

UNIVERSITY OF VICTORIA - CURRICULUM VITAE

Last Update: January 13, 2007

Name: KLYMAK, Jody M.

Faculty: Science

School of Earth and Ocean Sciences (.6 FTE)

Department of Physics and Astronomy (.4FTE)

1. EDUCATION and TRAINING

Degree	Field	Institute	Year
Doctor of Philosophy	Physical Oceanography	Univeristy of Washington, Seattle, WA	2001
Masters of Science	Physical Oceanography	Univeristy of Washington, Seattle, WA	1997
Bachelor of Science	Mathematics and Physics	Univeristy of Victoria	1993

Postdoctoral experience

2004–2006 Postdoctoral Researcher Scripps Institution of Oceanography

2001–2003 Postdoctoral Researcher Oregon State University

2. POSITIONS HELD PRIOR to APPOINTMENT at UVic

2006 Project Scientist, Scripps Institution of Oceanography

1993–1994 Research Scientist, Quester Tangent Corporation, Sydney B.C.

1989, 1992 Research Assistant, Institute of Ocean Sciences, Sydney B.C.

1991 Research Assistant, CERN, Geneva, Switzerland

3. APPOINTMENTS at the UNIVERSITY of VICTORIA

Period	Rank	Academic Unit
2006	Assistant Professor	School of Earth and Ocean Sciences

4. MAJOR FIELD(s) of SCHOLARLY or PROFESSIONAL INTEREST

Physical Oceanography

Geophysical Fluid Dynamics

Turbulence and Mixing

5. PUBLICATIONS

a. Articles published in refereed journals

- [1] Perlin, A., J. Moum, J. Klymak, M. Levine, T. Boyd, and M. Kosro, 2007: Organization of stratification, turbulence and veering in bottom Ekman layers, in press, *J. Geophys. Res.*
- [2] Moum, J. N., J. M. Klymak, J. D. Nash, A. Perlin, and W. D. Smyth, 2007: Energy transport by nonlinear internal waves, in press, *J. Phys. Oceanogr.*
- [3] Klymak, J. M., and J. N. Moum, 2007: Interpreting spectra of horizontal temperature gradients in the ocean: Part I - internal waves, in press, *J. Phys. Oceanogr.*
- [4] Klymak, J. M., and J. N. Moum, 2007: Interpreting spectra of horizontal temperature gradients in the ocean: Part II - turbulence, in press, *J. Phys. Oceanogr.*
- [5] Liu, C., R. Pinkel, M. Hsu, J. Klymak, H. Chen, and C. Villanovy, 2006: Non-linear internal waves from Luzon Strait. *EOS*.
- [6] Klymak, J. M., J. N. Moum, J. D. Nash, E. Kunze, J. B. Girton, G. S. Carter, C. M. Lee, T. B. Sanford, and M. C. Gregg, 2006: An estimate of tidal energy lost to turbulence at the Hawaiian Ridge. *J. Phys. Oceanogr.*, 36:1148–1164.
- [7] Klymak, J. M., R. Pinkel, C.-T. Liu, A. K. Liu, and L. David, 2006: Prototypical solitons in the South China Sea. *Geophys. Res. Lett.*, 33:doi:10.1029/2006GL025932.
- [8] Perlin, A., J. Moum, and J. Klymak, 2005: Response of the bottom boundary layer over a sloping shelf to variations in along-shore wind. *J. Geophys. Res.*, 110(C10S09):doi:10.1029/2004JC002500.
- [9] Perlin, A., J. Moum, J. Klymak, M. Levine, T. Boyd, and M. Kosro, 2005: A modified law-of-the-wall applied to oceanic bottom boundary layers. *J. Geophys. Res.*, 110(C10S10):doi:10.1029/2004JC002310.
- [10] Moum, J. N., A. Perlin, J. Klymak, M. Levine, T. Boyd, and M. Kosro, 2004: Convectively-driven mixing in the bottom boundary layer. *J. Phys. Oceanogr.*, 34:2189–2202.
- [11] Klymak, J. M., and M. C. Gregg, 2004: Tidally generated turbulence over the Knight Inlet sill. *J. Phys. Oceanogr.*, 34(5):1135–1151.

- [12] Edwards, K. A., P. MacCready, J. N. Moum, G. Pawlak, J. M. Klymak, and A. Perlin, 2003: Form drag and mixing due to tidal flow past a sharp point. *J. Phys. Oceanogr.*, 34:1297–1312.
- [13] Rudnick, D. L., T. J. Boyd, R. E. Brainard, G. S. Carter, G. D. Egbert, M. C. Gregg, P. E. Holloway, J. M. Klymak, E. Kunze, C. M. Lee, M. D. Levine, D. S. Luther, J. P. Martin, M. A. Merrifield, J. N. Moum, J. D. Nash, R. Pinkel, L. Rainville, and T. B. Sanford, 2003: From tides to mixing along the Hawaiian Ridge. *Science*, 301(5631):355–357.
- [14] Klymak, J. M., and M. C. Gregg, 2003: The role of upstream waves and a downstream density-pool in the growth of lee-waves: stratified flow over the Knight Inlet sill. *J. Phys. Oceanogr.*, 33(7):1446–1461.
- [15] Klymak, J. M., and M. C. Gregg, 2001: The three-dimensional nature of flow near a sill. *J. Geophys. Res.*, 106(C10):22,295–22,311.

b. Refereed conference proceedings

c. Books and chapters in books

d. Other publications

e. Presentations at conferences or institutions

Invited AGU 2006 Fall Meeting, Dec 2006, Interpreting horizontal scalar spectra in the ocean.

