

Interactive comment on “Investigating the impact of land-use land-cover change on Indian summer monsoon daily rainfall and temperature during 1951–2005 using a regional climate model” by S. Halder et al.

R. Pielke Sr

pielkesr@gmail.com

Received and published: 11 July 2015

I found this an informative and important paper that further documents the role of land use change as a first order climate forcing. I only have recommendations for papers the authors might like to add to their citations:

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. - Special Issue*, 112, D21108, C2502

doi:10.1029/2007JD008834.

Douglas, E., A. Beltrán-Przekurat, D. Niyogi, R.A. Pielke, Sr., and C. J. Vörösmarty, 2009: The impact of agricultural intensification and irrigation on land-atmosphere interactions and Indian monsoon precipitation – A mesoscale modeling perspective. *Global Planetary Change*, 67, 117–128, doi:10.1016/j.gloplacha.2008.12.007.

Niyogi, D., H.-I. Chang, F. Chen, L. Gu, A. Kumar, S. Menon, and R.A. Pielke Sr., 2007: Potential impacts of aerosol-land-atmosphere interactions on the Indian monsoonal rainfall characteristics. *Natural Hazards, Special Issue on Monsoons, Invited Contribution*, DOI 10.1007/s11069-006-9085-y.

Lei, M., D. Niyogi, C. Kishtawal, R. Pielke Sr., A. Beltrán-Przekurat, T. Nobis, and S. Vaidya, 2008: Effect of explicit urban land surface representation on the simulation of the 26 July 2005 heavy rain event over Mumbai, India. *Atmos. Chem. Phys. Discussions*, 8, 8773–8816.

Kishtawal, C.M., D. Niyogi, M. Tewari, R.A. Pielke Sr., and J. Marshall Shepherd, 2009: Urbanization signature in the observed heavy rainfall climatology over India. *Int. J. Climatol.*, doi:10.1002/joc.2044.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 12, 6575, 2015.