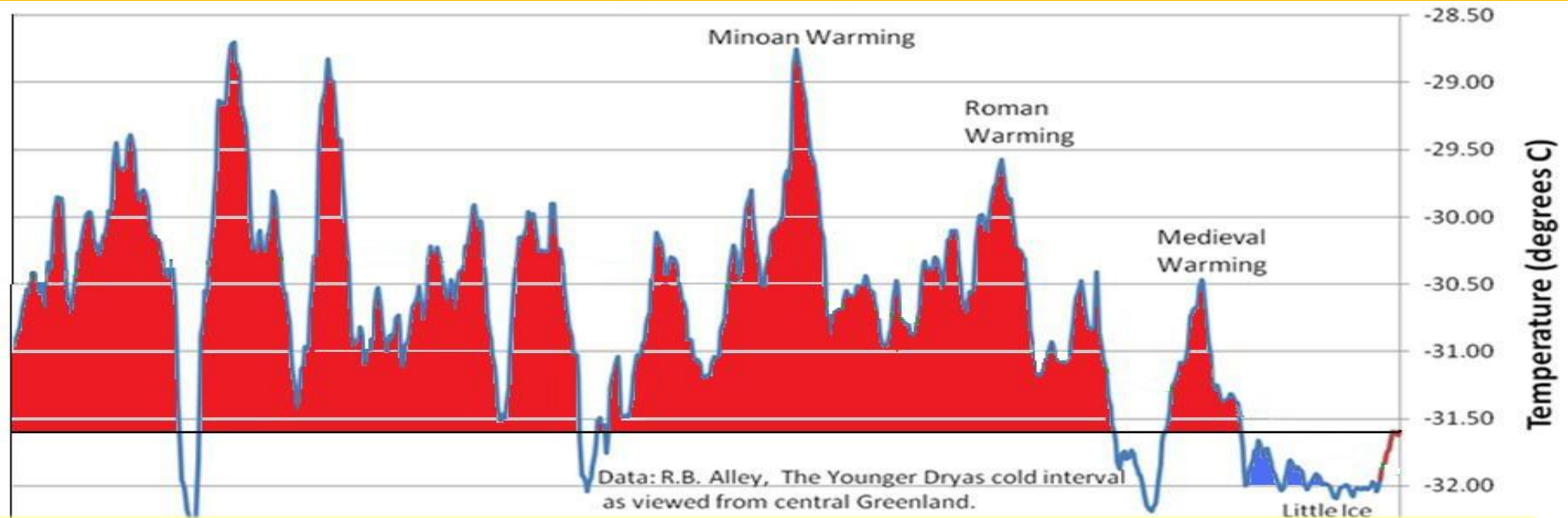


Doubting Catastrophic Anthropogenic Climate Change

“No Convincing Alternative Explanation”



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Cruces Atmospheric Sciences Forum

Executive Summary

Special Report

Many lines of evidence demonstrate that it is *extremely likely* that human influence has been the dominant cause of the observed warming since the mid-20th century. Over the last century, **there are no convincing alternative explanations supported by the extent of the observational evidence.** Solar output changes and internal natural variability can only contribute marginally to the observed changes in climate over the last century, and **there is no convincing evidence for natural cycles in the observational record that could explain the observed changes in climate.**

This claim by the National Climate Assessment is stunning in its lack of scholarship.

We provide Journal Articles from SCIENCE and the Swedish Society for Anthropology and Geography which clearly describe a 1000-1450 year climate cycle pioneered by the late Gerard Bond of Columbia University.

See for yourselves the references.

