

# The Tropospheric Ozone Assessment Report (TOAR), Phase II

Helen M. Worden

NCAR/ACOM, USA

## Author list (excluding presenting author)

Martin G Schultz, Lisa Emberson, Jacek Kaminski, Yugo Kanaya, Keding Lu, Raeesa Moola, Gabriele Pfister, Erika von Schneidemesser, Rodrigo J. Seguel, Baerbel Sinha, J Jason West, Owen Cooper

## Abstract

The Tropospheric Ozone Assessment Report (TOAR) is a highly successful IGAC activity with a mission to provide the research community with an up-to-date scientific assessment of tropospheric ozone's global distribution and trends from the surface to the tropopause. The first phase of TOAR (2014-2019) produced an open-access database with easily accessible web services to evaluate ozone metrics at all available monitoring sites worldwide, affording scientists the first observation-based view of the global surface ozone distribution. The first assessment consisted of 10 publications in *Elementa* that use the surface data, peer-reviewed literature and new analyses. TOAR is now in its second phase (TOAR-II, 2020-2025), with active participation from over 150 scientists from 31 countries. Through the formation of 16 working groups, TOAR-II is producing an updated assessment of tropospheric ozone's global distribution and trends, along with distributions and trends of ozone precursor emissions, and aims to quantify the impacts of tropospheric ozone on climate, human health and vegetation (e.g., crops). We will present the current status of the TOAR-II data and the scope of publications expected for a TOAR Community Special Issue (5 published, 16 in discussion and counting), followed by the topics and plans for the assessment papers that will synthesize the published results.

## Early Career Scientist

NO, I am not an early career scientist.

## IGAC Activities

TOAR: Tropospheric Ozone Assessment Report