



WHOI Contributions to the Scientific Literature Monthly Activity Report

Articles in Preparation – January 2003

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Berloff, Pavel and James McWilliams

Material transport in oceanic gyres. Part III: Randomized stochastic models.
J.Phys.Oceanogr., IN PRESS.
Department of WHOI Author: PO.

Chang, K., N. G. Hogg, M. Suk, S. Byun, and K. Kum

Mean flow and variability in the southwestern East Sea. *Deep-Sea Res.II*, IN PRESS.
Department of WHOI Author: PO.

Churchill, James H., Elise A. Ralph, Angela M. Cates, Judith W. Budd, and Noel R. Urban

Observations of a negatively buoyant river plume in a large lake. *Limnol.Oceanogr.*, IN PRESS.
Department of WHOI Author: PO.
Contribution Number: **10873**

Clift, P. D., J. F. Dewey, A. E. Draut, and M. Mange

Discussion of Williams, D. M. 2002. "Buried oblique-slip faults in the Irish Caledonides."
Geol.J., IN PRESS.
Department of WHOI Author: GEOL.

Clift, Peter D., Graham D. Layne, Yany M. R. Najman, Achim Kopf, Nobumichi Shimizu, and John Hunt

Temporal evolution of boron flux in the NE Japan and Izu Arcs measured by ion microprobe from the Forearc Tephra Record. *J.Petrol.*, IN PRESS.
Department of WHOI Author: GEOL.
Contribution Number: **10851**

Cohen, A. L., S. R. Smith, M. S. McCartney, and J. van Etten

How brain corals record climate: An interpretation of skeletal structure. *Coral Reefs*, IN PRESS.

Department of WHOI Author: PO.

Doney, Scott C., David M. Glover, Scott J. McCue, and Montserrat Fuentes

Mesoscale variability of Sea-viewing Wide Field-of-view Sensor (SeaWiFS) satellite ocean color: Global patterns and spatial scales. *J.Geophys.Res.*, IN PRESS.

Department of WHOI Author: MCG.

Contribution Number: **10861**

Donnelly, J. P., J. Butler, S. Roll, Micah Wengren, and T. Webb, III

A backbarrier overwash record of intense storms from Brigantine, New Jersey. *Mar.Geol.*, IN PRESS.

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Donnelly, J. P. and T. Webb, III

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Department of WHOI Author: GEOL.

Fisher, Karen, Peter Wiebe, and Bruce Malamud

Incorporating observed intermittency of fluorescence distributions in synthesized fields. In: *Handbook of Scaling Methods in Aquatic Ecology: Measurement, Analysis, Simulation*. CRC Press LLC, IN PRESS.

Department of WHOI Author: BIO.

Contribution Number: **10781**

German, C. and J. Lin

The Thermal Structure of the Ocean Crust and Dynamics of Hydrothermal Circulation. AGU, IN PRESS.

Department of WHOI Author: GEOL.

Golden, C. E., S. C. Webb, and R. A. Sohn

Hydrothermal microearthquake swarms beneath active vents at Middle Valley, northern Juan de Fuca Ridge. *J.Geophys.Res.*, IN PRESS.

Department of WHOI Author: GEOL.

Gregg, T. K. and D. K. Smith

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Department of WHOI Author: GEOL.

Hart, S. R., H. Staudigel, R. Workman, A. A. P. Koppers, and A. P. Girard

A fluorescein tracer release experiment in the hydrothermally active crater of Vailulu'u Volcano, Samoa. *J.Geophys.Res.*, IN PRESS.

Department of WHOI Author: GEOL.

Helfrich, Karl R. and Lawrence J. Pratt

Rotating hydraulics and upstream basin circulation. *J.Phys.Oceanogr.*, IN PRESS.

Department of WHOI Author: PO.

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Hinrichs, Kai-Uwe, Laura R. Hmelo, and Sean P. Sylva

Late Pleistocene variations in the marine methane cycle recorded by molecular biomarkers of methanotrophic prokaryotes. *Science*, IN PRESS.

