



Evaluating Environmental Change in Northern Fennoscandia from Chemical Tree-ring Proxies

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The development of long absolutely dated tree-ring chronologies in Northern Fennoscandia provides valuable insight into past environmental variability throughout much of the Holocene. Tree-ring data from the Tornetraesk region in Northern Sweden has already made a significant contribution to the understanding of past climate variability and has been particularly valuable in exploring the nature of recent climate variability within a longer term perspective. Tree-ring proxies are annually resolved and can be absolutely dated. More importantly, their environmental signal can be quantified, calibrated, independently verified and replicated. Results from a study to interrogate the environmental information contained within the chemical (stable isotopic) composition of tree-rings from Northern Sweden are presented. Preliminary findings indicate that whilst strong correlations with climatic variables may be attainable, over longer timescales, some methodological challenges may still remain.