Climate signals in tree-rings from the Norwegian Stave Churches

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Tree-rings are a valuable climate proxy because of the high degree of dating precision offered by the annual resolution. One challenge is finding suitable material that is both climate sensitive, and that extends as far back in time as possible. In Norway, a lot of work has been put into dendrochronological dating of the Stave Churches. This material roughly covers the period AD 800-1300, and substantial sample depth is available from both the eastern and western side of the water divide in southern Norway. As the growing sites of the trees are unknown, validation of the climate signal is a challenge. However, high matches between regions, and with building timber from other medieval buildings indicate a strong common signal. Here, we present the tree-ring records from the Stave Churches, and discuss the climatic information that can be gained from it.