

CURRICULUM VITAE

Adrian V. Rocha
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Woods Hole, MA 02345

EDUCATION

Ph.D. Department of Earth Systems Science, University of California, Irvine. 2008.
Dissertation Title: *The importance of intrinsic factors in driving interannual Net Ecosystem Production variability*. Advisor: Michael L. Goulden

M.S. Environmental Science, Ohio State University. 2003.
Thesis title: *Responses of Canopy Photosynthesis to Diffuse Radiation Under Wet and Dry Soil Moisture Conditions*. Advisor: Peter S. Curtis

B.S. (cum laude) Earth Systems Science and Policy, California State University of Monterey Bay. 2001.

INTERESTS

Biosphere-Atmosphere Interactions, Ecophysiology, Remote Sensing of vegetation, spatial and temporal controls of mass and energy fluxes in natural ecosystems

AWARDS

2008 Outstanding Contributions to the Department of Earth Systems Science. University of California, Irvine.

2004 NRS Mildred E. Mathias Graduate Student Research Grant Program.

RESEARCH IN POPULAR PRESS

Canon, S. (2008) Wildfires gain ground on Alaska tundra, Juneau Empire, July 16, 2008. http://www.juneauempire.com/stories/071608/sta_304740685.shtml

EDITORIAL RESPONSIBILITIES

Reviewed articles in: *Agricultural and Forest Meteorology*, *Global Change Biology*, *Ecosystems*, *Hydrological Processes*

JOURNAL PUBLICATIONS

Rocha, A.V. and G.R. Shaver (2009) Advantages of a two band EVI derived from solar and photosynthetically active radiation fluxes. *Agricultural and Forest Meteorology*. In press, doi:10.1016/j.agrformet.2009.03.016.

Rocha, A.V. and M.L. Goulden (2009) Why is marsh productivity so high? New Insights from Eddy Covariance and Biomass Measurements in a *Typha* Marsh. *Agricultural and Forest Meteorology*. 149, 159-168.

Rocha, A.V. and M.L. Goulden (2008) Large interannual CO₂ and energy exchange variability in a freshwater marsh under consistent environmental conditions. JGR-Biogeosciences. 113, G04019, doi:10.1029/2008JG000712

Rocha, A.V., D.L. Potts, and M.L. Goulden (2008) Standing litter as a driver of interannual CO₂ exchange variability in a freshwater marsh. JGR-Biogeosciences. 113, G04020, doi:10.1029/2008JG000713

Goulden, M.L., G.C. Winston, A.M.S. McMillan, M.E. Litvak, E.L. Read, **A.V. Rocha** and J.R. Elliot (2006) An eddy covariance mesonet to measure the effect of forest age on land-atmosphere exchange. Global Change Biology. 12:2146-2162

Rocha, A.V., M.L. Goulden, A.L. Dunn, and S.C. Wofsy. (2006) On linking interannual ring width variability with observations of whole-forest CO₂ flux. Global Change Biology. 12:1378-1389 (Publication "recommended" by Faculty of 1000: <http://www.f1000biology.com/article/id/1033682>)

Rocha, A.V., H.B. Su, C. Vogel, H.P. Schmid, and P.S. Curtis (2004) Photosynthetic and water use efficiency responses to diffuse radiation by an aspen-dominated northern hardwood forest. Forest Science. 50:793-801

CONFERENCE TALKS

Rocha, A.V. (2008) The Anaktuvuk River Fire: Results from the first post-fire growing season, Ecosystems Center of the Marine Biological Laboratory Weekly Seminar, Invited.

Rocha, A.V., Scott, G., Peters, J., and Shaver, G. (2008) Burn severity influences post fire exchanges of energy and mass in arctic tundra. AGU Fall Meeting. Talk. B42B-08

Rocha, A.V. and M.L. Goulden (2007) The importance of intrinsic factors in driving interannual NEP variability. AGU Fall Meeting. Talk. B32B-06

Wofsy, S.C., A.L. Dunn, B.D. Amiro, A. Barr, **A.V. Rocha**, and M.L. Goulden. (2006) Lagged processes and critical timescales in boreal forest response to climate. AGU Fall Meeting. Invited Talk. B24A-03

WORKSHOP & OUTREACH TALKS

Rocha, A.V. (2009) The Anaktuvuk River fire: a window into a future Arctic? Talk for the Institute for Science Instruction and Study (ISIS) fellows, Woods Hole, MA.

Rocha, A.V. (2008) Limitations of NDVI across a burn severity gradient: Implications for the PLIRITE model. Arctic Observatory Meeting, Ecosystems Center of the Marine Biological Laboratory, Woods Hole, MA. .

POSTER PRESENTATIONS

Rocha, A.V. and M.L. Goulden. (2006) Spatio-temporal variability in vegetation indices in a freshwater marsh and its implications for CO₂ exchange. AGU Fall Meeting. Poster Presentation. B41C-0213.

McMillan, A.M., **A.V. Rocha**, and M.L. Goulden. (2006) Changes in the NDVI of Boreal Forests over the period 1984 to 2003 measured using time series of Landsat TM/ETM+ surface reflectance and the GIMMS AVHRR NDVI record. AGU Fall Meeting. Poster Presentation. B21A-1008.

Rocha, A.V., M.L. Goulden, A. McMillan, G. Winston, E. Read, A.L. Dunn, S.C. Wofsy (2005). Climate, Tree Rings, and CO₂ fluxes in a Canadian Boreal Forest. AGU Fall Meeting. Poster Presentation. B33E-1087

A.M. McMillan, **A.V. Rocha**, G.C. Winston, M.L. Goulden (2005) Interannual variability in CO₂ exchange along a boreal chronosequence. AGU Fall Meeting. Talk. B42B-04

Rocha, A.V., G. Winston, E. Read, K. McDuffee, M. Goulden. (2005) Vegetation Dynamics along a Boreal Forest Chronosequence. Boreal Forest Chronosequence Workshop. Poster Presentation. U.C. Irvine. March 2005.

Rocha, A.V., P.S. Curtis, C.S. Vogel, H.P. Schmid, and H.B. Su (2002) Canopy Quantum Efficiency in a Northern Hardwood Forest: the contributing roles of direct and diffuse PAR. Poster Presentation. AGU Fall Meeting 2002.