

Macro Roundup Article

Headline: [Long-term Surface Impact of Hunga Tonga-Hunga Ha'apai-like Stratospheric Water Vapor Injection](#)

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Author(s)	Martin Jucker, Chris Lucas and Deepashree Dutta
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Summary: Volcanic eruptions typically cool the Earth's surface by releasing aerosols which reflect sunlight. However, a recent eruption released a significant amount of water vapor-a strong greenhouse gas-into the stratosphere with unknown consequences. This study examines the aftermath of the eruption and reveals that surface temperatures across large regions of the world increased by over 1.5°C for several years, although some areas experience cooling close to 1°C. Additionally, the research suggests a potential connection between the eruption and sea surface temperatures in the tropical Pacific, which warrants further investigation. Related: [What This Year's 'Astonishing' Ocean Heat Means for the Planet and Warming Could Push the Atlantic Past a 'Tipping Point' This Century](#) and [The Rapid Loss Of Antarctic Sea Ice Brings Grim Scenarios Into View](#)

Primary Topic: Science

Topics: Academic paper, Global Warming, Science

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