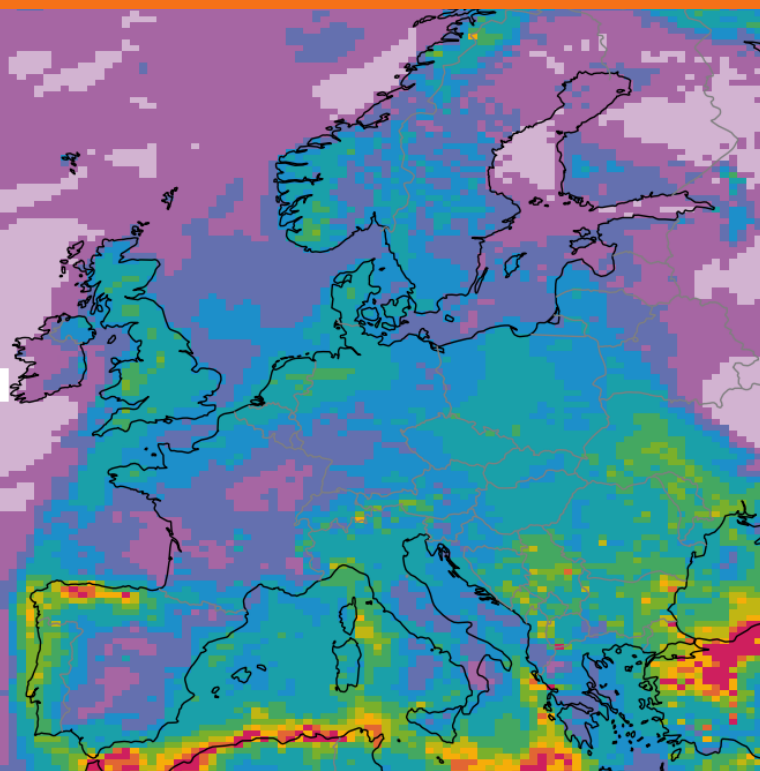


LOTOS - EUROS workshop

Air quality modeling
and emissions

28 & 29 January 2026
Utrecht



Wednesday 28 January

Venue: Aristo Meeting Plaza Utrecht

8:30 - 9:00 Registration and coffee

Welcome to LOTOS-EUROS Workshop 2026

9:00 - 9:15 Welcome
Host Tyler Wizenberg (TNO)



9:15 - 9:45 Model developments:
applications and ambitions
Opening speaker
Astrid Manders (TNO)



LOTOS-EUROS new developments

9:45 - 10:05 LOTOS EUROS Lite, making work easy:
A new tool for students, civil servants
or scientist active in other fields
Bas Henzing (TNO)

10:05 - 10:25 European scale emission inventories
for LOTOS-EUROS and work towards
higher resolution over specific areas
Jeroen Kuenen (TNO)

10:25 - 10:55 Coffee break

Source apportionment & UFP

10:55 - 11:15 Alternative fuel uptake in shipping and
air quality in present and 2030
Opening speaker
Jessie Zhang (TNO)



11:15 - 11:35 Modelling Ultrafine Particle in
LOTOS-EUROS
Quinten Bohte (TNO)

11:35 - 11:55 Source Apportionment in Protected
Nature Area's in The Netherlands
Hannah Jonas (TNO)

11:55 - 13:00 Lunch break

Reactive Nitrogen modelling and deposition

13:00 - 13:30 Model intercomparison for nitrogen
deposition in the Netherlands and recent
developments in LOTOS-EUROS
Opening speaker
Martijn Schaap (TNO)



13:30 - 13:50 Improving deposition modelling in
the Mediterranean using remote
sensing vegetation parameters
André Barreirinha
(University of Aveiro | UAVR)

13:50 - 14:10 Validation of NH3 exchange models
across multiple ecosystems
Tycho Jongenelen
(Leiden University | RIVM | TNO)

14:10 - 14:30 Dynamic Land-Use Parametrisation
and Its Impact on Ammonia
Deposition in LOTOS-EUROS
Mahmoud Ahmed (TU Delft)

14:30 - 14:50 Evaluation of Simulated Vertical NO2
Profiles over the North Sea Using
LOTOS-EUROS with Two Meteorological
Forcings (HARMONIE and ECMWF) with
Aircraft NO2 profiles
Andrés Yarce Botero
(Barcelona Supercomputing Center)

14:10 - 14:30 On the added value of manure transport data for the development of a dynamic agricultural emission timer
[Matteo Urzì \(FU Berlin\)](#)

15:10 - 15:40 Break

LOTOS-EUROS applications and Observations

15:40 - 16:00 The 2023 Measuring NH₃ with Remote Sensing (MARS) Campaign at Cabauw in the Netherlands
[Opening speaker](#)
[Enrico Dammers \(TNO\)](#)



16:00 - 16:20 LOTOS EUROS HCHO simulations against ground- and satellite-based remote sensing observations
[MariLiza Koukoulis \(Laboratory of Atmospheric Physics, Aristotle University of Thessaloniki, Greece\)](#)

16:20 - 16:40 Modelling the impact of harvesting activities on particulate matter levels in Germany
[Ilona Jäkel \(FU Berlin\)](#)

16:40 - 17:00 WRF vs ECMWF Part II: In depth analysis and comparison of different meteorological drivers
[Michael Russo \(University of Aveiro, Portugal\)](#)

17:00 - 17:20 OPALE: Optical Properties of Aerosols in LOTOS-EUROS
[Kaylee Elliott \(VU and TNO\)](#)

17:20 - 17:45 Wrap-up

18:30 Dinner

Thursday 29 January

Venue: TNO Utrecht Auditorium

9:00 - 9:10 Quick introduction

Data assimilation and Machine learning

9:10 - 9:30 Inverse modelling of N₂O emissions
[Opening speaker](#)
[Arjo Segers \(TNO\)](#)



9:30 - 9:50 Aerosol Emission Estimation by Assimilating Ground and Satellite Observations over Europe
[Babitha George \(Vrije Universiteit Amsterdam\)](#)

9:50 - 10:10 Using an offline ensemble Kalman filter with in situ and satellite measurements to estimate ammonia emissions in the Netherlands
[Simeng Li \(Leiden University & TNO\)](#)

10:10 - 10:30 Zeeman: Surrogate Model Driven Data Assimilation for Atmospheric Chemistry
[Jimmy Pang \(TU Delft\)](#)

10:30 - 10:45 Coffee break

LOTOS-EUROS and local modelling

10:45 - 11:05 Modeling high resolution ammonia concentrations from animal houses using a local plume model
[Opening speaker](#) [Jerry Ge \(TNO\)](#)



11:05 - 11:25 Offline coupling of LOTOS-EUROS and DALES for atmospheric composition tracers in open-boundary setups
[Arseniy Doyennel \(IHS\)](#)

11:25 - 12:10 Discussion in break-out sessions

12:10 - 12:30 Wrap-up and closure

Register?

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

Locations

Wednesday 28 January

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

Thursday 29 January

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