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Contribution Number: **10847**

Hiroe, Y., I. Yasuda, K. Komatsu, K. Kawasaki, T. M. Joyce, and F. Bahr

Transport of North Pacific intermediate water in the Kuroshio-Oyashio Interfrontal Zone.

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Hirose, K., N. Shimizu, and Y. Fei

Trace element partitioning in Earth's lower mantle. *Phys.Earth Planet.Inter.*, IN PRESS.

Department of WHOI Author: GEOL.

Hirth, G.

Laboratory constraints on the rheology of the upper mantle. In: *Plastic Deformation of Minerals and Rocks*. S. Karato and H. R. Wenk (eds.), IN PRESS.

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Rheology of the upper mantle and the mantle wedge: A view from the experimentalists. In: *The Subduction Factory*. J. Eiler (ed.), IN PRESS.

Department of WHOI Author: GEOL.

Huang, Rui Xin

Structure of the circulation induced by enhanced mixing in the Southern Oceans. *Ocean Model.*, IN PRESS.

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Hunt, Heather L., D. Archie McLean, and Lauren S. Mullineaux

Post-settlement alteration of spatial patterns of soft shell clam (*Mya arenaria*) recruits. *Estuaries*, IN PRESS.
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Joyce, Terrence M. and Jane Dunworth-Baker

Long-term hydrographic variability in the Northwest Pacific Ocean.. *Geophys.Res.Lett.*, IN PRESS.
Department of WHOI Author: PO.

Keigwin, L. D., Y. Rosenthal, and Sachs, J. P.

A 1600-year history of the Labrador Current off Nova Scotia. *Clim.Dyn.*, IN PRESS.
Department of WHOI Author: GEOL.

Kelemen, P. B., G. M. Yogodzinski, and D. W. Scholl

Along-strike variation in lavas of the Aleutian island arc: Implications for the genesis of high Mg# andesite and the continental crust. *AGU Monograph Series*. J. Eiler (ed.), IN PRESS.
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Kelemen, P. B., J. L. Rilling, E. M. Parmentier, L. Mehl, and B. R. Hacker

Thermal structure due to solid-state flow in the mantle wedge beneath arcs. *AGU Monograph Series*. J. Eiler (ed.), IN PRESS.
Department of WHOI Author: GEOL.

Kelly, R., P. B. Kelemen, and M. Jull

Buoyancy of the continental upper mantle. *Geochem.Geophys.Geosyst.*, IN PRESS.
Department of WHOI Author: GEOL.

Kraska, James

Sustainable development is security: Transboundary river agreements as a confidence building measure (CBM) in South Asia. *Yale J.Int.Law*, IN PRESS.
Department of WHOI Author: MPC.
Contribution Number: **10784**

Legg, Sonya

Internal tides generated on a corrugated continental slope: Part I: Cross-slope barotropic forcing. *J.Phys.Oceanogr.*, IN PRESS.
Department of WHOI Author: PO.
Contribution Number: **10852**

Legg, Sonya

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Contribution Number: **10853**

Lerczak, J. A., C. D. Winant, and M. C. Hendershott

Observations of the semidiurnal internal tide on the southern California slope and shelf.

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Department of WHOI Author: PO.

Lin, J.

Mantle hotspot plumes and interaction with oceanic lithosphere. In: *Earth Dynamics*. J. Chen et al. (eds), New Frontiers of Sciences, Beijing: Higher Education Press, IN PRESS.

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Time-dependent stress transfer and earthquake triggering. In: *Earth Dynamics*. J. Chen et al. (eds), New Frontiers of Science, Beijing: Higher Education Press, IN PRESS.

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Lundin, K. and C. Schander

Epidermal ciliary ultrastructure of adult and larval sipunculids (*Sipunculida*). *Acta Zool.*, IN PRESS.

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Milkov, Alexei V. and Roger Sassen

Preliminary assessment of resources and economic potential of individual gas hydrate accumulations in the Gulf of Mexico continental slope. *Mar.Pet.Geol.*, IN PRESS.