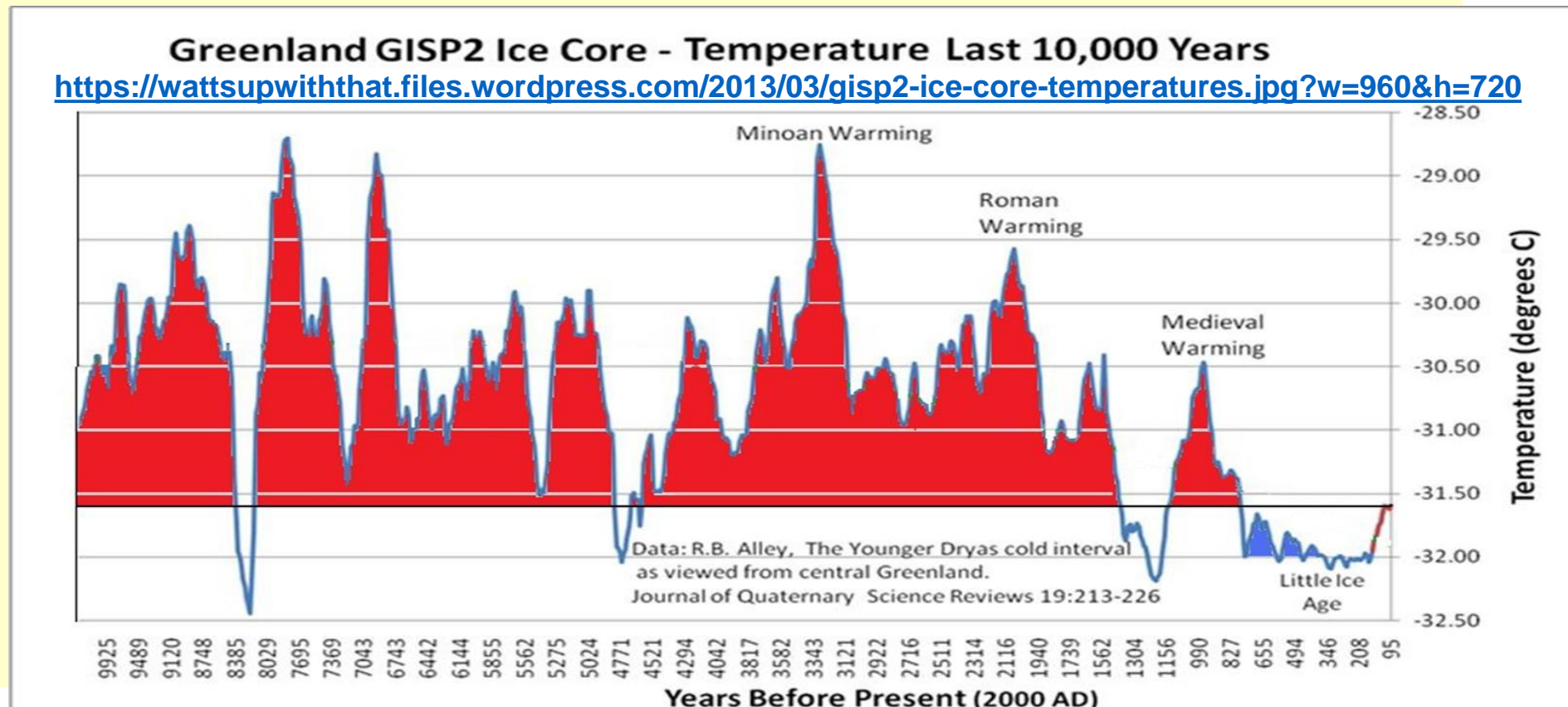
Ask yourselves, is this ignorance, failure to do a literature search, lack of scholarship or deliberate obfuscation?

How could they miss the Bond Cycles?

Some of the journal Articles are behind paywalls.

We provide links where these articles may be observed for free.

(After all, didn't our tax money already pay for this research?)



SHARE

RESEARCH ARTICLE

Persistent Solar Influence on North Atlantic Climate During the Holocene

Gerard Bond^{1,*}, Bernd Kromer², Juerg Beer³, Raimund Muscheler³, Michael N. Evans⁴, William Showers...

