

## Influence of solar wind on the climate ? a mechanism containing stratospheric ozone

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We recently have shown large correlation between solar parameters and temperature of atmospheric layers although its mechanism is still unknown. Here, we reexamine relevant mechanisms proposed so far, and show that a mechanism containing stratospheric ozone can give a reasonable explanation.

The solar wind particles finally enter the atmosphere, and produce NO<sub>x</sub> etc., and hence, decompose ozone molecules. The resultant ozone concentration decrease will reflect on the changes in the stratosphere heating due to UV absorption. This can influence the global climate/weather pattern through the changes in the stratosphere temperatures. The solar wind thus can influence the atmospheric circulations and temperatures.

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