

WILLIAM DAVID MILLER

Research Scientist
Computational Physics Inc
Remote Sensing Division
Naval Research Laboratory
Washington DC 20375
703-628-4194
miller@cpi.com

EDUCATION

2006 – PhD - University of Maryland, Cambridge, MD
1998 – MA - College Of William and Mary, Williamsburg, VA
1993 – BS - Wake Forest University, Winston-Salem, NC

WORK EXPERIENCE

Computational Physics Inc, Research Scientist - 4/2008 - Present
US Naval Research Laboratory, NRC Postdoctoral Research Associate - 6/2006 - 3/2008
University of Maryland, Horn Point Laboratory, Graduate Research Assistant - 9/1998 - 5/2006
Virginia Institute of Marine Science, Laboratory Technician - 1/1996 - 8/1998
Susquehanna River Basin Commission, Technician - 3/1994 - 9/1994

PROFESSIONAL PUBLICATIONS

Neubauer, S, WD Miller, I Anderson. 2000. Carbon cycling in a tidal freshwater marsh ecosystem: A carbon gas flux study. *Marine Ecology Progress Series*, 199, 13-30.

Miller, WD, S Neubauer, I Anderson. 2001. Effects of sea-level induced disturbances on high salt marsh metabolism. *Estuaries*, 24, 357-367.

Harding, L, WD Miller, R Swift, CW Wright. 2001. Aircraft remote sensing, pp. 113-122. In: Steele, J, S Thorpe, and K Turekian (eds.). *Encyclopedia of Ocean Sciences*. Academic Press Ltd. London U.K.

Roman, M, J Adolf, J Bichy, W Boicourt, L Harding, E Houde, S Jung, D Kimmel, WD Miller, X Zhang. 2005. Stimulation of plankton and fish abundance in Chesapeake Bay by Hurricane Isabel. *EOS*, 86, 261, 265.

Miller, WD, L Harding, J Adolf. 2005. The Influence of Hurricane Isabel on Chesapeake Bay Phytoplankton Dynamics, pp. 155-160. In: K Sellner (ed.). *Proceedings from the Symposium on Hurricane Isabel*. Chesapeake Research Consortium, Baltimore MD.

Kemp, WM, W Boynton, J Adolf, D Boesch, W Boicourt, G Brush, J Cornwell, T Fisher, P Glibert, J Hagy, L Harding, E Houde, D Kimmel, WD Miller, R Newell, M Roman, E Smith, J Stevenson. 2005. Eutrophication of Chesapeake Bay: Historical trends and ecological interactions. *Marine Ecology Progress Series*, 303, 1-29.

Adolf, J, L Harding, C Yeager, M Mallonee, WD Miller. 2006. Environmental forcing of phytoplankton floral composition, biomass, and primary productivity in Chesapeake Bay, USA. *Estuarine Coastal and Shelf Science*, 67, 108-122.

Miller, WD, D Kimmel, L Harding. 2006. Predicting spring discharge of the Susquehanna River from a synoptic climatology for the Eastern United States. *Water Resources Research*, 42, W05414, doi:10.1029/2005WR004270.

Miller, WD, L Harding, J Adolf. 2006. Hurricane Isabel generated an unusual fall bloom in Chesapeake Bay phytoplankton dynamics. *Geophysical Research Letters*, 33, L06612, doi:10.1029/2005GL025658.

Kimmel, D, WD Miller, M Roman. 2006. Regional scale climate forcing of Chesapeake Bay zooplankton dynamics. *Estuaries*, 29:375-387.

Miller, WD, L Harding 2007. Climate forcing of the spring bloom in Chesapeake Bay. *Marine Ecology Progress Series*, 331:11-22.

Boesch, D, V Coles, D Kimmel, WD Miller. 2007. Ramifications of Climate Change for Chesapeake Bay Hypoxia, In: *Regional Impacts of Climate Change in the United States: Four Case Studies*. Pew Center on Global Climate Change, Washington DC.

