



WHOI Contributions to the Scientific Literature Monthly Activity Report

Articles Received in March 2000

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Bach, Wolfgang and Samuel Niedermann.

Atmospheric noble gases in volcanic glasses from the southern Lau Basin: Origin from the subducting slab? *Earth Planet.Sci.Lett.*, 160:297-309, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Bach, Wolfgang and Dirk Naumann.

A helium, argon, and nitrogen record of the upper continental crust (KTB drill holes, Oberpfalz, Germany): Implications for crustal degassing.

Chem.Geol., 160:81-101, 1999.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Bach, Wolfgang and Wolfgang Irber.

Rare earth element mobility in the oceanic lower sheeted dyke complex: Evidence from geochemical data and leaching experiments.

Chem.Geol., 151:309-326, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Braun, Michael G.G. Hirth, and E. M. Parmentier.

The effects of deep damp melting on the mantle flow and melt generation beneath mid-ocean ridges. *Earth Planet.Sci.Lett.*, 176:339-356, 2000.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

**Buesseler, Ken, Lary Ball, John Andrews, Claudia Benitez-Nelson,
Rebecca Belastock, Fei Chai, and Yi Chao.**

Upper ocean export of particulate organic carbon in the Arabian sea derived from thorium-234. *Deep-Sea Res. II*, 45:2461-2487, 1998.

Department of WHOI Author: MCG.

Contribution Number: **9807**

Caswell, Hal.

Prospective and retrospective perturbation analyses: Their roles in conservation biology. *Ecology*, 81(3):619-627, 2000.

Department of WHOI Author: BIO.

Contribution Number: **10072**

Conte, Maureen H., J. C. Weber, and Nathan Ralph.

Episodic particle flux in the deep Sargasso Sea: An organic geochemical assessment. *Deep-Sea Res. I*, 45:1819-1841, 1998.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Croot, Peter L., James W. Moffett, and George W. Luther, III.

Polarographic determination of half-wave potentials for copper-organic complexes in seawater. *Mar. Chem.*, 67:219-232, 1999.

Department of WHOI Author: MCG.

Contribution Number: **9843**

Currie, L. A., G. A. Klouda, B. A. Benner, Jr., K. Garrity, and T. I. Eglinton

Isotopic and molecular fractionation in combustion; three routes to molecular marker validation, including direct 'dating' (GC/AMS).

Atmos. Environ., 33:2789-2806, 1999.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

**Dickey, T., J. Marra, D. E. Sigurdson, R. A. Weller, C. S. Kinkade, S. E. Zedler,
J. D. Wiggert, and C. Langdon.**

Seasonal variability of bio-optical and physical properties in the Arabian Sea: October 1994-October 1995. *Deep-Sea Res. II*, 45:2001-2025, 1998.

Department of WHOI Author: PO.

Contribution Number: **9613**

Dickneider, Trudy A., Stephanie Scull, Jean K. Whelan, and Neil V. Blough.

EPR study of kerogens from Middle Valley, Northern Juan de Fuca Ridge (ODP Leg 139). *Org. Geochem.*, 26(5/6):341-352, 1997.

Department of WHOI Author: MCG.

Contribution Number: **9231**

Ferron, Bruno, Herle Mercier, Kevin Speer, Ann Gargett, and Kurt Polzin.
Mixing in the Romanche Fracture Zone. *J.Phys.Oceanogr.*, 28:1929-1945, 1999.
Department of WHOI Author: PO.
Contribution Number: **NONE**

Garzoli, Siliva L., Philip L. Richardson, Christopher M. Duncombe Rae, David M. Fratantoni, Gustavo J. Goni, and Andreas J. Roubicek.
Three Agulhas rings observed during the Benguela Current experiment.
J.Geophys.Res., 104(C9):20971-20985, 1999.
Department of WHOI Author: PO.
Contribution Number: **9837**

Gawarkiewicz, Glen G.
Effects of ambient stratification and shelfbreak topography on offshore transport of dense water on continental shelves.
J.Geophys.Res. Oceans, 105(C2):3307-3324, 2000.
Department of WHOI Author: PO.
Contribution Number: **9801**

Goericke, Ralf, Amy Shankle, and Daniel J. Repeta.
Novel carotenol chlorin esters in marine sediments and water column particulate matter. *Geochem.Cosmochem.Acta*, 63(18):2825-2834, 1999.
Department of WHOI Author: MCG.
Contribution Number: **9831**

