## Abstract Submitted for the MAR15 Meeting of The American Physical Society

A Test for Periodic and Quasi-Periodic Fluctuations in Past Climate Change Data JAMES OTTO, JAMES ROBERTS, University of North Texas — In this work the temperature fluctuations for a number of proxy data sets were analyzed to test for periodic and quasi-periodic fluctuations in climate changes in the past. The data sets analyzed indicate temperature functions which could be modeled using amplitude and frequency modulated sinusoidal waves. Data for the past 2000 years were tested and they show select periods of 11 years, 100 years, 300 years and 600 years. Longer term data (million years) indicate periods of 21000 and 41000 years as predicted by Milankovitch.

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