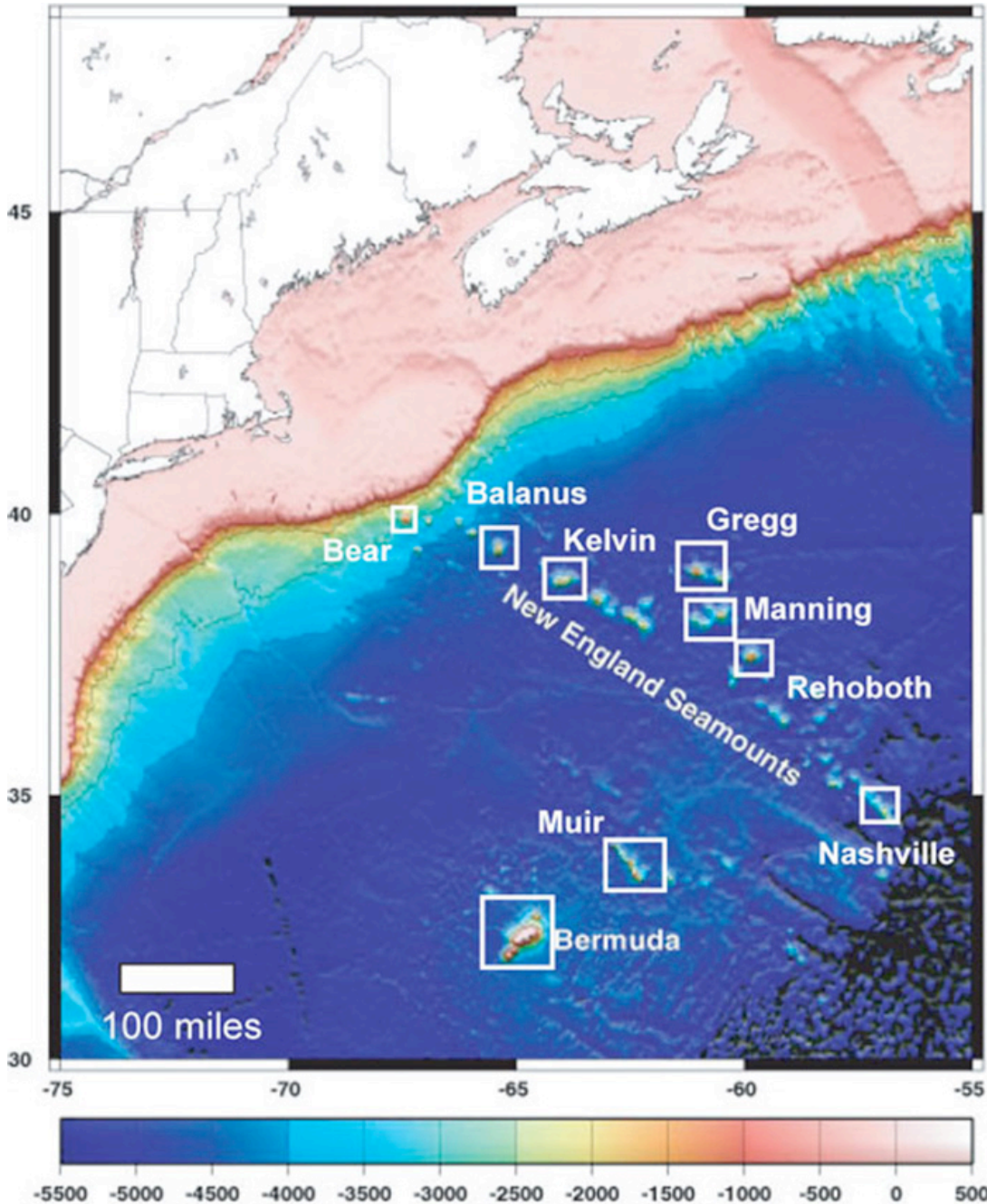


# Understanding the Mechanisms for Rapid Climate Change in the Past

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Global warming and rapid climate change are hot topics in today's newspapers, political debates and dinner table conversations. Fortunately, there is a geological context to these issues that can help us understand what the natural earth systems were like long before there was a discernable human impact on the atmospheres and oceans. While there is no good analog for our climatic future in past record, we will try to understand how past climate changes can help test our understanding of the basic mechanisms at work. I will discuss these issues in the context of my own group's quest to extract climate information from deep-sea corals and our use of deep submergence tools to find them in the first place.





Jess Adkins received his B.S in Chemistry from Haverford College in 1990. He then worked for two years as a lab technician at UC Santa Barbara where he first experienced the world of Oceanography and Climate research. Jess graduated with a PhD from the MIT-Woods Hole Oceanographic Institute joint program in Oceanography in 1998. He worked as a post-doc at Columbia University and the University of Minnesota until his arrival at Caltech in 2000.

In the last ten years his group has worked to understand the history of the earth's climate through measurements of ocean sediments and their interstitial fluids, deep-sea corals, and stalagmites from the tropics. The Adkins group also explores the mechanisms of coral skeleton formation and the trace metal content of the ocean.

Jess and his wife live in Altadena, CA with their two children aged 3 and 6.