



Climate variability during the last 2,000 years: an Eastern European cave ice core perspective

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To place the climate changes we witnessed over the past decades in a longer-term context, an understanding of the climate during the past two millennia is required. This can shed light on helping us decipher both natural and anthropogenic forces acting on the climate system. Here we present an ice core proxy-based reconstruction of air temperatures over the past 2000 years for east-central Europe, an area with poorly documented climatic studies. Our results suggest that over the past two millennia, the climate shifted back and forth between warmer (0-400 AD and 900-1300 AD) and colder (400-900 AD and 1300-1850 AD) periods, with a higher variability during the Little Ice Age and the Dark Ages Cold Period, than during the intervening warm intervals. The paper will discuss the possible role played by NAO variations and solar influence on the long-term trends and the short-lived climatic fluctuations caused by volcanic eruptions.