Tree-rings and climate: An Australasian perspective

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Trees record variation in environmental conditions in their wood. Decomposing the record of tree-ring growth variation into various components has enabled reconstruction of past climate variability in many regions in the world. Despite some early successes (eg, huon pine), progress in dendrochronology, the study of tree-ring growth, has been limited in Australia and the Australasian region. This is, in part, due to a combination of historical (ie, uncooperative researchers) and biological (ie, uncooperative tree species) factors. In the past 2-3 years renewed interest in the application of dendrochronology in the region has led to the development of a number of important tree-ring and multi-proxy chronologies related to the Asian and Australian monsoons. For example, a recent multi-proxy chronology using three well-dated, annually resolved chronologies, including a 160-year tree-ring chronology from the Northern Territory, has provided a successful experimental reconstruction of Australasian monsoon variability based on the Palmer Drought Severity Index based on highly significant, spatially coherent correlations between austral spring and summer PDSI, climate and ENSO. Several other tree-ring chronologies sensitive to hydroclimatic variability outside of the monsoon regions have been developed. This seminar will give an overview of tree-ring research in Australia and the region, discuss recent developments and highlight future opportunities.

Seminars held in Room 345, Building 28, Fridays 1–2pm
All Welcome!
For more information, contact Laura Davies or Jo Brown
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