Goyet, C., N. Metzl, F. Millero, G. Eiseheid, D. O'Sullivan, and A. Poisson.
Temporal variation of the sea surface CO₂/carbonate properties in the Arabian Sea.
Mar.Chem., 63:69-79, 1998.
Department of WHOI Author: MCG.
Contribution Number: **9686**

Greaves, M. J., H. Elderfield, and E. R. Sholkovitz.
Aeolian sources of rare earth elements to the western Pacific Ocean.
Mar.Chem., 68(1-2):31-38, 1999.
Department of WHOI Author: MCG.
Contribution Number: **9770**

Jayne, Steven R. and Nelson G. Hogg.
On recirculation forced by an unstable jet.
J.Phys.Oceanogr., 29:2711-2718, 1999.
Department of WHOI Author: PO.
Contribution Number: **9803**

Johnson, Kenneth M., Andrew G. Dickson, Greg Eischeid, Catherine Goyet, Peter Guenther, Robert M. Key, Frank J. Millero, David Purkerson, Christopher L. Sabaine, Rolf G. Schottle, Douglas W. R. Wallace, Richard J. Wilke, and Christopher D. Winn.

Coulometric total carbon dioxide analysis for marine studies: Assessment of the quality of total inorganic carbon measurements made during the US Indian Ocean CO₂ Survey 1994-1996. *Mar.Chem.*, 63:21-37, 1998.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Lagerloef, Gary S., E.Roger Lukas, Robert A. Weller, and Steven P. Anderson ,

Pacific warm pool temperature regulation during TOGA COARE: Upper ocean feedback. *J.Clim.*, 11:2297-2309, 1998.

Department of WHOI Author: PO.

Contribution Number: **9106**

Langmuir, C., S. Humphris, D. Fornari, C. Van Dover, K. Von Damm, M. K. Tivey, D. Colodner, J.-L. Charlou, D. Desonie, C. Wilson, Y. Fouquet, G. Klinhammer, and H. Bougault.

Hydrothermal vents near a mantle hot spot: the Lucky Strike vent field at 37°N on the Mid-Atlantic Ridge. *Earth Planet.Sci.Lett.*, 148:69-91, 1997.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Ledwell, J. R., E. T. Montgomery, K. L. Polzin, L. C. St.Laurent, R. W. Schmitt, and J. M. Toole.

Evidence for enhanced mixing over rough topography in the abyssal ocean.

Nature, 403:179-182, 2000.

Department of WHOI Author: AOPE., PO.

Contribution Number: **10050**

Lee, C.D., W. Murray, R. T. Barber, K. O. Buesseler, J. Dymond, J. I. Hedges, S. Honjo, S. J. Manganini, J. Marra, C. Moser, M. L. Peterson, W. L. Prell, and S. G. Wakeham.

Particulate organic carbon fluxes: Compilation of results from the 1995 US JGOFS Arabian Sea process study. *Deep-Sea Res.II*, 45:2489-2501, 1998.

Department of WHOI Author: MCG., GEOL.

Contribution Number: **NONE**

Marra, J., T. D. Dickey, C. Ho, C. S. Kinkade, D. E. Sigurdson, R. A. Weller, and R. T. Barber.

Variability in primary production as observed from moored sensors in the central Arabian Sea in 1995. *Deep-Sea Res.II*, 45:2253-2267, 1998.

Department of WHOI Author: PO.

Contribution Number: **NONE**

Mauritzen, C. and S. Haekkinen.

Influence of sea ice on the thermohaline circulation in the Arctic-North Atlantic Ocean. *Geophys.Res.Lett.*, 24(24):3257-3260, 1997.

Department of WHOI Author: PO.

Contribution Number: **NONE**

Mauritzen, C. and S. Haekkinen.

On the relationship between dense water formation and the “Meridional Overturning Cell” in the North Atlantic Ocean.

Deep-Sea Res.I, 46:877-894, 1999.

Department of WHOI Author: PO.

Contribution Number: **NONE**

Meulbroek, Peter, Lawrence Cathles, III, and Jean Whelan.

Phase fractionation at South Eugene Island Block 330.

Org.Geochem., 29(1-3):223-239, 1998.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Millero, Frank J., Andrew G. Dickson, Greg Eiseid, Catherine Goyet, Peter Guenther, Kenneth M. Johnson, Robert M. Key, Kitack Lee, Dave Purkerson, Christopher L. Sabine, Rolf G. Schottle, Douglas W. R. Wallace, Ernie Lewis, and Christopher D. Winn.

