

# Study finds Clean Air Act increased Atlanta rainfall

June 5 2013

---

A Georgia State University researcher is the first to show that the Clean Air Act of 1970 caused a rebound in rainfall for a U.S. city.

Jeremy Diem, an associate professor in the Department of Geosciences, analyzed summer [rainfall data](#) from nine [weather stations](#) in the Atlanta metropolitan area from 1948 to 2009. He discovered that precipitation increased markedly in the late 1970s as pollution decreased following passage of the Clean Air Act of 1970.

Diem also noted that pollution in the 1950s and 1960s caused rainfall to drop in the Atlanta area.

Previous studies have found a general link between [air pollution](#) and rainfall, with higher concentrations of particulates in the air suppressing rainfall.

Diem's research shows, for the first time, that a substantial decrease in pollution in a specific metropolitan area caused an increase in rainfall, Diem said, noting the findings are likely to apply to other urban areas across the United States that saw similar pollution decreases.

"Really, the only plausible reason for this increased rainfall is the reduced pollution due to the passage of the [Clean Air Act](#)," Diem said. "This probably happened in many cities other than Atlanta."

The study may also have implications for other urban areas around the

world that may be experiencing drop-offs in rainfall due to pollution, Diem said.

To view Diem's study, published in the journal *Atmospheric Environment*, visit: [www.sciencedirect.com/science/ ...  
ii/S1352231013002951](http://www.sciencedirect.com/science/.../S1352231013002951)

Provided by Georgia State University

Citation: Study finds Clean Air Act increased Atlanta rainfall (2013, June 5) retrieved 26 April 2024 from <https://phys.org/news/2013-06-air-atlanta-rainfall.html>

|  |
|--|
| <p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p> |
|--|