

How is Today's Warming Different from the Past?

by Hollili Riebeek

of The New York Times

Annotated Bibliography NASA Article

by Aster Volta

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Earth Observatory website:

<https://earthobservatory.nasa.gov/features/GlobalWarming/page3.php>

Scientists have been able to determine Earth's past climate by using evidence found in the paleoclimate record. The study of Earth's climate variability trends reveals that although climate change has occurred in the past without the presence of humans, Earth is now warming at a faster rate than ever before. According to NASA, after Earth moved out of ice ages over the past million years, global average temperature increased from 4 to 7 degrees Celsius over 5,000 years. In contrast, over the past 100 years, the global temperature has increased by 0.7 Celsius, which is ten times faster than the average rate of global warming after an ice age. Based on climate models, it is predicted that Earth will warm from 2 to 6 degrees Celsius in the next 100 years. This rate is at least twenty times faster than the global warming that has happened at different times in the past 2,000,000 years.

NASA is a reputable government organization responsible for aeronautics and aerospace research. The author is an expert in this field since an important aspect of NASA's science focuses on better understanding the Earth through the program called Earth Observing System. This program is responsible for the artificial satellite missions and scientific instruments on Earth's orbit which are designed for long-term global observations of the land surface, biosphere, atmosphere, and oceans. Although this article was published in 2010, making this an outdated source, current scientific evidence not only supports but predicts faster than previously expected warming rates.

The claims made are facts supported by relevant, true and sufficient evidence. For example, the article includes two graphs, one showing how temperature has changed over the past 800,000 years and another one comparing the temperature from paleoclimate data to the current instrumental record. Finally, the logic was sound, and the author writes without bias.