+ See all authors and affiliations

Science 07 Dec 2001:
Vol. 294, Issue 5549, pp. 2130-2136
DOI: 10.1126/science.1065680

Persistent Solar Influence on North Atlantic Climate During the Holocene

**Gerard Bond,^{1*} Bernd Kromer,² Juerg Beer,³
Raimund Muscheler,³ Michael N. Evans,⁴ William Showers,⁵
Sharon Hoffmann,¹ Rusty Lotti-Bond,¹ Irka Hajdas,⁶ Georges Bonani⁶**

Surface winds and surface ocean hydrography in the subpolar North Atlantic appear to have been influenced by variations in solar output through the entire Holocene. The evidence comes from a close correlation between inferred changes in production rates of the cosmogenic nuclides carbon-14 and beryllium-10 and centennial to millennial time scale changes in proxies of drift ice measured in deep-sea sediment cores. A solar forcing mechanism therefore may underlie at least the Holocene segment of the North Atlantic's "1500-year" cycle. The surface hydrographic changes may have affected production of North Atlantic Deep Water, potentially providing an additional mechanism for amplifying the solar signals and transmitting them globally.

A Pervasive Millennial-Scale Cycle in North Atlantic Holocene and Glacial Climates

Gerard Bond; William Showers; Maziet Cheseby; Rusty Lotti; et al **Science**; Nov 14, 1997; 278, 5341; Research Library

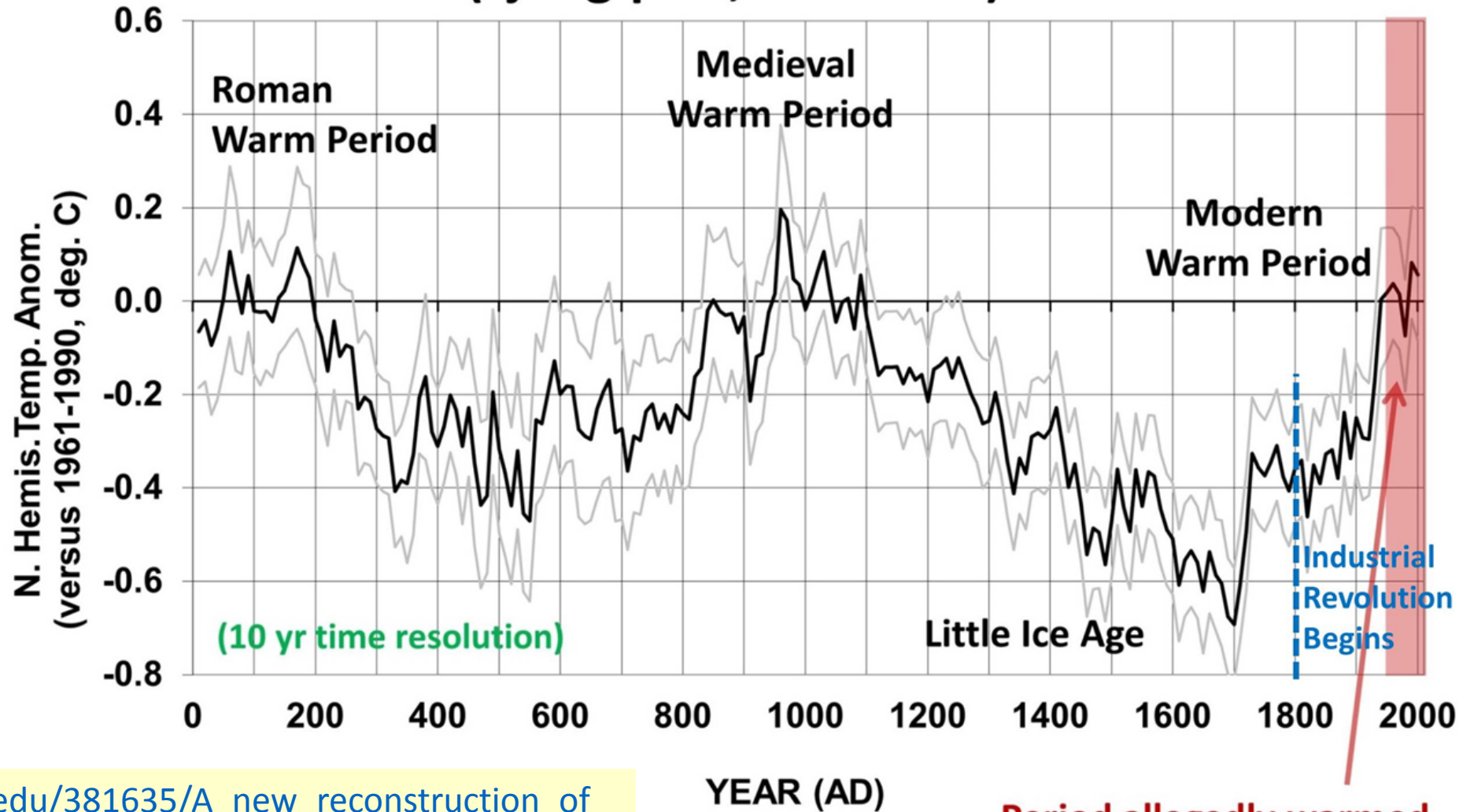
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Evidence from North Atlantic deep sea cores reveals that abrupt shifts punctuated what is conventionally thought to have been a relatively stable Holocene climate. During each of these episodes, cool, ice-bearing waters from north of Iceland were advected as far south as the latitude of Britain. At about the same times, the atmospheric circulation above Greenland changed abruptly. Pacing of the Holocene events and of abrupt climate shifts during the last glaciation are statistically the same; together, they make up a series of climate shifts with a cyclicity close to 1470 ± 500 years. The Holocene events, therefore, appear to be the most recent manifestation of a pervasive millennial-scale climate cycle operating independently of the glacial-interglacial climate state. Amplification of the cycle during the last glaciation may have been linked to the North Atlantic's thermohaline circulation.

