

# Integration of observational databases for evaluation of Hemispheric Transport of Air Pollutants

EMEP-TFHTAP

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Paul Eckhardt, Kjetil Tørseth and Aasmund Fahre Vik, NILU,  
Michael Schulz, LSCE

# EC service contract to provide:

- A "real" compilation of data in support of HTAP experiments (core dataset)
  - Data from regional monitoring networks
  - *Data from individual providers*
  - Period 2000-2006
  - Observations, not aggregates
  - Meet user needs
  - Encourage integration of regional monitoring efforts
  - Have lasting value, and provide guidance for further developments

# Data to be stored in a relational database offering

- Access control
- Batch export in NASA-AMES, NARSTO and NET-CDF formats
- Export according to CF naming convention
- A suite of standard programs to generate statistics, aggregates etc.
- A web interface to search, display and extract data
- Exchange of data and metadata with other data repositories (aircraft, satellite observations)

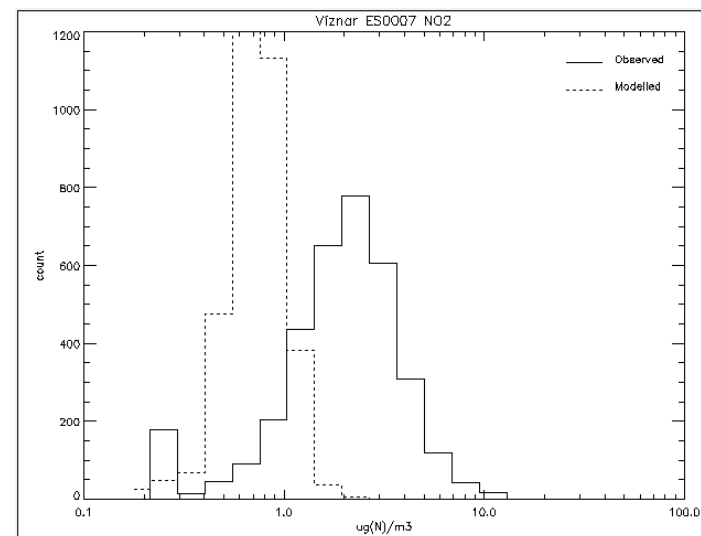
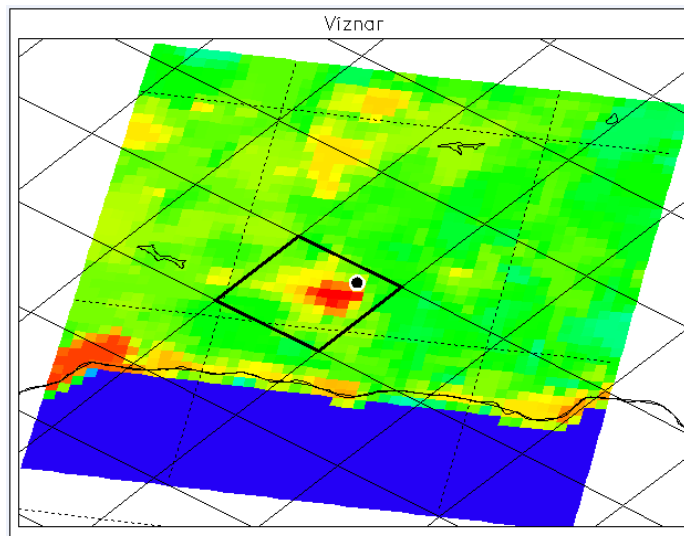
# Three areas where a close interaction is needed:

- **Data users and their needs/requests**
- Data providers (Networks and PI's)
- Providers to other types of data

# Data user needs

## Short-term and long-term needs

- What parameters are requested
- At what spatial resolution
- Temporal resolution
- How to deal with QAQC issues
- How to deal with representativeness



# Our approach

- Start with standard monitoring parameters available from regional networks
  - Inorganic chemistry in air and precipitation,
  - ozone and precursors,
  - Aerosol chemistry and physical properties
  - Toxics (Hg and POPs)
  - Tracers (CO, CH<sub>4</sub>, others)
- Identify individual data and assist PI's in providing non-network data

# Our approach (suggestion)

- In areas with many sites (Europe and North America) a subset of sites are to be selected in consultation with individual networks
- In areas with fewer sites, less stringent criteria will apply, but also here will we only include data from background sites
- PI' type data will be taken "as they are"
- No efforts towards short-term campaign data
- Avoid duplication of effort

**Sites, data originators**

**Original data repositories**  
EMEP, EANET, CAD, NewDebits, CASTNET, NADP, CAPMON, GAW WDCs, others  
EARLINET, AERONET, GAW-PFR, others

Export of data with meta data  
using standard routines

input to EBAS

File conversion routines  
to be developed

Export routines to accomodate needs  
of naming conventions to be developed

**HTAP data archive**  
(with access control)

Data available in NASA-ames,  
NARSTO, NetCDF and HDF formats

Use in combination with models

Integration of in-situ data with  
aircraft and satellite data

as more data or revisions  
are needed...



# Basic facts

- Project started March 2008,
- 23 month duration
- Contact person at NILU is Paul Eckhardt  
[pe@nilu.no](mailto:pe@nilu.no)
- Preliminary dataset available late summer 2008
- <http://www3.nilu.no/EBAS/> (test version!)