

PROGRESS IN EMEP ACTIVITIES IN 2016-2017 AND FUTURE WORK:

MEASUREMENTS AND MODELLING

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Joint EMEP SB & WGE, Geneva Sept 15th 2017

PROGRESS IN 2016-2017 WORKPLAN

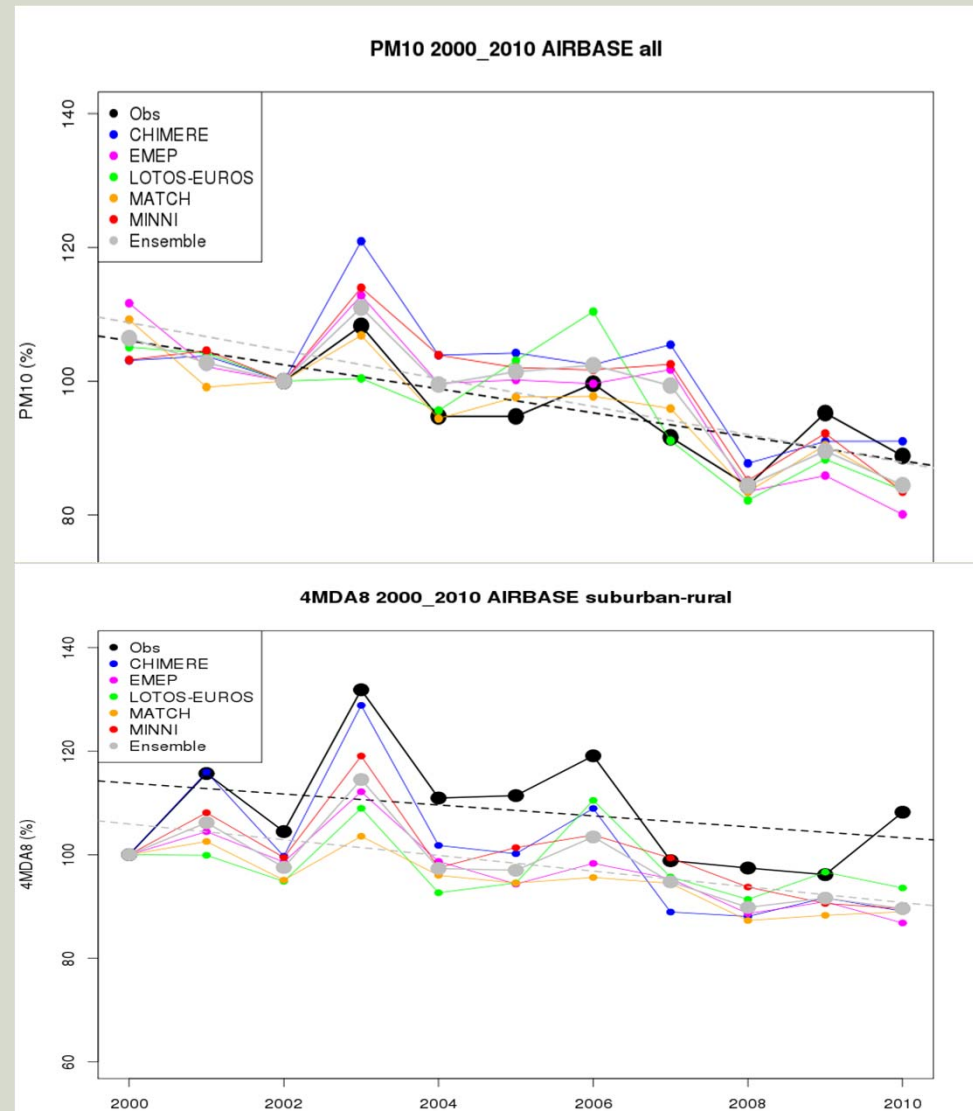
AIR POLLUTION TRENDS: VALIDATION

Eurodelta-Trend

- 8 models total (1990/2000/2010)
- 5 for 21yr trends

Ability to capture trends

- Very good agreement for relative trends of PM10
- Slight overestimate decrease 4MDA8