AGU Fall Meeting, Dec 2006, Prototypical solitons in the South China Sea (poster).

HOME workshop, Feb 2006, What drives dissipation in the ocean?

AGU Ocean Sciences Meeting, Feb 2006, Dissipation Regimes in Kauai Channel, Hawaii.

Nonlinear Internal Waves Workshop, Aug 2005, Deep-water soliton observations in the South China Sea.

Woods Hole Oceanographic Institution, June 2005, A blast from the past: Understanding internal waves and turbulence from horizontal tow data.

Woods Hole Oceanographic Institution, June 2005, Where did the energy go? Estimating turbulence near the Hawaiian Ridge.

Lamon Doherty Earth Observatory, June 2005, Where did the energy go? Estimating turbulence near the Hawaiian Ridge.

Scripps Institution of Oceanography, June 2005, Where did the energy go? Estimating turbulence near the Hawaiian Ridge.

University of Victoria, March 2005, The tidal energy cascade from Knight Inlet B.C.

- Invited** SCOR/IAPSO Ocean Mixing Conference, Oct. 12, 2004, Observations of (deep) diapycnal mixing rates.
- SCOR/IAPSO Ocean Mixing Conference, Oct. 11, 2004, Deep horizontal internal wave spectra and their scaling to turbulence (poster).
- HOME investigators meeting, Kona, Aug. 16, 2004, Turbulence via overturn measurements from FLIP.
- HOME investigators meeting Kona, Aug. 16, 2004, A quick summary of direct turbulence measurements during HOME.
- Invited** GFD summer program, Woods Hole, July 21, 2004. The Tidal Graveyard: Turbulent Dissipation Near a Strong Tidal Generation Site
- AGU Ocean Sciences Meeting, Feb. 2004. Deep horizontal internal wave spectra and their scaling to turbulence (poster).
- Timberline HOME Investigators Meeting, Aug. 26, 2003. An Estimate of Energy Lost to Turbulence at the Hawaiian Ridge.
- University of Victoria, Aug. 11, 2003. Where Does the Energy Go? Tidal Dissipation at the Hawaiian Ocean Ridge.
- Oregon State University, July 8th, 2003. Where Does the Energy Go? Tidal Dissipation at the Hawaiian Ocean Ridge.
- AGU 2002 Fall Meeting Dec. 2002. Preliminary Observations of Boundary Mixing: HOME 2002 (poster).

6. SERVICE and PROFESSIONAL ACTIVITIES

a. University and Faculty committees

b. Departmental committees and responsibilities

- 2006- Graduate Committee, Phys.&Astr.
- 2006- Technical Services Committee, SEOS
- 2006- Ocean Science Implementation Committee, SEOS

c. Membership and service on international, national and provincial professional bodies and societies

American Geophysical Union

d. Conference organisational committees

e. Grant committees

f. Grant proposals reviews

Written reviews for NSERC Discovery Grant, CFCAS Research Grant, US

NSF Research Grants.

g. Visiting scientists hosted

h. Editorships

i. Reviews for journals, book reviews, published commentaries

Regularly review for: Proceedings of the Royal Society; Journal of Geophysical Research; Deep Sea Research; Journal of Physical Oceanography; Journal of Atmospheric and Oceanic Technology; Journal of Marine Research; Geophysical Research Letters.

j. Other professional activities

Co-ordinated permitting and documentation of AESOP experiment in Monterey Bay National Marine Sanctuary.

Edit and maintain Hawaiian Ocean Mixing Experiment webpage.

Physical oceanography graduate student representative, UW. Organized Student Physical Oceanography Retreat, UW

Work at sea

Aug. 2006 *R/P FLIP*, AESOP deployment (**chief scientist**)

May. 2006 *R/V Revelle*, Internal Waves Across the Pacific

Jan. 2006 *R/V Revelle*, HDSS shakedown Cruise, Tahiti

Jan. 2005 *R/V Revelle*, South China Sea NLIWI cruise

Jan. 2003 *R/V Revelle*, Coastal Ocean Advances in Shelf Transport winter cruise

Oct. 2002 *R/V Wecoma*, Hawaiian Ocean and Mixing near-field cruise

Oct. 2001 *R/V Wecoma*, Oregon Coast Solitary wave experiment

Aug. 2001 *R/V Thompson*, Coast Advances in Shelf Transport

Mar. 2001 *R/V Thompson*, Three-tree Point and COAST engineering cruise.

Oct. 2000 *R/V Wecoma*, Hawaiian Ocean and Mixing survey cruise

Aug. 1998 *R/V Pt. Sur*, Monterey Canyon turbulence and internal waves.

Mar. 1997 *R/V Knorr*, Coastal Mixing and Optics spring cruise.

Sep. 1996 *R/V Seward Johnson*, Coastal Mixing and Optics summer cruise

Aug. 1995 *R/V Miller*, Knight Inlet sill flows and solitary waves

Sep. 1989 *R/V Parizeau*, IOS Vancouver shelf hydrography transects

7. OTHER ACTIVITIES