



## **Understanding and preparing for the impact of climate change on air quality**

S. Hunt

American Association for the Advancement of Science, Science and Technology Policy Fellow, at National Center for Environmental Research, United States Environmental Protection Agency, Washington DC, USA ([hunt.sherri@epa.gov](mailto:hunt.sherri@epa.gov) / Fax: 202-233-0677 / Phone: 202-343-9644)

In order to better understand the significant changes in the earth's climate, which have occurred over the past century, the Climate Change Science Program in the United States was formed to understand the impacts of climate change and variability and to support policies to adapt to and mitigate these changes. One of the more significant consequences of climate change is its potential impact on air quality, as the changing climate may increase the difficulty of meeting the National Ambient Air Quality Standards (NAAQS). Consequently, as the US Environmental Protection Agency's mission involves protecting human health and air quality, the National Center for Environmental Research and the Global Change Program have recently supported research to elucidate the impacts of climate change on regional air quality with a particular emphasis on ozone and particulate matter.

This presentation will give an early review of recent research aimed at investigating how climate change impacts regional air quality in the US. In particular, some of the greatest challenges and advances related to future air quality modeling will be presented. Additionally, the relative importance of meteorology, biogenic and anthropogenic emissions, and changes in land-use and technology to future air quality will be also addressed.