Brace for the Polar Vortex; It May Be Visiting More Often

by Kendra Pierre-Louis

of The New York Times

NYT Summary and Response 1

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The January 29, 2019, NYT article by the Kendra Pierre-Louis, states scientist found a trend of winters becoming shorter and more extreme due to the polar vortex "flooding southward more frequently" (Pierre-Louis, 2019). They think this pattern is due to the polar vortex breaking down because of climate change. The earth is not warming at the same rate everywhere. The Artic is getting warmer twice as fast as the world average which causes melting of sea ice near Siberia during the summer. This extra melting makes a darker spot which absorbs more solar radiation due to its low albedo and becomes a persistent hot spot in terms of temperature differences between seasons. Also, other effects of climate change affect the jet stream. These two factors cause the "polar vortex to break down in mid- to late winter" (Pierre-Louis, 2019).

This article is one of a large string of publications warming about the effects of global warming. The governments of several countries that are being affected by the changing temperatures might be on the brink of a paradigm shift because policymakers are faced with accepting and taking action against global warming or eventually suffer the consequences. In this case, scientists agree that climate change is occurring, but different voices around the world need to come together to have an open discussion about possible solutions. Also, the general public must radically shift their opinions, based on scientific evidence, in order to combat the effects of rising global temperatures.

At the end of the article the author talks about two seemingly opposing seasonal outlooks, "such as NOAA's that look at the whole three-month period and others that may be breaking it down month by month" (Pierre-Louis, 2019). This is an important caveat because the general public is not aware that data analysis is complex thus might be confused by the different model projections or even weather. For example, a common tactic is for climate deniers to dwell on weather patterns over the course of a few days or even a year to make the case that climate change is not happening. The general public gets confused when it is cold outside, or might think that the polar vortex indicates there is no global warming. Weather patterns will always vary, causing temperatures to be higher or lower than average from time to time, depending on factors like El Niño and other ocean processes, cloud variability, volcanic activity, and other natural cycles. It's the long-term range (30-plus year cycles) that scientists look at to determine real changes in the climate system, and the changes scientists see are unmistakable. It is time for climate deniers to stop focusing on the day-to-day weather as an excuse for why the Earth isn't warming. This will only harm humans in the future (The Climate Reality Project, 2015).

Furthermore, statistics can be used to misrepresent data. A common climate denier tactic is focusing on a specific year in a data set, usually one that happens to be an outlier. A great example of this is the year 1998. Nineteen-ninety-eight was one of the hottest years on record thanks to an unusually strong El Niño. That means when a subset of climate data is pulled from 1998–2012 (as deniers often do), it is starting at a record high point. And when looking at the years

that follow – years that vary naturally in temperature with some falling well below the 1998 peak – the upward trend in temperatures is not as visually obvious (The Climate Reality Project, 2015). Thus informing the public about how statistics and the scientific method works is paramount in making educated decisions to stop the warming. If we are able to change our minds and agree climate change is happening, then we can take responsibility for our future as humans on earth.

References

Pierre-Louis, K. (2019, January 18). Brace for the Polar Vortex; It May Be Visiting More Often. *The New York Times*, p. A9. Retrieved from https://nyti.ms/2RTztHO

The Climate Reality Project. (2015). Three Ways Climate Deniers Pick Facts About Climate Change. Retrieved from https://www.climaterealityproject.org/