The Global Emissions InitiAtive project

GEIA Global Emissions InitiAtive

Founded in 1990, a community initiative
Bridging science, society and policy
Bringing together people, data, and tools
Creating and communicating emissions information

IGAC **Activity**

A key forum for emissions knowledge serving stakeholders in rapidly evolving global society

Analysis of emission : GEIA working groups

China Emissions WG (K. He, Q. Zhang, Y. Wang)
- *Development of the Multi Resolution Emission inventory for China (MIEC)*
- *Development of Mosaic emission inventory for China*
- *Organizing training workshop and conferences & special issue on top journals*

VOC Emissions WG (Eva Pfannerstill , P. Dominutti, A. Borbon)
- *Improving global understanding of VOC emissions, including methane*
- *Creating a global directory of VOC observations to enhance discoverability of data*
- *Long-term trends in VOCs*
- *Effects of VOC speciation on secondary pollutant production*

Latin America/Caribbean Emissions WG (N. Huneeus, L. Dawidowski, N. Rojas)
- *Developing and evaluating LAC-specific emissions information*
- *Creating LAC regional emissions database and inventory*
- *Building LAC emissions expert community linked to global efforts*

Urban Emissions WG (L. Tarrasón)
- *Leveraging techniques for urban emissions characterization*
- *Building capacity in megacities around the world*

Africa Emissions WG (C. Leal-Liousse, S. Keita, M. Naidoo)
- *Creating a network of experts on African emissions*
- *Evaluating African-specific emission inventories*
- *Creating a regional database (fuel consumption, emission factors and inventories) and a continental wide African emission inventory*

Near-real-time (NRT) emissions WG (M. Guevara, B. H. Baek)
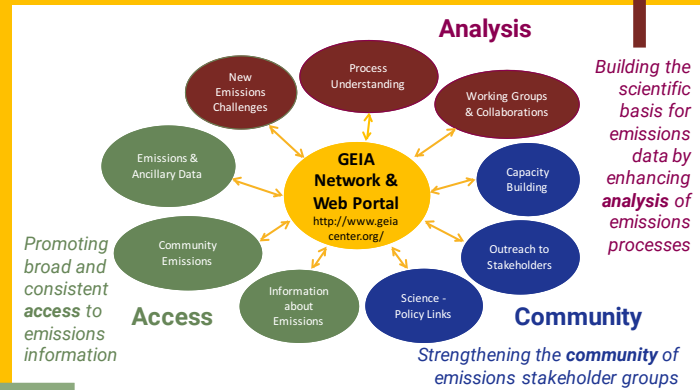- *Creating a network of experts on NRT emissions and corresponding applications*
- *Review of current practices and applications of NRT emission estimates*
- *Perform benchmarking exercises (i.e. NRT vs official estimates)*
- *Provide recommendations/guidance in the form of a publication*

ACCESS to emissions : the ECCAD data portal

Welcome to the new version of ECCAD

ECCAD, GEIA's emissions data portal, provides consistent access to inventories and ancillary data with easy-to-use tools for analysis and visualization, to serve scientific research & assessment efforts.

Analysis

New Emissions Challenges — Process Understanding — Working Groups & Collaborations — Capacity Building — Outreach to Stakeholders — Science - Policy Links — Information about Emissions — Community Emissions — Emissions & Ancillary Data

GEIA Network & Web Portal http://www.geia center.org/

Building the scientific basis for emissions data by enhancing analysis of emissions processes

Promoting broad and consistent access to emissions information

Access

Community

Strengthening the community of emissions stakeholder groups

Network

Real time GEIA users : more than 2000 people worldwide
(*Blue points represent GEIA SSC member locations*)

NEWS

VOC WG : new co-chairs, new objectives
Joining the WG ? *Meet E. Pfannerstill and P. Dominutti here, or scan the following QR code/follow the link: tinyurl.com/GeiaVoc*
Recent outputs from the previous WG : *von Schneidemesser, E., et al., Comparing urban anthropogenic NMVOC measurements with representation in emission inventories—A global perspective. Journal of Geophysical Research: Atmospheres, 128, e2022JD037906, 2023 (https://doi.org/10.1029/2022JD037906)*

COVID 19 WG => NRT WG
End to COVID-19 as global health emergency officially declared...,but the need for near-real time emission information has come to stay.
Recent outputs from the COVID 19 WG : *Guevara, M. et al., Towards near-real-time air pollutant and greenhouse gas emissions: lessons learned from multiple estimates during the COVID-19 pandemic, Atmos. Chem. Phys., 23, 8081–8101, 2023 (https://doi.org/10.5194/acp-23-8081-2023)*

20th GEIA conference (June 2023, Brussels)
153 researchers (62 ECR) from 31 countries; 32 orals, 112 posters : a rich conference!
Highlights :
Intense GEIA activities on developments of bottom-up emission inventories
An increasing number of "top-down" emissions studies
Interest of GEIA to develop integrated studies of air pollutants and greenhouse gas emissions.
Interest of GEIA to explore links between emission studies and policy implementation
Expand GEIA WGs to better incorporate regional (Asia, Africa, Latin America/Caribbean) and urban analyses.

21th GEIA conference
July 9-11, 2025, Abidjan, Côte d'Ivoire
(A training workshop will be organized in the frame of GEIA Africa, on July 7-8, 2025)

GEIA Scientific Steering Committee

Beatriz Cardenas (*Mexico*)
Hugo Denier van der Gon (*The Netherlands*)
Claire Granier (*France, USA*)/ Database manager
Marc Guevara (*Spain*)
Nicolas Huneeus (*Chile*)
Greet Janssens-Maenhout (*EU*)
Monica Crippa (*EU*)
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Sekou Keita (*Côte d'Ivoire*)
Zbigniew Klimont (*Austria*)

Catherine Liousse (*France*)/ Co-chair
Brian McDonald (*USA*)/ Co-chair
Paulette Middleton (*USA*)/ Network manager
Tom Oda *(USA)*
Pallavi Saxena *(India)*
Katerina Sindelarova (*Czech Republic*)
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