

# Chelyabinsk Meteorite Plume Lingered for Months, NASA Says

By [The Moscow Times](#)

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The plume from a meteorite that exploded over Russia in February lingered in the atmosphere for months, U.S. space agency NASA reported in a new study, producing a phenomenon with overtones of climate-changing natural disasters or a “nuclear winter.”

The plume circumnavigated the Earth within four days of the meteorite hitting the Earth, forming a clearly-shaped belt. Its traces could be detected over the Northern Hemisphere for months after the impact, NASA said Wednesday, citing data from its Suomi NPP weather satellite.

The study helped reveal “a much better picture of what the aftermath on the atmosphere could be from potential future and even bigger events,” the video report about the study available on YouTube said.

A meteorite more than 18 meters in size and weighing 10,000 metric tons exploded over the

city of Chelyabinsk in the Urals on February 15. The blast was an equivalent to 440 kilotons of TNT — 27 times more powerful than the nuclear bomb that destroyed Nagasaki in 1945 — and left 1,200 injured, most by window glass shattered by the shockwave.

An asteroid 180 kilometers in diameter hitting the Earth is believed to have caused the extinction of the dinosaurs, by triggering climate change by generating aerosol particles that formed clouds, obstructing the sun for years.

Large-scale volcanic eruptions — such as the Mount Tambora explosion that caused a “Year Without Summer” in 1816 — have a similar effect. Scientists have also predicted that a large-scale nuclear war would also cause a similar “nuclear winter” phenomenon. No climatic impact, however, was reported from the Chelyabinsk meteorite, which exploded before it hit the ground.

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