

## BIOGRAPHICAL SKETCH FOR ANKUR R DESAI

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### EDUCATION

Oberlin College, B.A., Computer Science, 1997  
Oberlin College, B.A., Environmental Studies, 1997  
University of Minnesota, M.A., Geography, 2000  
Pennsylvania State University, Ph.D., Meteorology, 2006

### ACADEMIC EMPLOYMENT

2007- Assistant Professor, Dept. of Atmospheric & Oceanic Sciences, University of Wisconsin  
2006-2007 Postdoctoral Fellow, Advanced Study Program, Nat'l Center for Atmospheric Research  
2002-2006 Graduate Research Assistant, Dept. of Meteorology, Pennsylvania State University  
2000-2001 Research Fellow, Dept. of Forest Resources, University of Minnesota  
1998-2000 ICGC MacArthur Scholar Fellow, Dept. of Geography, University of Minnesota

### 5 RELEVANT PUBLICATIONS

- Desai, A.R.**, Bolstad, P.V., Cook, B.D., Davis, K.J., Carey, E.V., 2005. Comparing net ecosystem exchange of carbon dioxide between an old-growth and mature forest in the upper Midwest, USA. *Agricultural and Forest Meteorology* 128(1-2): 33-55, doi:10.1016/j.agformet.2004.09.005.
- Desai, A.R.**, Moorcroft, P.R., Bolstad, P.V. and Davis, K.J., 2007. Regional carbon fluxes from a biometrically-constrained dynamic ecosystem model: Impact of disturbance, CO<sub>2</sub> fertilization and heterogeneous land cover. *Journal of Geophysical Research - Biogeosciences*, 112(G01017), doi:10.1029/2006JG000264.
- Desai, A.R.**, Noormets, A.N., Bolstad, P.V., Chen, J., Cook, B.D., Davis, K.J., Euskirchen, E.S., Gough, C.M., Martin, J.G., Ricciuto, D.M., Schmid, H.P., Tang, J.W. and Wang, W., 2006. Influence of vegetation and surface forcing on carbon dioxide fluxes across the Upper Midwest, USA: Implications for regional scaling, *Agricultural and Forest Meteorology*, in press.
- Desai, A.R.**, Richardson, A.D., Moffat, A.M., Kattge, J., Hollinger, D.Y., Barr, A., Falge, E., Noormets, A., Papale, D., Reichstein, M., and Stauch, V.J., 2008. Cross site evaluation of eddy covariance GPP and RE decomposition techniques, *Agricultural and Forest Meteorology*, in press, doi:10.1016/j.agformet.2007.11.012.
- Heinsch, F.A., Zhao, M., Running, S.W., Kimball, J.S., Nemani, R.R., Davis, K.J., Bolstad, P.V., Cook, B.D., **Desai, A.R.**, Ricciuto, D.M., Law, B.E., Oechel, W.C., Kwon, H., Luo, H., Wofsy, S.C., Dunn, A.L., Munger, J.W., Baldocchi, D.D., Xu, L., Hollinger, D.Y., Richardson, A.D., Stoy, P.C., Siqueira, M.B.S., Monson, R.K., Burns, S. and Flanagan, L.B., 2005. Evaluation of remote sensing based terrestrial productivity from MODIS using regional tower eddy flux network observations, *IEEE Transactions on Geosciences and Remote Sensing*, 44(7): 1908-1925, doi:10.1109/TGRS.2005.853936.

### OTHER PUBLICATIONS

- Desai, A.R.**, Davis, K.J., Senff, C., Ismail, S., Browell, E.V., Stauffer, D.R., and Reen, B.P., 2006. A case study on the effects of heterogeneous soil moisture on mesoscale boundary layer structure in the southern Great Plains, USA. Part I: Simple prognostic model. *Boundary-Layer Meteorology*, 119(2): 195-238, doi:10.1007/s10546-005-9024-6.
- Tang, J., Bolstad, P.V., Ewers, B.E., **Desai, A.R.**, Davis, K.J. and Carey, E.V., 2006. Sap-flux-upscaled canopy transpiration, stomatal conductance and water use efficiency in an old-growth forest in the

Great Lakes region of United States. *Journal of Geophysical Research - Biogeosciences*, 111(G02009), doi:10.1029/2005JG000083.

Yi, C., Davis, K.J., Bakwin, P.S., Denning, A.S., Zhang, N., Desai, A.R., Lin, J.C., Gerbig, C. and Wofsy, S.C., 2004. Observed covariance between ecosystem carbon exchange and atmospheric boundary layer dynamics at a site in northern Wisconsin. *Journal of Geophysical Research*, 109(D08302), doi:10.1029/2003JD004164.

#### AWARDS AND HONORS

National Center for Atmospheric Research Advanced Study Program Fellowship (2006-2007); Pennsylvania Space Grant Consortium, NASA Space Grant Fellowship (2005-2006); Arnulf I Muan Graduate Fellowship, College of Earth and Mineral Science, Penn State Univ. (2004-2005); Centennial Research Award, Penn State Univ. (2004-2005); Inducted to Chi Epsilon Pi, Penn State chapter, 2003; John D. and Catherine T. MacArthur Scholars Fellowship, University of Minnesota (1998-2000)

#### SYNERGISTIC ACTIVITIES

- Co-convener, AGU Fall 2007 Session B31: Observing, Modeling and Predicting Regional Carbon Exchange
- Organizer, *Regional-scale Biogeochemistry: Needs and Methodologies*, NCAR/ASP Summer Student Colloquium workshop, June 4-15, 2007
- Member, AGU Committee on Biogeosciences, 2008-
- Participant and organizer for Chequamegon Ecosystem-Atmosphere Study (ChEAS) meetings and workshops, multi-investigator study of regional forest-atmosphere CO<sub>2</sub> and H<sub>2</sub>O cycling, 2002-2007
- Teach UW-Madison class AOS 171: Global Climate Change for primarily non-science majors

#### COLLABORATORS (LAST 48 MONTHS)

M. Barkley (U. Leicester), E.V. Browell (NASA), E.V. Carey (JSA Consultants), J. Chen (U. Toledo), B.D. Cook (U. Minnesota), A.S. Denning (Colorado State U.), E.S. Euskirchen (U. Alaska), B.E. Ewers (U. Wyoming), C.M. Gough (Ohio State), F.A. Heinsch (U. Montana), S. Ismail (NASA), D.S. Mackay (SUNY-Buffalo), J.G. Martin (Oregon State), G.A. McKinley (U. Wisconsin), N. Miles (Penn State), A. Moffatt (Max-Planck BGC), P.R. Moorcroft (Harvard U.), A. Noormets (NC State), B. Reen (Penn State), A. Richardson (UNH), D.M. Ricciuto (Penn State), N. Saliendra (USDA), S. Samanta (Woods Hole Research Center), C. Senff (NOAA), J.W. Tang (Chicago Botanic Gardens), R.M. Teclaw (USDA), N. Urban (Michigan Tech), W. Wang (DOE), C. Yi (CUNY)

#### GRADUATE AND POST-DOCTORAL ADVISORS

David S. Schimel, National Center for Atmospheric Research

Kenneth J Davis, Pennsylvania State University

Howard Veregin, Rand-McNally, formerly University of Minnesota – Twin Cities

#### POSTDOCTORAL FELLOWS ADVISED

None

#### GRADUATE STUDENTS ADVISED

Ben Sulman (current Ph.D. student)