

## 5.055 Long-term trends of global tropospheric column ozone.

Early Career Scientist

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## Abstract:

Tropospheric ozone is a greenhouse gas and pollutant detrimental to human health and crop and ecosystem productivity. Since 1990 a large portion of the emissions of anthropogenic precursor species that react in the atmosphere to produce ozone have shifted from industrialized North America and Europe to Asia. This rapid shift, coupled with limited ozone monitoring globally and in these nations in particular, has left scientists with limited capability to answer the most basic questions: Is ozone continuing to decline in nations with strong emission controls? To what extent is ozone increasing in the developing world? In response to these questions this presentation will show results from IGAC's Tropospheric Ozone Assessment Report, and will present the first multi-instrument comparison of long-term tropospheric column ozone trends using co-located observations from satellites, FTIR and Umkehr. The study is aimed at evaluating the chemistry-climate models participating in the CCMI and TF-HTAP experiments.