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Scientific Podcast Script – Volcanic Eruption

DRAFT

[volcanic explosion sound effect]

In 2018, Hawaii experienced the most destructive volcanic eruption in its history: the Kilauea volcano. It destroyed hundreds of homes, vaporized lakes, and caused extreme weather (NY Times). Since there are thousands of volcanoes all over the world, whether they be on the ocean floor or above ground, the question I pose is as simple as this: is there a possibility of another volcanic eruption that is just as destructive in the near future? I’m sure several people are thinking “well, yes, it’s possible”, but let’s dive deeper. Based on our current climate in the world, will there be one in the near future? Let’s see …

[Transition – fade out & fade in]

Before we discuss whether or not it’s possible, let’s listen to an explanation from BBC News explaining how volcanoes erupt.

[insert audio clip here]

Now that we know how they erupt, let’s talk about their effects …

* Once they erupt, volcanoes release a combination of particles and gases into the air. Ash and sulfur dioxide, for example, create a cooling effect on the Earth since they reflect sunlight away from the planet, according to an article from The Guardian.
* Most particles like the ones I mentioned, do cool the planet. And that cooling can last ranging from days to weeks or months to years – all depending on the make-up of the eruption.
* The volcanic aerosols and other particles released into the air cause heating in the stratosphere – a layer in the atmosphere – and cooling in the troposphere – the lowest region of the atmosphere. And tropospheric warming in the winter.

You’re probably wondering, “well, so what?” I’ll tell you …

* According to a research professor at Rutgers University, there is a pattern of winter warming following volcanic eruptions. That pattern is identical to that of an increase in winter surface temperature caused by global warming.

[insert \*ding\* noise] (representing an “aha moment”)

Based on this research, I’ve come to the conclusion that it IS possible that there could be another destructive volcanic eruption in the near future. Since this moment in time is just part of the pattern, who’s to say that the next eruption won’t be soon?

Shockingly, if there were a volcanic eruption this year, it wouldn’t be the craziest thing to happen in 2020. [volcanic explosion sound effect]