## **Global Emissions InitiAtive**

#### **Gregory Frost**

**GEIA Co-Chair** 

NOAA/Earth System Research Laboratory, Boulder, CO, USA



**GEIA Co-Chair** 

Norwegian Institute for Air Research, Kjeller, Norway

#### Claire Granier

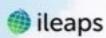
**GEIA Database Manager** 

NOAA/Earth System Research Laboratory, Boulder, CO, USA University of Colorado/CIRES, Boulder, CO, USA Laboratoire d'Aérologie, Toulouse, France LATMOS/IPSL, UPMC, CNRS, Paris, France

#### Paulette Middleton

GEIA Network Manager Panorama Pathways, Boulder, CO, USA

































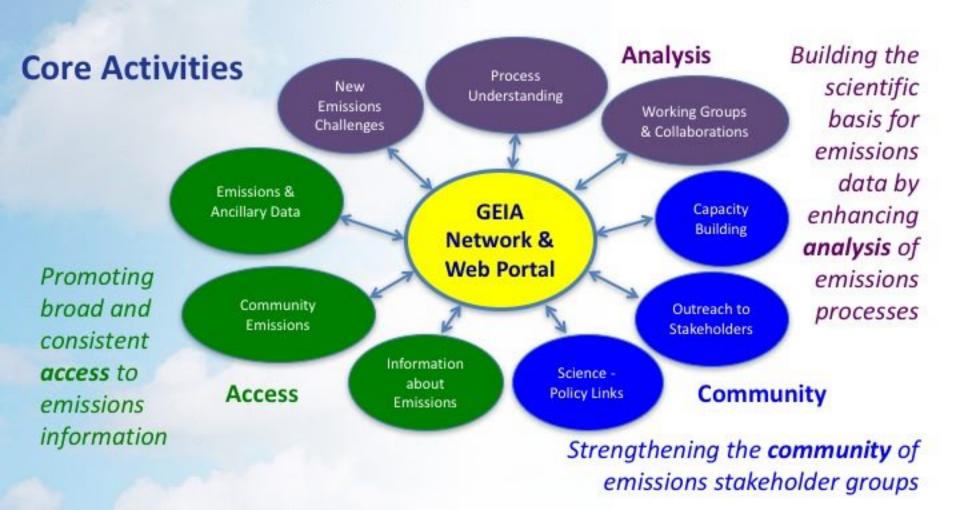




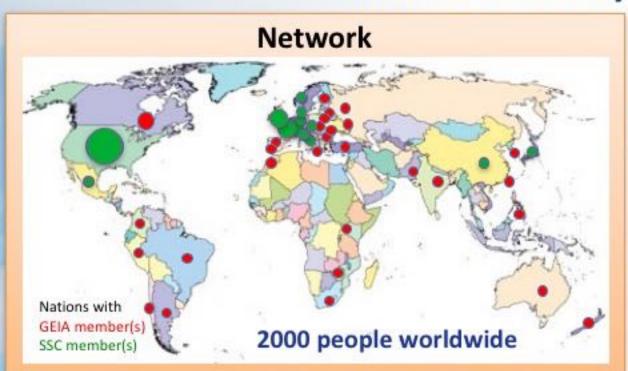




Founded in 1990, **GEIA** is a community initiative that builds bridges between environmental science and policy, by bringing together people, data, and tools to *create* and *communicate* the highest quality information about *emissions*.



## **GEIA Community**



#### **Connections**



#### Scientific Steering Committee

Alexander Baklanov (Switzerland)

Beatriz Cardenas (Mexico)

Hugo Denier van der Gon (The Netherlands)

Gregory Frost (USA)

Claire Granier<sup>2</sup> (USA, France)

Greet Janssens-Maenhout (Italy)

Johannes Kaiser (Germany)

1 Co-Chair

2 Database Manager

Terry Keating (USA)

Zbigniew Klimont (Austria)

Catherine Liousse (France)

Paulette Middleton<sup>3</sup> (USA)

Ute Skiba (UK)

Leonor Tarrasón¹ (Norway)

Yuxuan Wang (China)

