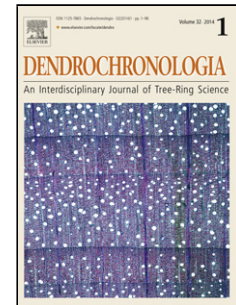


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Title: Dry/wet variations in the eastern Tien Shan (China) since AD 1725 based on Schrenk spruce (*Picea schrenkiana* Fisch. et Mey) tree rings

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Running page head: Drought variations in the eastern Tien Shan

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ABSTRACT Cores of Schrenk spruce from seven sites of eastern Tien Shan were used to develop a regional tree-ring chronology to extend the climate record. We developed a August–July Standardized Precipitation Evapotranspiration Index (SPEI) reconstruction that spans AD 1725–2013 based on the regional tree-ring chronology. The reconstruction model accounts for 45.3% of the SPEI variance from 1959 to 2013. The SPEI reconstruction agrees reasonably well with the dry and wet periods

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