THE DAILY CALLER

New Study Shows Past Research On Rising Ocean Temps Built On Faulty Science

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Ocean temperatures have risen only 0.1 degree Celsius over the last five decades, according to a landmark study some scientists argue could change the way researchers measure the ocean's temperature levels.

Each layer of water in the ocean has vastly different temperatures, so determining the average temperature is nearly impossible without glossing over important data. Researchers at the University of California, San Diego decided on a different model – they measured the ratio of noble gases in the atmosphere, which are in direct relation to the ocean's temperature.

Geoscientist Jeff Severinghaus, an academic at Scripps Institution of Oceanography, measured values of the noble gases argon, krypton, and xenon in air bubbles captured inside ice cores in Antarctica. Krypton and xenon are released into the atmosphere in known quantities as the ocean warms, according to the study, which was published Thursday in Nature Journal

"This method is a radically new way to measure change in total ocean heat," Severinghaus said in a post on the Scripps website, which has since been removed. "It takes advantage of the fact that the atmosphere is well-mixed, so a single measurement anywhere in the world can give you the answer."

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Much of the previously available information used to determine ocean temperatures during the past thousands of years has come from records produced by organisms that lived during those times and were subject to a complex array of external biological factors. The U.N. Intergovernmental Panel on Climate Change and other major organizations rely on these methods to make their determinations.

The ratio of these gases allows for a much more effective and exact calculation of average global ocean temperature, according to Severinghaus and his team of researchers at Scripps. They discovered that xenon and krypton are well preserved in ice cores and can, therefore, provide temperature information that scientists can use to study many other aspects of the earth's oceans.

“Our precision is about 0.2 ºC (0.4 ºF) now, and the warming of the past 50 years is only about 0.1 ºC,” he said, adding that advanced equipment can provide more precise measurements, allowing scientists to make better calculations going forward. His fellow researcher made similar remarks.

“The reason this study is so exciting is that previous methods of reconstructing ocean heat content have very large age uncertainties, [which] smooths out the more subtle features of the record,” said co-author Sarah Shackleton, a graduate student at Severinghaus’ lab.

“This is the first time that we’ve been able to see these subtle features in the record of the deglaciation,” she added. “This helps us better understand the processes that control changes in ocean heat content.”

Severinghaus’ findings are potentially very significant and “remarkably interesting,” Cato Institute scientist Patrick Michaels told The Daily Caller News Foundation. It tells academics that “we are living in a world that won’t warm at the same rate as those seen in the U.N. climate models”

Ocean temperature levels have caused a great deal of debate in recent decades. Many scientists believe hotter and cooler oceans could lead to dramatic shifts in not just global temperature levels but also hurricane frequency.

A study in 2015, for instance, predicted that the Earth is about to undergo a major climatic shift that could mean decades of cooler temperatures and fewer hurricanes hitting the U.S.

Scientists at the University of Southampton in the United Kingdom predicted at the time that a cooling of the Atlantic Ocean could cool global temperatures a half a degree Celsius and may offer a “brief respite from the persistent rise of global temperatures.”

This cooling phase in the Atlantic will influence “temperature, rainfall, drought and even the frequency of hurricanes in many regions of the world,” says Dr. Gerard McCarthy. The study’s authors based their results on ocean sensor arrays and 100 years of sea-level data.