Title	**International** **Atmospheric Transport Modelling** **Workshop 2026**
Objectives	The workshop is targeted at scientific experts, NDC technical staff and analysts, and prospective scholars who seek a common goal in building a capacity for scientific knowledge exchange to strengthen the Atmospheric Transport Modelling community affiliated to CTBTO's verification regime. The workshop's objectives are: • Advance understanding of recent technological developments in Atmospheric Transport Modelling (ATM) and their relevance to verification technologies under the Comprehensive Nuclear-Test-Ban Treaty (CTBT). • Strengthen expertise in uncertainty quantification (UQ) methods for ATM and radionuclide (RN) analyses to enhance confidence in ATM applications for RN-related verification assessments. • Investigate and introduce innovative data fusion methodologies to spatially and temporally integrate seismic, hydroacoustic, infrasound (SHI), and radionuclide event data, improving event characterization across the CTBT verification system.
	Topics of interest: 1. Strengths, weaknesses, and future directions of different atmospheric transport models (ATMs) - How do FLEXPART, HYSPLIT, and other models compare in terms of capabilities and limitations? - What developments are expected in the near future? 2. Scientific enhancements - How can spatial–temporal source–receptor sensitivity be improved? - What advances are needed in physical parameterizations? - How should data representation be handled? 3. Lagrangian versus Eulerian modeling frameworks - Which approach is more suitable for long-range simulations, and under what conditions? - Are backward and forward modeling truly equivalent for a given source–receptor pair in a Lagrangian framework?

	4. High-resolution ATM - What strategies and configurations are most effective for supporting real-world deployments like field exercises? - How to make hi-res ATM feasible for operational and time-critical modes? 5. Uncertainty quantification - What methodologies are best suited for ATM? - How can ensembles be aggregated into a small set of clear, interpretable metrics or plots for expert assessments? - How should uncertainty in general be distinctly communicated to policy makers. 6. Machine learning (ML) versus physics-based models - Could ML realistically replace physics-based models for computationally intensive tasks? - How can we leverage ML in ATM? 7. Source-term localization and background estimation - What methods offer the greatest improvements in accuracy, robustness, and computational efficiency? - Do species-specific or spatio-temporal factors call for different methodological approaches? 8. Data fusion across technologies - How can ATM data be integrated with seismic, hydroacoustic, and infrasound observations? 9. Impact of network density - What does a denser spatio-temporal detection network imply for source sensitivity and attribution accuracy? CTBT-related contributions on additional relevant topics are welcome.
Location	Vienna International Centre, Vienna, Austria The workshop is in full hybrid format.
Dates	**17 - 19 November 2026**
Language	English
PTS Point of Contact	Administrative POC: Capacity Building and Training Section (IDC/CBT) CTBTO Preparatory Commission Vienna International Centre P.O.Box 1200, 1400 Vienna, Austria Tel: +43 1 26030 6147 Email: conferences_and_workshops@ctbto.org

Participants Profile	The workshop is aimed at scientific experts, NDC technical staff and analysts, and prospective scholars involved in atmospheric transport modelling. Please be informed that the Provisional Technical Secretariat solicits presentations and posters from participants on the topics of the Workshop.
Application Procedures	Applicants are requested to register online at the Commission's CTNW platform: https://ctnw.ctbto.org Financial support may be available to a limited number of participants. Such assistance must be requested at the time of registration (by selecting the relevant box during online registration) and no later than **Monday 17 August 2026**. Financial support will be considered only for those who have submitted an abstract that will be accepted. Participants are strongly encouraged to first seek travel and participation funds from non-CTBTO sources. State Signatories wishing to nominate experts are requested to inform the Provisional Technical Secretariat (See Administrative Point of Contact) through their respective Permanent Mission by the deadline set for application.
Abstract Submission	Applicants are invited to submit an abstract relevant to the objectives of the Workshop at https://ctnw.ctbto.org/ before the registration deadline. You will be prompted to select whether you prefer it to be an oral presentation or a poster. In case you would like to moderate a round-table discussion, please state this in the abstract. See also Workshop Format. Note: By submitting an abstract, the applicant confirms that the submitted abstract represents their own work or ideas, and that in all cases material from the work of others is acknowledged, and quotations and paraphrases are clearly indicated. It is also hereby declared that the submitted abstract adheres to scientific and professional ethics regarding plagiarism, fabrication, and falsification. Any violation of these requirements may result in the rejection of the submitted abstract.
Deadline for Application and Abstract Submission	**Monday 17 August 2026**
Financial Information	**Applicable to PTS-funded participants only** In accordance with the Staff regulations and rules and Administrative Directives, the PTS will provide the following: • A Daily Subsistence Allowance (DSA) that is sufficient to cover the related expenses during the workshop program will be paid on the first day of the workshops to the participants. • The PTS travel agent will reserve, issue, and forward the flight ticket to the participants for the most direct and economic route.

	• Funded participants are not allowed to purchase their own tickets unless, under exceptional circumstances, be authorized to do so and only if this proves to be most cost-effective for the PTS. • The PTS will book a hotel and cover the costs for the accommodation; and • Health insurance will be provided that covers the duration of the workshop. *Requirement: A scanned copy of valid passport*.
Workshop Format	The workshop is in full hybrid for in-person and online attendance, participation, and presentation and we will have round table discussions.
Other Pertinent Information	**Visas** Participants should apply for visas, if needed, at the corresponding consular office upon receipt of an acceptance Note Verbale from the Secretariat, in order to ensure timely processing. **Health/Accident Insurance** It is strongly recommended that prior to departure all participants should acquire health and accident insurance for the duration of the workshop.