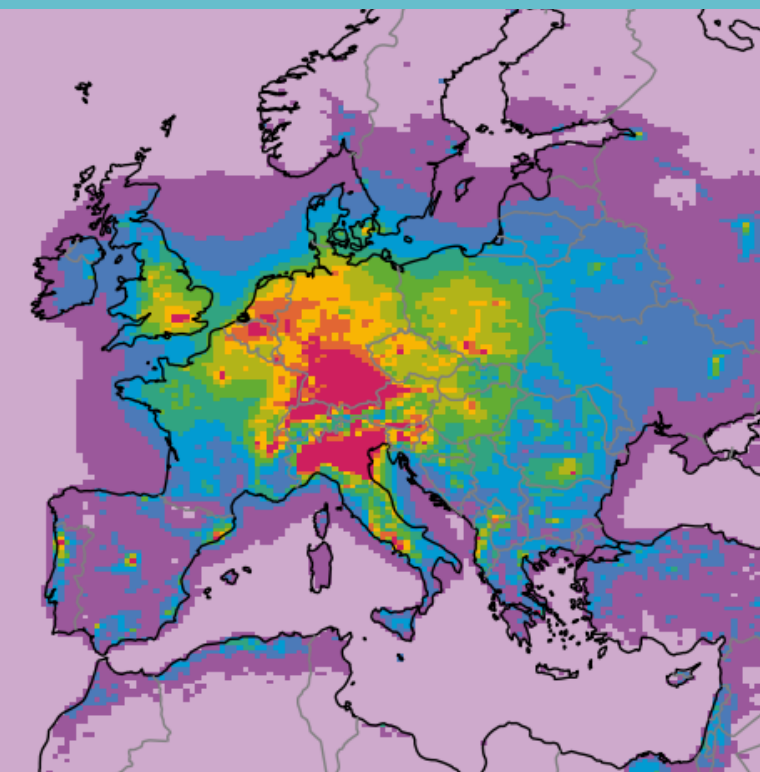


LOTOS - EUROS workshop

Air quality modeling
and emissions

29 & 30 January 2025
Utrecht



Wednesday 29 January

Venue: Aristo Utrecht Hoog Catharijne

8:30 - 9:00 Registration and coffee

Welcome and Introduction

9:00 - 9:15 Welcome TNO
Ioanna Skoulidou (TNO)



9:15 - 9:45 LOTOS-EUROS: the big picture
Keynote speaker
Astrid Manders (TNO)



Emission input aspects

9:45 - 10:15 Recent developments in emission inventories: emerging pollutants & sources, plus specific improvements to the spatial distribution
Keynote speaker
Jeroen Kuenen (TNO)



10:15 - 10:35 Improvement of emission time profiles and their impact
Jerry Ge (TNO)

10:35 - 10:55 Coffee break

Reactive Nitrogen Modelling

10:55 - 11:25 Progress in modelling nitrogen deposition for the Netherlands and Germany
Keynote speaker
Martijn Schaap (TNO)



11:25 - 11:45 Adapting the LOTOS-EUROS deposition module for improved performance in Mediterranean climates
Andre Barreirinha (UA)

11:45 - 12:05 High-Resolution Nitrogen Deposition Modelling for Ecological Conservation: Integrating DALES and LOTOS-EUROS for the Veluwe
Mahmoud Ahmed (TU Delft)

12:05 - 13:00 Lunch break

Data Assimilation and Machine Learning

13:00 - 13:30 Data Assimilation with the LOTOS-EUROS Local Ensemble Transform Kalman Filter (LETKF)
Keynote speaker
Tyler Wizenberg (TNO)



13:30 - 13:50 AI-based air quality Forecasting model learned from LOTOS-EUROS
Jimmy Pang (TU Delft)

13:50 - 14:10 A local-scale Bayesian inversion for atmospheric ammonia emission
Simeng Li (CML)

14:10 - 14:30 Optimizing NH₃ emissions over China by assimilating CrIS satellite observations into LOTOS-EUROS China version
Jianan Che (WUR)

14:30 - 15:00 Coffee break

Use of Earth Observations

15:00 - 15:20 Using LOTOS-EUROS in an end-to-end environment for satellite instrument designs
[Keynote speaker](#)
[Enrico Dammers \(TNO\)](#)



15:20 - 15:40 CAMS NCP for the Netherlands
[John Douros \(KNMI\)](#)

15:40 - 16:00 Tropospheric Ozone in the Po Valley: Assessment Using Space-Borne Observations, In-Situ Measurements, and LOTOS-EUROS Simulations
[Stiliani Musollari \(AUTH\)](#)

16:00 - 16:20 Meta-analysis of NH₃ exchange models: validation across diverse measurement datasets
[Tycho Jongenelen \(CML\)](#)

16:20 - 17:30 **Interactive session and wrap-up**

18:30 **Dinner**

Thursday 30 January

Venue: TNO Utrecht Auditorium

Source apportionment for policy support

9:30 - 9:50 Model and method intercomparisons for source apportionment
[Keynote speaker](#)
[Jessie Zhang \(TNO\)](#)



9:50 - 10:10 Organic aerosol modeling and source apportionment with LOTOS-EUROS
[Ruud Janssen \(TNO\)](#)

New Developments LOTOS-EUROS

10:10 - 10:40 Developments in LOTOS-EUROS v3
[Keynote speaker](#)
[Hannah Jonas \(TNO\)](#)



10:40 - 11:00 WRF vs ECMWF: Which meteorological driver is the most adequate for complex terrain?
[Michael Russo \(UA\)](#)

11:00 - 11:20 First steps in determining critical loads in Wallonia via LOTOS-EUROS
[Fabian Lenartz \(ISSEP\)](#)

11:20 - 12:15 **Discussion in break-out sessions**

12:15 - 12:30 **Wrap-up and closure**

Register?

Sign up for the event by clicking this [hyperlink](#).

Locations

Wednesday 29 January

Aristo Meeting Plaza
Hoog Catharijne
Godebaldkwartier 357
NL-3511 DT Utrecht

Thursday 30 January

TNO Utrecht
Auditorium
Princetonlaan 6-8
NL-3584 CB Utrecht