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0.1 Solar and Climate Variation Relationship Searched by Studying Oxygen-18 Time Series from Antarctica

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This work presents a study of the relations between solar and climate variations during the last tow millennium by spectral and wavelets analysis for oxygen-18 time series. This time series has been obtained in Dronning Maud Land, Antarctica. The spectral and wavelet analysis of tree ring data shows the main periodicities of the solar cycle were present in your time series, with 0.95 confidence level. This result suggests a solar modulation of climate variations in ice accumulation the oxygen-18. Short-term variations, between 2-7 years, are also present. This spectral and wavelet analysis shows that both, solar and climate factors, are recorded in the oxygen-18 data.