NY, 11:29-67, 1998.

Department of WHOI Author: PO.

Contribution Number: **NONE**

Hill, Richard W., Bradley A. White, Matthew T. Cottrell, and John W. Dacey.

Virus-mediated total release of dimethylsulfoniopropionate from marine phytoplankton: A potential climate process. *Aquat.Microb.Ecol.*, 14:1-6, 1998.

Department of WHOI Author: BIO.

Contribution Number: **NONE**

Hirth, G., J. W. Dunlap, and C. Teyssier.

Dislocation creep regimes in naturally deformed quartz aggregates. In: *Atlas of Mylonitic and Fault-Related Rocks*. A. W. Snoke, J. A. Tullis, and V. R. Todd, eds. Princeton University Press, :500-501, 1998.

Department of WHOI Author: GEOL.

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Dislocation creep regimes in experimentally deformed quartz aggregates. In: *Atlas of Mylonitic and Fault-Related Rocks*. A. W. Snoke, J. A. Tullis, and V. R. Todd, eds. Princeton University Press, :496-499, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Holland, P. M., R. V. Mustacich, J. F. Everson, and J. W. H. Dacey

Miniaturized gas chromatography instrumentation for DMS in the marine atmosphere. In: *Recent Advances in Marine Science and Technology '96*, Narenddra Saxena, ed. Seventh Pacific Congress on Marine Science and Technology (PACON 96), Honolulu, HI, 17-20 June 1996, :277-286, 1997.

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Contribution Number: **NONE**

Honda, Makio C., Masashi Kusakabe, Shigeto Nakabayashi, Steven J. Manganini, and Susumu Honjo.

Change in pCO₂ through biological activity in the margin seas of the western North Pacific: The efficiency of the biological pump estimated by a sediment trap experiment. *J.Oceanogr.(Tokyo)*, 53(6):645-662, 1997.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Honnorez, Jose J., Jeffrey C. Alt, and Susan E. Humphris.

Vivisection and autopsy of active and fossil hydrothermal alterations of basalt beneath and within the TAG hydrothermal mound. In: *Proc. Ocean Drill. Prog., Sci. Res.*, S.E. Humphris, P.M. Herzig, D.J. Miller and R. Zierenberg, eds. College Station, TX, 158:231-246, 1998.

Department of WHOI Author: GEOL.

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Hosom, David S.

Air-sea interaction observations from buoys and VOS. In: *Proceedings, Ocean Community Conference '98, The Marine Technology Society Annual Conference, November 16-19, 1998*, Baltimore, MD. Marine Technology Society, Washington, DC, 1:16-20, 1998.

Department of WHOI Author: PO.

Contribution Number: **NONE**

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Mixing and energetics of the oceanic thermohaline circulation.

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Contribution Number: **9405**

Huang, Rui Xin and Joseph Pedlosky.

Climate variability inferred from a layered model of the ventilated thermocline.

J. Phys. Oceanogr., 29:779-790, 1999.

Department of WHOI Author: PO.

Contribution Number: **9697**

Huang, Rui Xin.

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Available:http://www.joss.ucar.edu/joss_psg/project/oce_workshop/apropos/presentations/huang.html. (version current at 21 January 1998), 1998.

Department of WHOI Author: PO.

Contribution Number: **NONE**

Humphris, Susan.

Ridge (Ridge Inter-Disciplinary Global Experiments). *Oceanus*, 41(1):7, 1998.

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Contribution Number: **NONE**

Humphris, Susan E., Jeffrey C. Alt, Damon H. A. Teagle, and Jose J. Honnorez.
Geochemical changes during hydrothermal alteration of basement in the stockwork beneath the active TAG hydrothermal mound. In: *Proc. Ocean Drill. Prog., Sci. Res.*, S.E. Humphris, P.M. Herzig, D.J. Miller and R. Zierenberg, eds. College Station, TX, 158:255-276, 1998.
Department of WHOI Author: GEOL.
Contribution Number: **9396**

Huuskonen, Sirpa E., Mark E. Hahn, and Pirjo Lindstrom-Seppa.
A fish hepatoma cell line (PLHC-1) as a tool to study cytotoxicity and CYP1A induction properties of cellulose and wood chip extracts.
Chemosphere, 36(14):2921-2932, 1998.
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Contribution Number: **9466**

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Mantle flow, melting, and dehydration of the Iceland mantle plume.
Earth Planet. Sci. Lett., 165(1):81-96, 1999.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Jannasch, Holger W.
Microbiological studies at Guaymas Basin near 21°N EPR hydrothermal vent sites: Brief cruise report. *InterRidge News*, 7(2):11, 1998.
Department of WHOI Author: BIO.
Contribution Number: **NONE**

Jin, Di and Hauke L. Kite-Powell.
Cost assessment for abyssal seafloor waste isolation.
J. Mar. Syst., 14(3-4):289-303, 1998.
Department of WHOI Author: MPC
Contribution Number: **9119**

Johns, W. E., T. N. Lee, R. C. Beardsley, J. Candela, R. Limeburner, and B. Castro.
Annual cycle and variability of the North Brazil Current.
J. Phys. Oceanogr., 28(1):103-128, 1998.
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Joyce, Terrence M., Glenn A. Cannon, Dave Pashinski, Karl R. Helfrich, and Stephanie A. Harrington.
Vertical and temporal vorticity observations at Juan De Fuca Ridge: Hydrothermal signatures. *Geophys. Res. Lett.*, 25(10):1741-1744, 1998.
Department of WHOI Author: PO.
Contribution Number: **9641**

Keigwin, L. D. and Edward A. Boyle.

Surface and deep ocean variability in the northern Sargasso Sea during marine isotope stage 3. *Paleoceanography*, 14(2):164-170, 1999.

Department of WHOI Author: GEOL.

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