

THE LABORATORY OF TREE-RING RESEARCH

presents a talk by

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A new spatiotemporal field reconstruction of last millennium Northern Hemisphere summer temperatures

Wednesday, September 9, 2015 - 4:00pm to 5:00pm Room: Bannister 110

Climate field reconstructions allow surface temperature variability to be estimated in both space and time from proxy paleoclimate data, providing targets for general circulation model comparisons and knowledge about the fingerprint of regional-scale climate variability in response to radiative forcing and internal climate system variability. Here, we use a network of 54 temperature-sensitive tree-ring width, density, and blue intensity chronologies at high latitudes to reconstruct the Northern Hemisphere summer temperature field back to 750 CE. We evaluate proxy network and reconstruction skill in space and time, observe the relative site contributions as a function of proxy type, and query the reconstruction to better understand past temperature anomalies due to solar and volcanic forcing.