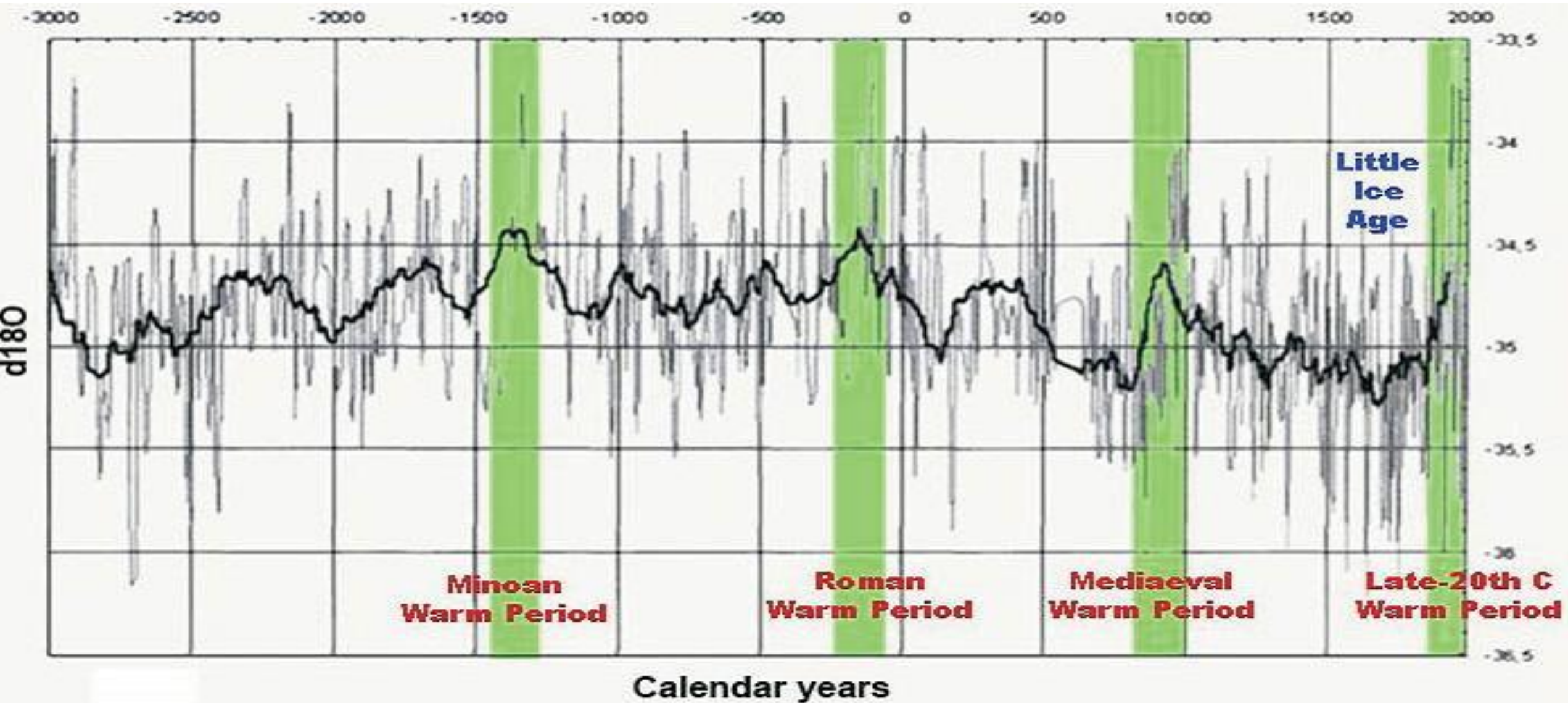
N. Hemisphere Temperature proxies (Ljungqvist, F.C. 2010)