Szekiolda, K, G Marmorino, S Maness, T Donato, J Bowles, WD Miller, WJ Rhea. 2007. Airborne hyperspectral imaging of cyanobacteria accumulations in the Potomac River. *Journal of Applied Remote Sensing*, 1: 013544.

Harding, L, WD Miller. 2009. Airborne Remote Sensing of Chlorophyll in Chesapeake Bay, USA, pp. 115-138. In: X Yang (ed). *Remote Sensing and Spatial Information Technologies for Coastal Ecosystem Assessment and Management: Principles and Applications*, Springer Berlin Germany.

Kimmel, D, WD Miller, L Harding, E Houde, M Roman. 2009. Estuarine ecosystem response captured using a synoptic climatology. *Estuaries and Coasts*, 32:403-409.

Szekiolda, K, J Bowles, D Gillis, WD Miller. 2009. Interpretation of Absorption Bands in Airborne Hyperspectral Radiance Data. *Sensors*, 9:2907-2925.

Marmorino, G, G Smith, WD Miller, J Bowles. 2010. Detection of a buoyant coastal wastewater discharge using airborne hyperspectral and infrared imagery. *Journal of Applied Remote Sensing*, 4, 043502.

Bachmann, C, C Nichols, M Montes, R Li, P Woodward, R Fusina, W Chen, V Mishra, W Kim, J Monty, K McIlhany, K Kessler, D Korwan, D Miller, E Bennert, G Smith, D Gillis, J Sellars, C Parrish, A Schwarzschild, B Truitt. 2010. Retrieval of substrate bearing strength from hyperspectral imagery during the Virginia Coast Reserve (VCR'07) multi-sensor campaign. *Marine Geodesy*, 33:101-116.

Korwan, D, R Lucke, M Corson, J Bowles, B Gao, R Li, M Montes, W Snyder, N McGlothlin, S Butcher, D Wood, C Davis, WD Miller. 2010. The Hyperspectral Imager for the Coastal Ocean (HICO) - Design and Early Results. Proceedings of the IEEE GRSS Workshop on Hyperspectral Image and Signal Processing: Evolution in Remote Sensing, Reykjavik, Iceland.

Corson, M, R Lucke, C Davis, J Bowles, D Chen, B Gao, D Korwan, D Miller, W Snyder. 2010. The Hyperspectral Imager for the Coastal Ocean (HICO) – Environmental Littoral Imaging from the International Space Station. Proceedings of the 2010 IEEE International Geoscience and Remote Sensing Symposium, Honolulu, HI.

Bachmann, C, C Nichols, M Montes, R Li, P Woodward, R Fusina, W Chen, W Mishra, W Kim, J Monty, K McIlhany, K Kessler, D Korwan, D Miller, E Bennert, G Smith, D Gillis, J Sellars, C Parrish, A Weidemann, W Goode, A Schwarzschild, B Truitt. 2010 Airborne Remote Sensing of Trafficability in the Coastal Zone. *NRL Review* 2009, pp. 223- 228.

AFFILIATIONS

American Geophysical Union
Estuarine Research Federation
American Society of Limnology and Oceanography

PROFESSIONAL SKILLS & TRAINING

SCUBA Certification, PADI
Radiation Protection Training Course, University of Maryland Radiation Safety Office
Hazardous Materials Technician Training, University of Maryland Fire & Rescue Institute
Confined Space Entry and Rescue Training, University of Maryland Fire & Rescue Institute
Boating Skills and Seamanship, US Coast Guard Auxiliary
CPR/First Aid Certification, Red Cross
Research flight experience (700+ hrs flight time)
Small boat operations (800+ hrs as captain)
Software proficiency in: SAS, MATLAB, S+, IDL/ENVI, ArcGIS, Surfer, MS Office

REVIEWER

North Carolina Sea Grant
Estuaries and Coasts
Estuarine Coastal and Shelf Science
Aquatic Ecology
Journal of Coastal Research
Ecosystems