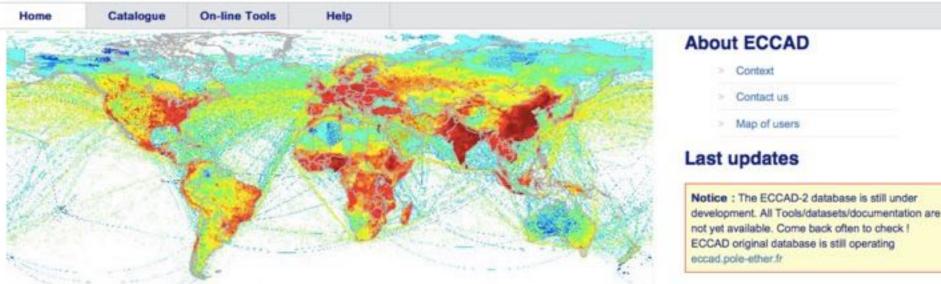
3 Network Manager

## **New ECCAD-2 Portal**



#### ECCAD: Emissions of atmospheric Compounds and Compilation of Ancillary Data

Making data accessible and providing tools for data analysis



#### Welcome to ECCAD - GEIA:

#### ECCAD database provides ;

- . A large number of datasets at global and regional scales, at various spatial resolution, time periodicity and temporal coverage.
- · On-line data manipulation tools and statistical information over geographical regions.
- Detailed metadata for each of the datasets.
- Downloaded files as interoperable NetCDF CF-compliant files.















## Available soon!





# 1GACnews

facilitating atmospheric chemistry research towards a sustainable world

18-20 NOVEMBER 2015 TSINGHUA UNIVERSITY, BEIJING, CHINA

**IGAC Sponsored** 

#### **AUTHORS**

Gregory Frost, National Oceanic and Atmospheric Administration (NOAA), USA

Paulette Middleton, Panorama Pathways, USA

Leonor Tarrason, Norwegian Institute for Air Research (NILU), Norway

Qiang Zhang, Tsinghua University, China

Yuxuan Wang, Tsinghua University, China

#### HOST INSTITUTION



## 17th GEIA Conference – Influence of Urbanization on Emissions Worldwide



## **Progress in GEIA Working Groups**

#### China Emissions WG

Contacts: Kebin He, Qiang Zhang, Yuxuan Wang

- Improving scientific basis for Chinese emissions
- Sharing results between Chinese research groups
- Publishing in ACP's East Asian Emissions Assessment
  - 36 papers published since 2014!



#### VOC Emissions WG

Contacts: Erika von Schneidemesser, Hugo Denier van der Gon

- Improving global understanding of VOC emissions
- Leveraging on-going inventory development, measurements, modelling
- Starting evaluation of megacity VOC emissions

# H\_C C C H

#### Latin America/Caribbean (LAC) Emissions WG

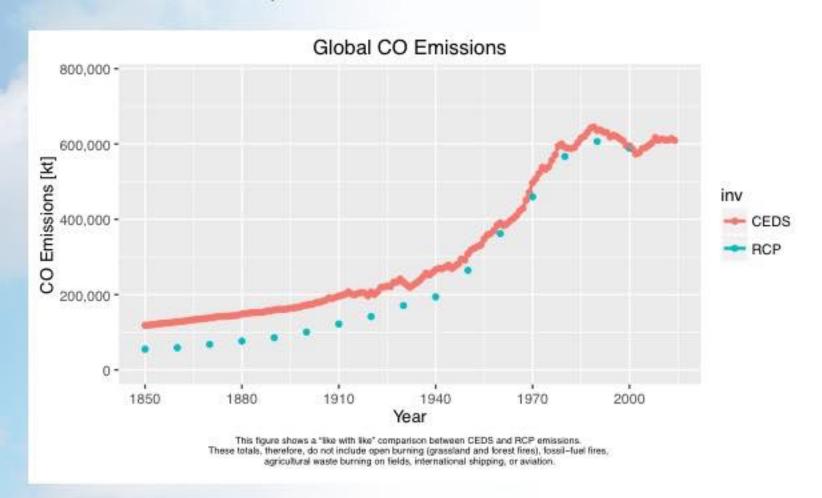
Contacts: Nicolas Huneeus, Laura Dawidowski, Néstor Rojas

- Developing and evaluating LAC-specific emissions information and harmonized national emissions inventories
- Building LAC emissions expert community
- Multinational LAC collaboration has recently been funded



## **Community Emissions Data System (CEDS)**

- Open source framework producing global historical emission estimates
- CMIP6 historical and preindustrial control runs now available



Steven Smith (PNNL/JGCRI, U Maryland)

http://www.globalchange.umd.edu/ceds/

## 18th GEIA Conference

### **Emissions Science for a Healthy Environment**

The interplay of human versus natural influences on climate and air quality emissions

13-15 September 2017 University of Hamburg Hamburg, Germany



Details available soon at www.geiacenter.org

## Side meetings this week





**Tuesday**, 7:30-8:30, Breckenridge Ballroom – Peak 15:

VOC Emissions WG

Friday, 14:00 – 18:00, Colorado Ballroom:

Assessment of emissions from inverse modeling

## **Demonstration of ECCAD-2**