

DEV NIYOGI

Dev Niyogi is an Assistant Professor of Applied Climatology in Departments of Agronomy and Earth and Atmospheric Sciences, and the Indiana State Climatologist. He obtained his B.E. Civil Engineering from University of Poona, India with a focus on environmental engineering and M.S. and Ph.D. in 1996 and 2000, respectively from NC State University focusing on the land surface processes and carbon – water interactions. From 1998 to 2000 he was the Assistant State Climatologist for North Carolina, and from 2001 – 2005 he was the Associate State Climatologist and a Research Assistant Professor in the Department of Marine, Earth and Atmospheric Sciences at NC State University. Since 2005, he is with Purdue University, as an Assistant Professor and Indiana State Climatologist. Dr. Niyogi's research involves both field observations and modeling analysis, for process studies, hypothesis – driven experimentation, and societal applications of the weather forecasts, and climate outlook. The research improves the understanding of the effect of environmental changes on the plant and land surface response and the representation of the land surface – atmosphere interactions in models for understanding the nonlinear feedback plant and landsurface changes on environmental processes. His research is largely federally funded through a variety of competitive research grants from NASA, NSF, and USDA NRI CGP. He has authored or co- authored 20 successful proposals for external grants totaling over \$3M. Dr. Niyogi currently advises 5 Ph. D. students and supervises one post-doctoral associate at Purdue. Ten graduate students have finished MS degree under advising or co-advising of Dr. Niyogi (at NC State University). In addition to his students, three undergraduate and graduate students work in his lab and the collocated State Climate Office to conduct research on various aspects of Indiana climate and environment. He has coauthored 77 papers for peer – reviewed international journals of which 61 have been published or accepted for publication as refereed journal articles, and 16 more papers are in review or revision following peer – review. He has also coauthored 3 book chapters, and over 150 conference proceedings or abstracts for various professional conferences such as the AMS and AGU annual meetings. Four papers he has co-authored have received good recognition in the popular press (including NASA EO). He is a member of the AGU Biogeochemistry meetings group / spring meeting student awards chair, Member of AMS Committee on Applied Climatology, was a member of the AMS Committee on Agricultural Forest Meteorology (1999-2002), invited member FGDC Spatial Climate Working Group, Member of the Weather Research and Forecast (WRF) model WG- 14. He is a Review Editor for 'Climate Research'. As the director of the state climate office, and PI on projects with NASA, NSF and endowments, and mentor/graduate advisor for 15 graduate students, Dr. Niyogi has sustained and successful record for managing various scientific, technical, financial and personnel aspects of project management. He has also participated in continued education conferences related to Total Quality Management. In the last 3 years (2005 – 2007), he has published 1 book chapter, and 23 papers in peer reviewed journals, with 7 more papers in press.

Select Significant/ Relevant Publications: (* : graduate student; pdf available at landsurface.org)

- Pielke Sr., R.A., C. Davey, D. Niyogi, S. Fall* J. Steinweg-Woods*, K. Hubbard, X. Lin, M. Cai, Y.-K. Lim, H. Li, J. Nielsen-Gammon, K. Gallo, R. Hale, J. Angel, R. Mahmood, S. Foster, R.T. McNider, and P. Blanken, 2007: Unresolved issues with the assessment of multi-decadal global land surface temperature trends. *J. Geophys. Research* in press.
- Pielke R. A. Sr.*, J.O. Adegoke*, T.N. Chase*, C. H. Marshall*, T. Matsui*, D. Niyogi*, 2007, A New Paradigm for Assessing the Role of Agriculture in the Climate System and in Climate Change, *Agric. For. Meteorol.*, Special Issue, 132, 234 - 254. (Invited Paper)

- Roy, S.S., R. Mahmood, D. Niyogi, M. Lei*, S.A. Foster, K.G. Hubbard, E. Douglas, and R.A. Pielke Sr., 2007: Impacts of the agricultural green revolution induced land use changes on air temperatures in India. *J. Geophys. Res.*, in press.
- Palmieri*, R., Tredway L., Niyogi D., Lackmann G., 2006, Development and Evaluation of a Forecasting System for Fungal Disease in Turfgrass, *Meteorological Applications*, 13, 1–12
doi:10.1017/S1350482706002428
- Mera R.J.*, D. Niyogi, G.S. Buol, G. G. Wilkerson, F. Semazzi, 2006, Potential Individual Versus Simultaneous Climate Change Effects on Soybean (C3) and Maize (C4) Crops: An Agrotechnology Model Based Study, *Global and Planetary Change*, 54, Special Issue: Land-use/land-cover change and its impact on climate, 163 - 182.
- Alpert P., Niyogi D., Pielke R.A. Sr., Eastman J.L., Xue Y.K., Raman S., 2006, Evidence for carbon dioxide and moisture synergies from the leaf cell up to global scales: Implications to human-caused climate change, Special Issue: Land-use/land-cover change and its impact on climate, 202-208.