



WHOI Contributions to the Scientific Literature Monthly Activity Report

Articles Received in May 1999

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Aarkrog, A., M. S. Baxter, A. O. Bettencourt, R. Bojanowski, A. Bologna, S. Charmasson, I. Cunha, R. Delfanti, E. Duran, E. Holm, R. Jeffree, H. D. Livingston, S. Mahapanyawong, and H. Nies, et al.

A comparison of doses from ^{137}Cs and ^{210}Po in marine food: A major international study. *J. Environ. Radioact.*, 34(1):69-90, 1997.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Altabet, M. A., C. Pilskaln, R. Thunell, C. Pride, D. Sigman, F. Chavez, and R. Francois.

The nitrogen isotope biogeochemistry of sinking particles from the margin of the eastern North Pacific. *Deep-Sea Res. I*, 46(4):655-680, 1999.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Archer, D., J. Aiken, W. Balch, D. Barber, J. Dunne, P. Flament, W. Gardner, C. Garside, C. Goyet, E. Johnson, D. Kirchman, M. McPhaden, J. Newton, and E. Peltzer.

A meeting place of great ocean currents: Shipboard observations of a convergent front at 2°N in the Pacific. *Deep-Sea Res. (Part 2, Topical Studies in Oceanography)*, 44(9-10):1827-1849, 1997.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Barragan, Roberto, Dennis Geist, Minard Hall, Peter Larson, and Mark Kurz.

Subduction controls on the compositions of lavas from the Ecuadorian Andes. *Earth Planet. Sci. Lett.*, 154(1-4):153-166, 1998.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Bazin, Sara, Harm van Avendonk, Alistair J. Harding, John A. Orcutt, J. Pablo Canales, and Robert S. Detrick.

Crustal structure of the flanks of the East Pacific Rise: Implications for overlapping spreading centers. *Geophys.Res.Lett.*, 25(12):2213-2216, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Bernstein, Stefan, Peter B. Kelemen, Christian Tegner, Mark D. Kurz, Jurek Blusztajn, and C. Kent Brooks.

Post-breakup basaltic magmatism along the East Greenland Tertiary rifted margin. *Earth Planet.Sci.Lett.*, 160(3-4):845-862, 1998.

Department of WHOI Author: GEOL. MCG.

Contribution Number: **NONE**

Bernstein, Stefan, Peter B. Kelemen, and C. Kent Brooks.

Depleted spinel harzburgite xenoliths in Tertiary dykes from East Greenland; restites from high degree melting. *Earth Planet.Sci.Lett.*, 156(1-2):1-11, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Blackman, Donna K., Johnson R. Cann, Bob Janssen, and Deborah K. Smith.

Origin of textensional core complexes: Evidence from the Mid-Atlantic Ridge at Atlantis Fracture Zone. *J.Geophys.Res.*, 103(B9):21315-21333, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Catubig, Nina R., D. E. Archer, Roger Francois, Peter de Menocal, Will Howard, and Ein-Fen Yu.

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Department of WHOI Author: MCG.

Contribution Number: **NONE**

Channell, J. E. T., D. A. Modell, J. McManus, B. Lehman.

Orbital modulation of the Earth's magnetic field intensity.

Nature (London), 394(6692):464-468, 1998.

Department of WHOI Author: GEOL.

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**

Clift, Peter D., Andrew Carter, and Anthony J. Hurford.

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In: *Proc.Ocean Drill.Prog.,Sci.Res.* J. Mascle, G. P. Lohmann, and M. Moullade, eds., Ocean Drilling Program, College Station, TX, 159:35-41, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **9412**

Cohen, Anthony S., R. Keith O'Nions, and Mark D. Kurz.

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Earth Planet.Sci.Lett., 143(1-4):111-124, 1996.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Dahl-Jensen, Trine, W. Steven Holbrook, John R. Hopper, Peter B. Kelemen, Hans Christian Larsen, Robert Detrick, Stefan Bernstein, and Graham Kent.

Seismic investigation of the East Greenland volcanic rifted margin. In: *Review of Greenland Activities; 1996.* A. K. Higgins and Jon R. Ineson, eds. Geology of Greenland Survey Bulletin, 176, :50-54, 1997.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

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Isotopic biogeochemistry of the Neocomian lacustrine and upper aptian marine-evaporitic sediments of the Potiguar Basin, northeastern Brazil. *Org.Geochem.*, 28(6):361-381, 1998.

