Postdoctoral Position in Ecosystem-Climate interactions at the University of Washington

The Ecoclimate Lab at the University of Washington is looking for a postdoctoral researcher to work on the climate implications of forest die-off in North America and the Amazon. The research is part of a funded NSF Macrosystems grant which includes a team doing field observations in North and South America.

Large-scale tree mortality due to drought, warmer temperature, and associated pests and pathogens is emerging as a global phenomenon, and a potentially critical but unevaluated force for altering and amplifying land surface-atmosphere feedbacks. At the same time, global scale modeling studies are beginning to suggest that 'ecoclimate teleconnections' may link the fates of forests across regions and even continents. For example, we recently published findings that large scale afforestation - the inverse of forest die-off - may lead not only to locally significant warming, but, intriguingly, also to increased energy transfer between northern and southern hemispheres, a northward shift in the Intertropical Convergence Zone (ITCZ), and significant increases in drought in the Amazon of South America. This poses the question: will continued North American tree die-off also lead to north-south shifts in the ITCZ and effects in Amazonia? And could current large-scale deforestation in South America, potentially exacerbated by future dieback of Amazon forests, affect climates in temperate North America via similar ecoclimate teleconnections?

This postdoctoral position will focus on simulations using earth system models and, therefore, someone with experience using climate or ecosystem models is preferred. Hoping to find someone to start by the beginning of summer, although earlier or later may be possible.

Questions about the position can be sent to Abigail Swann (aswann@uw.edu).