

HEGIFTOM Kick-Off Meeting

(Final Agenda)

When? Virtual 22, 25, 29 March 2021: 16:00-18:00 UTC

Zoom Meeting: <https://us02web.zoom.us/j/9217593451>

Documents will be shared at

<https://drive.google.com/drive/folders/1UfDkBevHgssWDt8-M2vg47HrBNE9tNN0?usp=sharing>

Organizers: Roeland Van Malderen and Herman Smit

Objectives:

- A. Presentation and Discussion of Work plan with HEGIFTOM-participants and identifying who wants to actively contribute.
- B. Identifying and Establishing collaborations within TOAR-II and external when necessary.

Outline Agenda:

Day#1 (22/03): Workplan Internal consistency, incl. uncertainties, super sites

- **Introduction** (*Herman Smit, FZJ, 10'*)
- Each platform representative (5'+5') present the status and discuss the methodology to follow w.r.t.:
 - 1) Harmonization within each ground-based technique platform
 - 2) Uncertainties: Random-Systematic
 - 3) Data Flagging
 - ✓ **IAGOS** (*Romain Blot, LAT*)
 - ✓ **Ozonesondes** (*Roeland Van Malderen, RMI*)
 - ✓ **FTIR** (*Corinne Vigouroux, BIRA*)
 - ✓ **Brewer/Dobson Umkehr** (*Irina Petropavlovskikh, NOAA/GML*)
 - ✓ **LIDAR** (*Thierry Leblanc, NASA/JPL*)
 - ✓ **MAX-DOAS** (*Michel Van Roozendael, BIRA*)
 - ✓ **Pandora** (*Alexander Cede, Luftblick*)
- **Guidelines in estimating and reporting uncertainties from the TUNER (Towards Unified Error Reporting) activity**, *Thomas Clarmann (KIT, 10'+5')*
- **Discussion** (25')

Day#2 (25/03): Representativeness (Time and Space: horizontal-vertical)

When inter-comparing (co-located) ground-based free tropospheric ozone retrievals, information about the temporal and spatial (both in the vertical and the horizontal) representativeness is substantial. For instance, are the same tropospheric ozone columns compared? Can e.g. the satellite ozone retrievals and models provide such information?

- **Introduction** (*Herman Smit/Roeland Van Malderen, 10'*)
- **Cross-cutting topics between HEGIFTOM and the TOAR-II Satellite Ozone Focus Working Group**, *Paul Palmer (Univ. of Edinburgh, 10'+5')*

- **Integrated use of satellite and network data to derive local to global distributions and trends**, *Daan Hubert, Arno Keppens, Jean-Christopher Lambert, Corinne Vigouroux, Deniz Poyraz, Roeland Van Malderen, Catherine Wespes, Pierre Coheur* (BIRA+RMI+ULB, 10'+5')
- **Assessment of measurement representativeness by chemical reanalyses and TOAR-II chemical reanalysis Focus Working Group plan**, *Kazuyuki Miyazaki* (NASA/JPL, 10'+5')
- **Possible interactions between HEGIFTOM and the TOAR-II Modelling Focus Working Group**, *David Plummer* (Environment & Climate Change Canada, 10'+5')
- **Possible interactions between HEGIFTOM and SPARC OCTAV-UTLS**, *Luis Millan* (NASA/JPL, 10'+5')
- **Discussion** (35')

Day#3 (29/03): Intercomparison and exploitation of the ground-based free-tropospheric ozone datasets

The last day will be devoted to the exploitation of the internally and externally consistent free-tropospheric ozone datasets from the ground-based instruments (Year 3) and will wrap up the discussions held during the first two days. Also time for getting more practical in the work plan!

- 1) Exploitation of the data (Year 3, e.g. trends etc.)
 - **Recent developments on estimating trends in non-homogeneously distributed networks and vertical profile data**, *Kai-Lan Chang* (NOAA, 10'+5')
 - **Discussion** (max 15')
- 2) Summary on Internal Consistency (incl. discussion, max 30')
- 3) Summary on External Consistency & Representativeness (incl. discussion, max 30')
- 4) General Discussion + Outlook (max 10')