**Period allegedly warmed
by human activities**

[https://www.academia.edu/381635/A_new_reconstruction_of_temperature_variability_in_the_extra-tropical Northern Hemisphere during the last two millennia](https://www.academia.edu/381635/A_new_reconstruction_of_temperature_variability_in_the_extra-tropical_Northern_Hemisphere_during_the_last_two_millennia)

http://www.greenworldtrust.org.uk/Science/Images/Main/Warm_periods.jpg



“Persistent Solar Influence on North Atlantic Climate during the Holocene,” Gerard Bond et al, Science, 07 Dec 2001:Vol. 294, Issue 5549, pp. 2130-2136DOI: 10.1126/science.1065680
http://www.essc.psu.edu/essc_web/seminars/spring2006/Mar1/Bond%20et%20al%202001.pdf

“A Pervasive Millennial-Scale Cycle in North Atlantic Holocene and Glacial Climates,” Gerard Bond et al, Science, 14 Nov 1997: Vol. 278, Issue 5341, pp. 1257-126 DOI: 10.1126/science.278.5341.1257
<http://ruby.fgcu.edu/courses/twimberley/EnviroPhilo/BondPap.pdf>

“A New Reconstruction of Temperature Variability in the extra-tropical Northern Hemisphere during the last Two Millennia,” Ljungqvist, F.C., Geografiska Annaler. Series A, Physical Geography Vol. 92, No. 3 (2010), pp. 339-351

The Ljungqvist graphic showing the ~1000- Bond Cycles, with annotations by Dr Roy Spencer:

<http://www.drroyspencer.com/2014/05/ill-see-your-97-percent-and-raise-you-3-percent/>

”... there is no convincing evidence for natural cycles in the observational record that could explain the observed changes in climate”

The stunning ignorance or attempted outright deception by Government “experts” in this statement, take your choice, are a marvel to behold.

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