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Contribution Number: **NONE**

Dymond, J., R. Collier, J. McManus, S. Honjo, and S. Manganini.

Can the aluminum and titanium contents of ocean sediments be used to determine the paleoproductivity of the oceans? *Paleoceanography*, 12(4):586-593, 1997.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Edmonds, Henrietta N., John N. Smith, Hugh D. Livingston, Linas R. Kilius, and John M. Edmond.

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Department of WHOI Author: MCG.

Contribution Number: **NONE**

Elder, Kathryn L., Ann P. McNichol, and Alan R. Gagnon.

Evaluating reproducibility of seawater, inorganic and organic carbon ¹⁴C results at NOSAMS. *Radiocarbon*, 40(1):223-230, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Evans, Rob. L., Spahr C. Webb, Marion Jegen, and Khamla Sananikone.

Hydrothermal circulation at the Cleft-Vance overlapping spreading center; results of a magnetometric resistivity survey.

J.Geophys.Res.B, 103(6):12321-12338, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Feely, R. A., R. Wanninkhof, C. Goyet, D. E. Archer, and Taro Takahashi.

Variability of CO₂ distributions and sea-air fluxes in the central and eastern equatorial Pacific during the 1991-1994 El Nino. *Deep-Sea Res. (Part 2, Topical Studies in Oceanography)*, 44(9-10):1851-1867, 1997.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Fornari, D. J. and M. R. Perfit.

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Mar.Tech.Soc.J., 30(3):77-79, 1997.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Fornari, Dan, Susan Humphris, and Joe Cann.

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Department of WHOI Author: GEOL.

Contribution Number: **NONE**

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Mapping volcanic morphology on the crest of the East Pacific Rise 9°49'-52'N using the WHOI Towed Camera System: A versatile new digital camera sled for seafloor mapping. *BRIDGE Newsletter*, 14:4-12, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

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In: *Proceedings of the Fourth European Conference on Underwater Acoustics*,
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Department of WHOI Author: AOPE.
Contribution Number: **9811**

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Proc.Int.Symp.Ocean Wave Meas.Anal., 1:208-218, 1998.
Department of WHOI Author: GEOL. PO.
Contribution Number: **NONE**

Gregg, Tracy K. P., and Daniel J. Fornari.

Long submarine lava flows: Observations and results from numerical modeling.
J.Geophys.Res., 103(B11):27517-27531, 1998.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Guptha, M. V. S., W. B. Curry, V. Ittekkot, and A. S. Muralinath.

Seasonal variation in the flux of planktic foraminifera: Sediment trap results from
the Bay of Bengal, northern Indian Ocean. *J.Foramin.Res.*, 27(1):, 1997.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Hauri, Eric H., Mark D. Kurz.

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Department of WHOI Author: MCG.
Contribution Number: **NONE**

Huang, Rui Xin.

Mixing and energetics of the oceanic thermohaline circulation.
J.Phys.Oceanogr., 29:727-746, 1999.
Department of WHOI Author: PO.
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**

**Hunt, John B., Peter D. Clift, Christian Lacasse, Tracy L. Vallier,
and Reinhard Werner.**

Interlaboratory comparison of electron probe microanalysis of glass geochemistry.
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, 152:85-91, 1998.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Kelly, Kathryn A., Sandipa Singh, and Rui Xin Huang.

Seasonal variations of sea surface height in the Gulf Stream region.
J.Phys.Oceanogr., 29:313-327, 1999.
Department of WHOI Author: PO.
Contribution Number: **9367**

Kukla, George, Jerry F.McManus, Isabelle Chuine, and Denis-Didier Rousseau.

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Quat.Sci.Rev., 16(6):605-612, 1997.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

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situ microanalysis of lead isotope ratios in minerals and melt inclusions.
Mineral.Mag., 62A:860-861, 1998.
Department of WHOI Author: GEOL.
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Ganglion layer topography and retinal resolution of the Caribbean manatee
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Department of WHOI Author: BIOL.
Contribution Number: **NONE**

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College Station, TX, 151:437-444, 1996.
Department of WHOI Author: GEOL.
Contribution Number: **NONE**

Pun, Aurora, J. J. Papike, and G. D. Layne.

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Geochim.Cosmochim.Acta, 61(23):5089-5097, 1997.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Ravizza, Greg.

