

April 6, 2010

Dr. Connie Woodhouse  
Associate Professor  
School of Geography and Development  
412 Harvill Building, Box #2  
University of Arizona  
Tucson, Arizona 85721-0076

Re: Christopher Jason Still

Dear Committee members,

It is a pleasure to write a letter for Chris. Chris did most of the work for his Ph.D. work in my lab at the Carnegie Institution. Chris does a very good job of describing his work and research interests in his application materials, and I will rely on his narrative to inform you about his accomplishments and interests.

In my assessment, Chris is very smart, creative and articulate. His undergraduate training is in biochemistry. He thinks like a biologist, but he is also well acquainted with important tools coming from the earth and atmospheric science communities such as remote sensing, forward modeling and data analysis by model inversion. He has demonstrated impressive ability to use these tools in studies of the effect of climate and atmospheric change on biological and ecological processes.

His Ph.D. work focused on constructing a map of the global distribution of C<sub>3</sub> and C<sub>4</sub> plants. These plants have very different properties and the maps he has produced are widely used in global carbon cycle and biogeochemical models. It is based on a combination of remote sensing and physiological insight into the functional properties of these plant types. This was a nice piece of work. However, what has really impressed me is the way he has moved on from this good beginning to new work in his postdoc with Inez Fung and in his current position at UCSB. He branched out to new areas and has come back to re-examine some of his original work with new and creative ideas. For example, I really like the way he has brought phylogeny onto the global stage with his re-examination of the distribution of C<sub>4</sub> species in Hawaii. This displays a rare desire to go deeper into a problem that most of us thought had been solved. He is not one to stand pat on his previous achievements or to get caught-up in defending them. His allegiance is to the way nature works, and he thinks deeply about that.

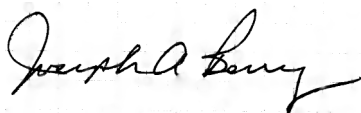
He was always very competent and a quick learner. Over the years since he left my lab he has grown in confidence, leadership skills and perspective. He has developed a unique approach to that combines good biology with the tools of earth and atmospheric sciences to

address interesting problems that span a very wide range from atmospheric transport to evolution. In part this reflects growth in his ability to leverage the array of people, skills and knowledge that are available to him at his university and through the collaborations that he has built. He has put these things together in unique and creative ways. He is, and will continue to develop as, a real leader in earth and environmental sciences.

I think Chris is a very good fit for the position you describe at U of A. He is very strong in carbon dynamics and modeling ecosystem atmosphere interactions. I don't know of any work specifically on tree ring analysis but he is very strong in stable isotope approaches that would be very useful in forest growth studies. Chris would be particularly good at constructing and using models of how climatic factors influence isotopic fractionation. As I noted above, he is a quick learner and a good collaborator. One area where this leadership has been evident is in organizing meetings. This started with organizing a session on isotopes in ecology at the AGU while he was still a student. He hosted a very influential meeting on Isoscapes (<http://isoscapes2008.org>) and a meeting on Climate System Modeling at the Kavli Institute for Theoretical Physics at UCSB. I am confident that Chris would bring a world-class research program and strong leadership. I don't think you can go wrong with Chris.

Aside from his impressive academic qualifications, I would like to close by noting that he is also a very interesting and enjoyable person. He and his wife Maria have lots of friends, and Chris has lots of collaborators. He will be a great colleague.

Sincerely,



Joseph A Berry  
Staff Scientist