

# SARA HENDRIX

## EDUCATION:

2007. M.S. Civil and Environmental Engineering, Hydrology, Massachusetts Institute of Technology, Cambridge, MA. Optimized and verified a stochastic rainfall model, using a novel error metric to compare an ensemble of images to one observation image.

2004. B.A. Applied Mathematics, emphasis in Stochastic Optimization, Interdisciplinary Studies Field of Social Science, with honors, University of California, Berkeley, CA. Mathematics coursework included real and complex analysis, linear and abstract algebra, numerical analysis, statistics, linear programming, and stochastic differential equations. ISF Honors Thesis topic: qualitatively analyzing dynamics of conflict between human systems and natural systems, with focus on the history of California water resources exploitation.

## PROFESSIONAL EXPERIENCE:

2007-Present. Staff Scientist, Cambridge Environmental Inc., Cambridge, MA.

2004-2007. Research Assistant, Massachusetts Institute of Technology, Cambridge, MA. Focus: land-atmosphere interaction, rainfall, and estimation methodology. Assembled and analyzed land and atmospheric data, including soil and vegetation maps, soil moisture point measurements, latent and sensible heat fluxes from eddy covariance and scintillometry, and radar rainfall images. Coded land, atmospheric, and toy models, including MIKE SHE, the NCAR community land model, large eddy simulation of the planetary boundary layer, chaotic maps and flows such as the Lorenz equations, and a simple probabilistic rainfall model.

2005. Field Sampler, Soil Moisture Experiment 2005, Walnut Creek Watershed, Ames, Iowa. Sampled soil and vegetation characteristics using remote and probe sensing and physical sampling methods, including ThetaProbe, qualitative dew assessment, and GPS waypointing.

## PROFESSIONAL ASSOCIATIONS:

Society for Risk Analysis NE Chapter

## AWARDS:

2005-2008: NSF Graduate Research Fellow

2004-2005: MIT Presidential Fellow

2004-2005: MIT Linden Earth System Fellow

## ORIGINAL REPORTS:

Crouch, E., Green, L., and Hendrix, S. (2008). A Proposition 65 no-significant-risk evaluation of 1,4-dioxane in assorted consumer products. Cambridge Environmental Inc.

- Lester, R.R. and Hendrix, S. (2008). Method 3 risk characterization former MBTA parking lot 1395 Massachusetts Avenue Arlington, Massachusetts RTN 3-0078. Cambridge Environmental Inc.
- Lester, R.R. and Hendrix, S. (2008). Harvard University Allston Science Complex. Electric and magnetic field evaluation of electrical distribution in the distributed energy facility. Task I: Electric power distribution. Cambridge Environmental Inc.
- Lester, R.R., Hendrix, S.H. and Zemba, S.G. (2008). Method 3 risk characterization 114-116 Water Street, Beverly, Massachusetts, RTN 3-0027244. Cambridge Environmental Inc.
- Hendrix, S., Lester, R.R. and Zemba, S.G. (2008). Washington Mills Hennepin, Inc. endangered species evaluation. Cambridge Environmental Inc.