Osmium-isotope geochemistry of Site 959: Implications for Re-Os sedimentary geochronology and reconstruction of past variations in the os-isotopic composition of seawater.

In: *Proc.Ocean Drill.Prog.,Sci.Res.* J. Mascle, G. P. Lohmann, and M. Moullade, eds., Ocean Drilling Program, College Station, TX, 159:181-186, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Reusch, Douglas N., Greg Ravizza, Kirk A. Maasch, and James D. Wright.

Miocene seawater $^{187}\text{Os}/^{188}\text{Os}$ ratios inferred from metalliferous carbonates.

Earth Planet.Sci.Lett., 160(1-2)163-178, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Saal, A. E., R. L. Rudnick, G. E. Ravizza, and S. R. Hart.

Re-Os isotope evidence for the composition, formation and age of the lower continental crust. *Nature (London)*, 393:58-61, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Saal, A. E., S. R. Hart, N. Shimizu, G. Layne, and E. H. Hauri.

In situ Pb isotope ratios in melt inclusions from oceanic island basalts: Mangaia, a case study. *Mineral.Mag.*, 62A:1310-1311, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Saccocia, Peter J., Jeffrey S. Seewald, and Wayne C. Shanks, III.

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Department of WHOI Author: MCG.

Contribution Number: **NONE**

Sager, W. W., C. J. Weiss, M. A. Tivey, and H. P. Johnson.

Geomagnetic polarity reversal model of deep-tow profiles from the Pacific Jurassic Quiet Zone. *J.Geophys.Res.B*, 103(3):5269-5286, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Schneider, Robert J., J. M. Hayes, Karl F. von Reden, Ann P. McNichol, T. I. Eglinton, and J. S. C. Wills.

Target preparation for continuous flow accelerator mass spectrometry.

Radiocarbon, 40(1):95-102, 1998.

Department of WHOI Author: GEOL. MCG.

Contribution Number: **NONE**

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Laboratory and theoretical constraints on the generation and composition of natural gas. *Geochim. Cosmochim. Acta*, 62(9):1599-1617, 1998.

Department of WHOI Author: MCG.

Contribution Number: **NONE**

Shank, Timothy M., Daniel J. Fornari, Karen L. Von Damm, Marvin D. Lilley, Rachel M. Haymon, and Richard A. Lutz.

Temporal and spatial patterns of biological community development at nascent deep-sea hydrothermal vents (9°50'N, East Pacific Rise).

Deep-Sea Res. II, 45:465-515, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Shearer, C. K., J. J. Papike, and G. D. Layne.

The role of ilmenite in the source region for mare basalts: Evidence from niobium, zirconium, and cerium in picritic glasses.

Geochim. Cosmochim. Acta, 60(18):3521-3530, 1996.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Shearer, C. K., J. J. Papike, and G. D. Layne.

Deciphering basaltic magmatism on the moon from the compositional variations in the Apollo 15 very low-Ti picritic magmas.

Geochim. Cosmochim. Acta, 60(3):509-528, 1996.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Shen, Yang, S. C. Solomon, I. T. Bjarnason, and C. J. Wolfe.

Seismic evidence for a lower-mantle origin of the Iceland plume.

Nature, 395(6697):62-65, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Shimizu, N. and G. D. Layne.

In situ PB isotope analysis of MORB melt inclusions and the origin of garnet signatures. *Mineral.Mag.*, 62A:1393, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Sohn, Robert A., Daniel J. Fornari, Karen L. Von Damm, John A. Hildebrand, and Spahr C. Webb.

Seismic and hydrothermal evidence for a cracking event on the East Pacific Rise at 9°50'N. *Nature*, 396:159-161, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

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Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Warren, Bruce A.

Approximating the energy transport across oceanic sections.

J.Geophys.Res., 104(C4):7915-7919, 1999.

Department of WHOI Author: PO.

Contribution Number: **9659**

Wolfe, Cecily J.

Prospecting for hotspot roots. *Nature (London)*, 395:212-213, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Yogodzinski, G. M. and P. B. Kelemen.

Slab melting in the Aleutians; implications of an ion probe study of clinopyroxene in primitive adakite and basalt. *Earth Planet.Sci.Lett.*, 158(1-2):53-65, 1998.

Department of WHOI Author: GEOL.

Contribution Number: **NONE**

Compiled by: Maureen Carragher
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library@whoi.edu
June 2, 1999