

**23rd International Conference on
Harmonisation within Atmospheric
Dispersion Modelling
for Regulatory Purposes**

15-19 September 2025, Hamburg, Germany



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First Announcement

**23rd International Conference on
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Organized by

**University of Hamburg
Helmholtz-Zentrum Hereon, Geesthacht
Germany**

Audience

The 23rd International conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes (Harmo23) is aimed towards model developers, model users, environmental protection agencies and legislation experts. What distinguishes this conference from many others is its focus on common tools and methodologies.

Focus of the conference

The series of international conferences on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes is concerned with the improvement of “modelling culture” both in Europe and at an international level.

Dispersion modelling is widely used for regulatory purposes, both for permits and for assessments, but there is a lack of sufficient mechanisms to make modelling processes transparent and ensure trust in modelling results.

There are many open questions and aspects of this, such as: Are the models scientifically sound for the purpose they are used? Are the models validated against observations or physical experiments? Are the models properly used by the experts? Are the users familiar with good practices and do they avoid bad practices? Are model developments sufficiently quality assured? Are reference problems established? Is proper exchange of experiences ensured? Work on these questions is needed in order to assess the air quality impacts on society and nature, on human health, biodiversity and climate.

Such issues that are not specific for one particular model, but common to several, are in focus at the 20th International conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes.

The series of Harmonisation conferences started in 1991 (see www.harmo.org) and is a natural forum for discussing modelling issues related to the European Union air quality directives. European networks such as the FAIRMODE network and COST Actions can use the conference in order to expose their work to a wider audience.

The Harmonisation conferences provide the ground where model users and decision-makers can bring their requirements to the attention of scientists and search together for better regulatory tools and indicators for the diverse impacts of air quality.

Find further details:

<http://www.harmo.org/harmo23>

A dedicated conference website will be available soon.

Call for abstracts

Short abstracts (less than 350 words) for oral or poster presentations will be collected via the conference website until **end of April 2025**.

The **underlying driver** for all sessions is **modelling**, understood in general and wide terms, i.e. as modelling system, that includes all components (meteorology, chemistry, dispersion, emissions...) as well as related datasets for evaluation.

Harmonisation of modelling approaches encompasses the following activities (not exhaustive): inter-comparison exercises, common evaluation protocols, shared datasets for model evaluation...

Starting from these two key items, the HARMO Conferences build around the following ten key topics.

Topics 1 to 6 address harmonisation of modelling approaches in the following fields:

- T1: Approaches to model evaluation and quality assurance
- T2: Regional / long-range scale modelling
- T3: Urban Scale and Street Canyon Modelling
- T4: Health and exposure assessments
- T5: Inverse modelling, source identification and apportionment
- T6: Dispersion modelling and exposure to accidental releases

Topics 7 and 8 focus on the support to the development of regulatory models:

- T7: Air pollution management and decision support systems
- T8: Support to EU legislation on air quality modelling

Topics 9 and 10 are dedicated to new advancements and reviews of “golden papers” of the past

- T9: Theoretical studies on atmospheric processes for dispersion modelling
- T10: Highlights of past works, which should not be forgotten

Proposed special Sessions in Harmo23

- SS1: Emerging fields in air quality modelling
- SS2: Results from MODISAFE Project

The basic criteria when selecting papers for oral presentations is how well they fit into the philosophy of developing an improved modelling culture where modellers as well as regulators and users will efficiently use each other's experience. When submitting abstracts authors are requested to motivate how their paper relates to the underlying main theme of the conference: *Harmonisation within modelling* in a broad sense (see abstract submission form).

Special sessions:

Additional special sessions may be arranged on model evaluation exercises and other topics within the scope of the conference.

If you have suggestions for special sessions, please contact the organisers as soon as possible.

Important Dates

Short abstracts (less than 350 words) should be submitted by **April 30th, 2025**

Confirmation for acceptance of contributions will be made by **May 31st, 2025**

Five-page extended abstracts should be submitted by **August 15th, 2025**.

Conference registration: **September 15, 2025**

Start of scientific program: **September 16, 2025**.

Location

The Conference will take place in a building hosting most of the Earth System Sciences at Hamburg University. Lecture halls, equipped with audio and video will be provided for sessions and discussion. The venue is located near the city centre of Hamburg and easy to reach by public transportation. Further information on the city of Hamburg and its sights can be found for example on <https://www.hamburg.com/visitors/sights>

Organized by

The University of Hamburg (UHH) is the largest institution for education and research in northern Germany. As one of the country's largest universities, UHH offers a range of degree programs and research opportunities. The University is hosting numerous interdisciplinary projects in a broad range of fields and an extensive partner network of leading regional, national, and international higher education and research institutions.

Earth System Science in general and atmospheric and climate research have a long tradition at UHH and the Meteorological Institute remains to be a central place for research and development in atmospheric and climate modelling. A number of well-known meso- and micro-scale atmospheric flow and transport models have been developed at the Technical Meteorology division of the Meteorological Institute and both, the Mesoscale/Microscale Modelling Group and the Environmental Wind Tunnel Lab feature prominently in the research and education portfolio of the Institute.