Department of WHOI Author: GEOL.

Contribution Number: **10867**

Milkov, Alexei V., Peter R. Vogt, Kathy Crane, Alla Yu Lein, Roger Sassen, and Georgiy A. Cherkashev

Geological, geochemical, and microbial processes at the hydrate-bearing Hakon Mosby mud volcano: A review. *Chem.Geol.*, IN PRESS.

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Miyazaki, S., J. J. McGuire, and P. Segall

A transient subduction zone slip episode in southwest Japan observed by the nationwide GPS array. *J.Geophys.Res.*, IN PRESS.

Department of WHOI Author: GEOL.

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A channel subspace post-filtering approach to adaptive least-squares estimation and equalization. *IEEE Trans.Signal Process.*, IN PRESS.

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Contribution Number: **10846**

Parman, S. W., N. Shimizu, T L. Grove, and J. C. Dann

Constraints on the pre-metamorphic trace element composition of Barberton komatiites from ion probe analyses of preserved clinopyroxene. *Earth Planet.Sci.Lett.*, IN PRESS.

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Contribution Number: **NONE**

Pawlowicz, R., R. Beardsley, and S. Lentz

Classical tidal harmonic analysis with errors in MATLAB using T_TIDE. *Comput.Geosci.*, IN PRESS.

Department of WHOI Author: PO.

Pedlosky, Joseph

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Pedlosky, Joseph and Jim Thomson

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Contribution Number: **10870**

Peucker-Ehrenbrink, B., and M. W. Miller

Quantitative bedrock geology of Alaska and Canada. *Geochem.Geophys.Geosyst.*, IN PRESS.

Department of WHOI Author: MCG.

Contribution Number: **10862**

Pratt, Larry and Mike Spall

A porous media theory for geostrophic flow through ridges and archipelagos.

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Contribution Number: **10854**

Proshutinsky, A., R. H. Bourke, and F. A. McLaughlin

The role of the Beaufort Gyre in Arctic climate variability: Seasonal to decadal climate scales.

Geophys.Res.Lett., IN PRESS.

Department of WHOI Author: PO.

Rasmussen, T. L., D. W. Oppo, E. Thompson, and J. Lehman

Deep-sea records from the SE Labrador Sea: Timing of ocean circulation changes and ice-raftering events during the last 160,000 years. *Paleoceanography*, IN PRESS.

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Renner, J., K. Viskupic, G. Hirth, and B. Evans

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Richardson, P. L., J. R. E. Lutjeharms, and O. Boebel

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Rosenthal, Yair, Delia W. Oppo, and Braddock K. Linsley

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Scheltema, Amelie and Dmitry Ivanov

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Schmitt, R. W.

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Sloyan, B., G. C. Johnson, and W. S. Kessler

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Solow, Andrew R.

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Solow, Andrew R. and Andrew Beet

Statistical modeling of the distribution of large geomagnetic storms. *Geophys.Res.Lett.*, IN PRESS.
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Thwaites, Fred and Kurt Polzin

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Tucholke, Brian

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Wang, Wei and Rui Xin Huang

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Contribution Number: **10868**

Ward, Brian, Rik Wanninkhof, Wade R. McGillis, Andrew T. Jessup, Michael D. DeGrandpre, Jeffrey E. Hare, and James B. Edson

Biases in the air-sea flux of CO₂ resulting from ocean surface temperature gradients during GasEx-2001. *J.Geophys.Res.*, IN PRESS, .
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Contribution Number: **10855**

Watwood, Stephanie, Peter L. Tyack, and Randall S. Wells

Whistle sharing in paired male bottlenose dolphins, *Tursiops truncatus*.
Behav.Ecol.Sociobiol., IN PRESS.
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Zafiriou, Oliver C.

Sunburnt organic matter: Biogeochemistry of light-altered substrates. *ASLO Bull.*, IN PRESS.
Department of WHOI Author: MCG.
Contribution Number: **10785**

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