

Biographic Sketch

JEFFREY Q. CHAMBERS

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Lawrence Berkeley National Laboratory
Earth Sciences Division, Climate Sciences Department
1 Cyclotron Rd, MS 74R-316C
Berkeley, CA 94720

email: jchambers@lbl.gov
cell: 510.520.5874
work: 510.495.2932

EDUCATION

University of California, Santa Barbara
Ph.D. Ecology – Oct. 1998 (Advisors: Josh Schimel and John Melack)

California Polytechnic State University, San Luis Obispo
B.S. 1992 Biochemistry – *Cum Laude*

RESEARCH AND PROFESSIONAL EXPERIENCE

University of California, Berkeley, Geography Department, Berkeley, CA. *Associate Professor*, July 2013 – Present.

Lawrence Berkeley National Laboratory, Earth Sciences Division, Climate Sciences Department, Berkeley, CA. *Faculty Scientist*, August 2010 – Present.

National Institute of Amazon Research (Instituto Nacional de Pesquisas na Amazônia – INPA)
Research Faculty, Manaus, Brazil, Jan 1999 – Present.

Tulane University, Ecology and Evolutionary Biology, *Associate Professor* July 2009 – July 2010
Assistant Professor, July 2003 – June 2009; and **National Institute for Climatic Change Research (NICCR) Coastal Center**, *Co-Director*, July 2006 – Present; New Orleans, LA.

University of California, *Assistant Researcher II* (from Jan. 2002) and *Postdoctoral Researcher*, Earth System Science, Irvine, CA, Oct 1998 – Sept 2003.

National Center for Ecological Analysis and Synthesis, *Graduate Internship*, Santa Barbara, CA. May 1997 – Sept 1998.

University of California, *Research Assistant*, Department of Ecology, Evolution and Marine Biology, Santa Barbara, CA, Sept 1992 – Sept 1998.

Lawrence Livermore National Laboratory (LLNL), *Research Assistant*, Biogeochemical Cycles Group, Global Climate Research Division, Livermore, CA: Summers of 1992-95.

PUBLICATIONS

- Chambers JQ, Negrón-Juárez RI, Marra DM, Di Vittorio AD, Tews J, Roberts D, Ribeiro HPM, Trumbore SE, Higuchi N. (2013) The steady-state mosaic of disturbance and succession across an old-growth Central Amazon forest landscape. *Proceedings of the National Academy of Sciences*. doi/10.1073/pnas.1202894110
- Trumbore, S.E., Angert, A., Kunert, N., Muhr, J., and Chambers, J.Q., (2013), What's the flux? Unraveling how CO2 fluxes from trees reflect underlying physiological processes: *New Phytologist*, 197:353-355
- Angert, A., Muhr, J., Juarez, R.N., Munoz, W.A., Kraemer, G., Santillan, J.R., Barkan, E., Mazeh, S., Chambers, J.Q., and Trumbore, S.E., (2012), Internal respiration of Amazon tree stems greatly exceeds external CO2 efflux: *Biogeosciences*, 9:4979-4991.
- Angert, A., Muhr, J., Juarez, R.N., Munoz, W.A., Kraemer, G., Santillan, J.R., Chambers, J.Q., and Trumbore, S.E., (2012), The contribution of respiration in tree stems to the Dole Effect: *Biogeosciences*, 9:4037-4044.
- Negrón-Juárez R.I., Chambers J.Q., Marra D.M., Ribeiro G.H.P.M., Rifai S., Higuchi N., and Roberts D., (2011) Detection of subpixel gaps with Landsat imagery in Central Amazon forest, *Remote Sensing of Environment*, 115, 3322–3328.

