Purpose: TOAR-II Kick-Off is the first TOAR-II workshop, designed to gather the community and develop the working groups (WGs) that will produce the papers for the TOAR-II Community Special Issue, which constitutes the first step of the second Tropospheric Ozone Assessment, as well as new datasets for the assessment of tropospheric ozone and its impact on climate, health and vegetation.

Dates and times: The workshop will span a total of 4 days, 2 hours max. per day to allow for wide international participation.

Day 1: Monday, January 25, 13:00-15:00 UTC
Day 2: Wednesday, January 27, 13:00-15:00 UTC
Day 3: Thursday, January 28, 13:00-15:00 UTC
Day 4: Wednesday, February 3, 13:00-14:30 UTC

Registration:

Please register at https://igacproject.org/activities/TOAR/TOAR-II/register before Sunday, January 17th, 23:59 UTC. We ask you to provide a brief summary of your research interests and a picture to facilitate community interaction. This information will only be made available to workshop participants through the end of the workshop.

Meeting platform:

Will be announced in January 2021. Links for participation in the virtual meeting will be distributed to registered participants.

For general information on TOAR-II, please visit our webpage.
Agenda (all times are UTC):

**Day 1 (Monday, January 25): Overview and input**

1300 - 1320 Welcome, Introduction to TOAR and the TOAR-II Kick-Off workshop (TOAR-II chairs)

1320 - 1340 Overview of existing Focus Working Groups (Helen Worden and WG leads):

2 minute pitches with 1 slide each. For an overview on working groups that have been approved by the TOAR-II Steering Committee (SC), please see [https://igacproject.org/activities/TOAR/TOAR-II](https://igacproject.org/activities/TOAR/TOAR-II)

1340-1410 Breakout groups to discuss missing topics and ideas for additional WGs:

Meeting participants will be randomly assigned to breakout groups. A rapporteur will be appointed to each breakout group, who is responsible for collecting the information from the discussions and preparing a short summary.

1410-1420 Break

1420-1450 Plenary session: reports from breakout group rapporteurs and general discussion

1450-1500 Wrap-up, next steps

The TOAR-II SC will meet on the following day to review the breakout group reports, refine planning of breakout groups and identify additional topics for discussions on workshop Days 2 and 3.

**Day 2 (Wednesday, January 27):**

1300-1315 Plenary session with brief recap from Day 1 and outline of Day 2

This includes a summary of the SC deliberations from Tuesday, January 26.

1315-1320 Set-up and switch over to breakout groups

1320-1410 WG breakouts

Each WG that has been approved by the TOAR-II SC (or is close to approval) will be given a separate breakout room to introduce the WG concept to a wider audience and begin specific planning of WG activities. Identify open questions concerning the scope and activities of the WG, publication plans and relation to other TOAR-II WGs.

1410-1420 Break

1420-1500 TOAR data infrastructure user forum

This session will consist of a very brief recap of the existing and planned services around the TOAR database and a Q&A session on TOAR data services. We seek, 1) community input regarding further improvements to the TOAR data infrastructure; and 2) requests for additional data products and services to be developed during TOAR-II. The TOAR data infrastructure user forum will be repeated annually.
**Day 3 (Thursday, January 28):**

*1300-1305* Plenary welcome session

*1305-1340* Presentation on statistical methods *(20 min +15 min discussion time)*

*1340-1345* Introduction to the Day 3 breakout groups

*1345-1350* Set-up and switch over to breakout groups

*1350-1410* Cross-cutting breakout groups

The idea is to foster cross-fertilization among WGs, discuss common methods and statistics, talk about data products and versioning of datasets, which are used in TOAR-II analyses but are not part of the TOAR database (e.g. free troposphere & satellite observations), and develop a broader picture of how the WGs fit together. Rapporteurs will be assigned to each breakout group who will prepare reports for the SC by Friday 1200 UTC.

*1410-1420* Break

*1420-1440* Plenary

Short feedback from breakout rapporteurs (2 minutes per WG; highlights only - no slides), short pitches (2 min each) on new working group ideas, which can be further discussed in the following breakout sessions. The TOAR-II SC will decide on the breakout sessions based on the Day 1 discussions and additional input from the Day 2 meeting.

*1440-1500* Ice breaker meetings for new working groups *(max 6 breakout rooms)*

Opportunity for participants to engage in the formation of additional WGs, first steps towards preparation of WG proposals, consultation with SC members about WG strategy and other aspects. Please review the WG procedures and WG guideline documents on https://igacproject.org/activities/TOAR/TOAR-II before planning a new TOAR-II WG.

*The TOAR-II SC will meet on Monday, Feb 1st to review the first three workshop days and prepare a meeting summary as well as additional discussion points.*

**Day 4 (Wednesday, February 3):**

*1300-1330* Summary of meeting Days 1-3 including open issues and action items *(TOAR-II chairs)*

*1330-1420* Plenary discussions

A structure for these discussions will be developed during the SC meeting on Monday, February 1

*1420-1430* Wrap-up, TOAR-II timeline, next steps and forthcoming meetings *(TOAR-II chairs)*