The 120-year period in the solar magnetic activity and its relation to climate variability

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The nature of the climatic response to solar magnetic variability is reviewed. The results obtained give us new evidence of the reality of the solar-climate link over a long-time scale. The wavelet analysis applied to paleoclimatic proxy data (Southern Oscillation Index, Pacific Decadal Oscillation, Atlantic multidecadal Oscillation, etc.) has revealed climatic oscillations with periods of 120 years that may reflect the corresponding oscillations of 120-years in different records of solar activity (cosmogenic isotopes, sunspot number and historic data).