Assessment of the quality of the shipboard measurements of total alkalinity on the WOCE Hydrographic Program Indian Ocean CO₂ survey cruises 1994-1996.

Mar.Chem., 63:9-20, 1998. Department of WHOI Author: MCG.

Contribution Number: **NONE**

Millero, Frank J.Elizabeth A. Degler, Daniel W. O'Sullivan, Catherine Goyet, and Greg Eiseid.

The carbon dioxide system in the Arabian Sea.

Deep-Sea Res.II, 45:2225-2252, 1998.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Moreira, Manuel, Regis Doucelance, Mark D. Kurz, Bernard Dupre, and Claude Jean Allegre.

Helium and lead isotope geochemistry of the Azores archipelago. *Earth Planet.Sci.Lett.*, 169:189-205, 1999.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Muhe, R., B. Peucker-Ehrenbrink, C. W. Devey, and D. Gare-Schonberg ,
On the redistribution of Pb in the oceanic crust during hydrothermal alteration.
Chem.Geol., 137:67-77, 1997.
Department of WHOI Author: MCG.
Contribution Number: **NONE**

Niedermann, Samuel, Wolfgang Bach, and Jorg Erzinger.
Noble gas evidence for a lower mantle component in MORBs from the southern
East Pacific Rise: Decoupling of helium and neon isotope systematics.
Geochim.Cosmochim.Acta, 61(13):2697-2715, 1997.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Ocampo, Ruben, Julian P. Sachs, and Daniel J. Repeta.
Isolation and structure determination of the unstable ^{13}C , ^{17}O -Cyclophosphoride a
enol from recent sediments.
Geochim.Cosmochim.Acta, 63(22):3743-3749, 1999.
Department of WHOI Author: MCG.
Contribution Number: **NONE**

Pedlosky, Joseph.
The transmission of Rossby waves through basin barriers.
J.Phys.Oceanogr., 30:495-511, 2000.
Department of WHOI Author: PO.
Contribution Number: **9874**

Preisig, James C.
Copositivity and the minimization of quadratic functions with nonnegativity and
quadratic equality constraints. *Siam J.Contr.Optimiz.*, 34(4):1135-1150, 1996.
Department of WHOI Author: AOPE.
Contribution Number: **8427**

Sachs, Julian P., Daniel J. Repeta, and Ralf Goericke.
Nitrogen and carbon isotopic ratios of chlorophyll from marine phytoplankton.
Geochim.Cosmochim.Acta, 63(9):1421-1441, 1999.
Department of WHOI Author: MCG.
Contribution Number: **NONE**

Shay, Lynn K., Steven J. Lentz, Hans C. Graber, and Brian K. Haus.
Current structure variations detected by high-frequency radar and vector-
measuring current meters. *J.Atmos.Ocean.Tech.*, 15:237-256, 1998.
Department of WHOI Author:
Contribution Number: **NONE**

Sholkovitz, E. R., H. Elderfield, R. Szymczak, and K. Casey ,

Island weathering: River sources of rare earth elements to the Western Pacific Ocean. *Mar.Chem.*, 68:39-57, 1999.

Department of WHOI Author: MCG.

Contribution Number: **9771**

Speer, Kevin G., John Gould, and Joseph LaCasce.

Year-long float trajectories in the Labrador Sea water of the eastern North Atlantic Ocean. *Deep-Sea Res.II*, 46(1-2):165-179, 1999.

Department of WHOI Author: PO.

Contribution Number: **NONE**

Stephen, Ralph A.

Optimum and standard beam widths for numerical modeling of interface scattering problems. *J.Acoust.Soc.Am.*, 107(3):1095-1102, 2000.

Department of WHOI Author: GEOL.

Contribution Number: **10094**

Trull, T. W. and M. D. Kurz.

Isotopic fractionation accompanying helium diffusion in basaltic glass.

J.Mol.Struct., 485-486:555-567, 1999.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Tuit, C., G. Ravizza, and M. Bothner.

Anthropogenic platinum and palladium in the sediments of Boston Harbor.

Environ.Sci.Tech., 34(6):927-932, 2000.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Zenk, Walter, Gerold Siedler, Bernd Lenz, and Nelson G. Hogg.

Antarctic bottom water flow through the Hunter Channel.

J.Phys.Oceanogr., 29:2785-2801, 1999.

Department of WHOI Author: PO.

Contribution Number: **9720**

Compiled by: Maureen Carragher
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