- Ballantyne A.P., Baker P.A., Chambers J.Q., Villalba R., Argollo J. (2011) Regional Differences in South American Monsoon Precipitation Inferred from the Growth and Isotopic Composition of Tropical Trees. *Earth Interactions* 15:10.1175/2010EI1277.1171
- Negrón-Juárez RI, Baker DB, Zeng H, Henkel TJ, Chambers JQ (2010) Assessing hurricane-induced tree mortality in US Gulf Coast forest ecosystems. *Journal of Geophysical Research - Biogeosciences* 115:G04030
- Dolan, K.A., Hurtt, G.C., Chambers, J.Q., Dubayah, R.O., Frolking, S., and Masek, J.G. (2010) Using ICESat's Geoscience Laser Altimeter System (GLAS) to assess large-scale forest disturbance caused by hurricane Katrina. *Remote Sensing of Environment* 115:86-96.
- Negrón-Juárez, R. I., J.Q. Chambers, G. Guimaraes, H. Zeng, C.F.M. Raupp, D.M. Marra, G.H. Ribeiro, N. Higuchi, and B. Nelson. (2010) Widespread Amazon forest tree mortality from a single cross-basin squall line event. *Geophysical Research Letters* 37:L16701
- Chambers, J.Q., R. I. Negrón-Juárez, G. C. Hurtt, D. M. Marra, and N. Higuchi (2009) Lack of intermediate-scale disturbance data prevents robust extrapolation of plot-level tree mortality rates for old-growth tropical forests. *Ecology Letters*, 12:E22-E25.
- Chambers J.Q., Sessler M., Carneiro V., Smith M.L., Plourde L. & Higuchi N. (2009) Hyperspectral remote detection of niche partitioning among canopy trees driven by blowdown gap disturbances in the Central Amazon. *Oecologia* 160: 107-117.
- Zeng H., Chambers J.Q., Negrón-Juarez R.I., Hurtt G.C., Baker D.B. & Powell M.D. (2009) Impacts of tropical cyclones on US forest tree mortality and carbon flux from 1851 to 2000. *Proceedings of the National Academy of Sciences*, 106, 7888-7892
- Malhi, Y., L. E. Aragao, D. B. Metcalfe, R. Paiva, C. A. Quesada, S. Almeida, L. O. Anderson, P. Brando, J.Q. Chambers, A.C.L. da Costa, L.R. Hutyra, P. Oliveira, S. Patino, E.H. Pyle, A.L. Robertson, and L.M. Teixeira. (2009) Comprehensive assessment of carbon productivity, allocation and storage in three Amazonian forests. *Global Change Biology*, 15: 1255-1274
- Frolking S., Palace M.W., Clark D.B., Chambers J.Q., Shugart H.H. & Hurtt G.C. (2009) Forest disturbance and recovery: A general review in the context of spaceborne remote sensing of impacts on aboveground biomass and canopy structure. *JGR-Biogeosciences*, 114, G00E02
- Negrón-Juárez, R.I., J.Q. Chambers, H. Zeng, and D.B. Baker (2008) Hurricane driven changes in land cover create biogeophysical climate feedbacks. *Geophysical Research Letters* 35: L23401
- Chapman E.L., Chambers J.Q., Ribbeck K., Baker D.B., Tobler M.A. & White D.A. (2008) Hurricane Katrina impacts on forests of Louisiana's Pearl River basin. *Forest Ecology & Management*, 256: 883-889
- Fisher, J.I., G.C. Hurtt, R.Q. Thomas, and J.Q. Chambers (2008) Clustered disturbances lead to bias in large-scale estimates based on forest sample plots. *Ecology Letters*, 11(6), 554-563
- Chambers J.Q., Fisher J.I., Zeng H., Chapman E.L., Baker D.B. & Hurtt G.C. (2007) Hurricane Katrina's carbon footprint on Gulf Coast forests. *Science* 318:1107.
- Chambers J.Q., Asner G.P., Morton D.C., Anderson L.O., Saatchi S.S., Espírito-Santo F.D.B., Palace M. & Souza C. (2007) Regional ecosystem structure and function: Ecological insights from remote sensing of tropical forests. *Trends in Ecology & Evolution*, 22, 414-423

COLLABORATIONS & AFFILIATIONS

Collaborators: Sassan Saatchi (Caltech/JPL), Paul Moorcroft (Harvard), Dar Roberts (UC Santa Barbara), George Hurtt (Univ. of Maryland), Alon Angert (Hebrew University of Jerusalem), Steve Frolking (Univ. of New Hampshire), Mark Powell (NOAA), Ashley Ballantyne (University of Colorado), Lee Dyer (Univ. of Nevada, Reno), Niro Higuchi (INPA, Manaus, Brazil), Bruce Nelson (INPA, Manaus, Brazil). **Thesis, Grad, and Post-Grad Advisors:** John Melack (UC Santa Barbara) Josh Schimel (UC Santa Barbara), Jeff Amthor (DOE-LLNL), Susan Trumbore (UC Irvine). **Previous Advisees:** Robinson Negrón-Juárez (postdoc), Hongcheng Zeng (postdoc), Jeremy Fisher (postdoc), Thomas Shannon (postdoc), Angela Smilanich (Ph.D.), Tara Massad (Ph.D.), Theryn Henkel (Ph.D.), Sami Rifai (Ph.D.), Rebecca Hazen (Ph.D.), Elise Chapman (Masters).