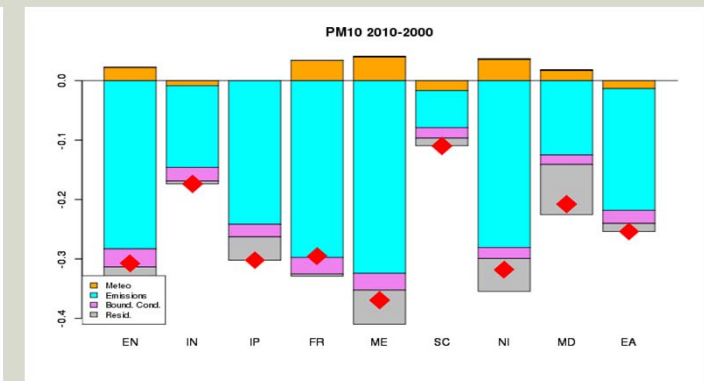
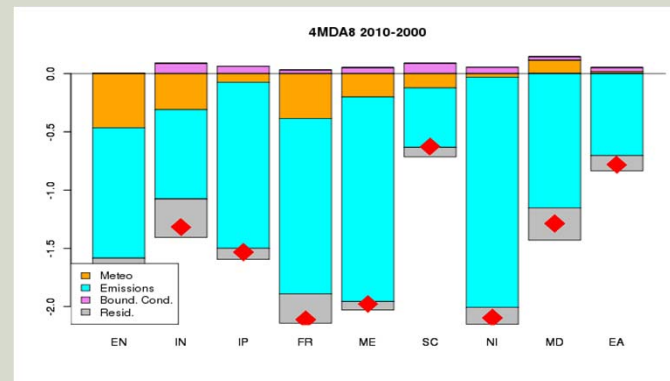
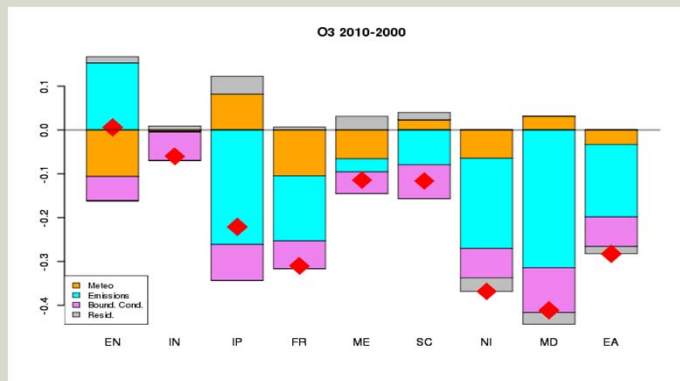
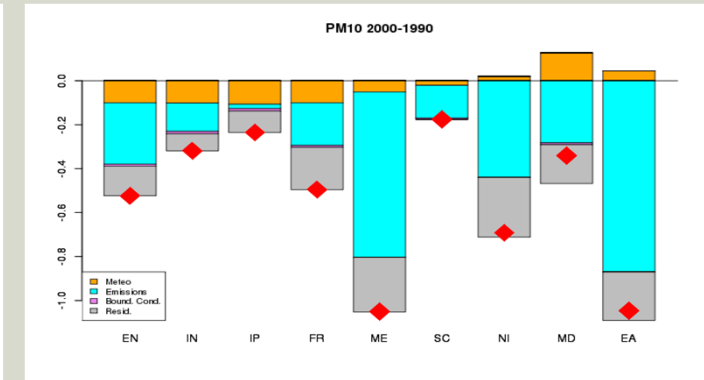
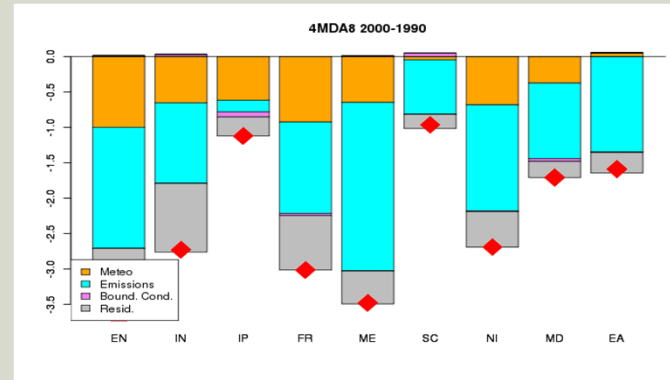
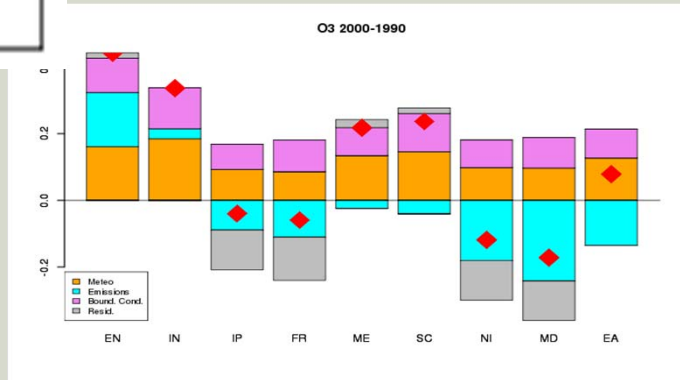


TRENDS: ATTRIBUTION

O3avg

O3 4MDA8

PM10



- Opposite sign of intercontinental contribution
- Meteorology is important

- insignificant intercontinental contribution
- Meteorology contributes to decrease
- Limited trends can not be attributed to external factors

- Mainly emissions

TRENDS: DEPOSITION

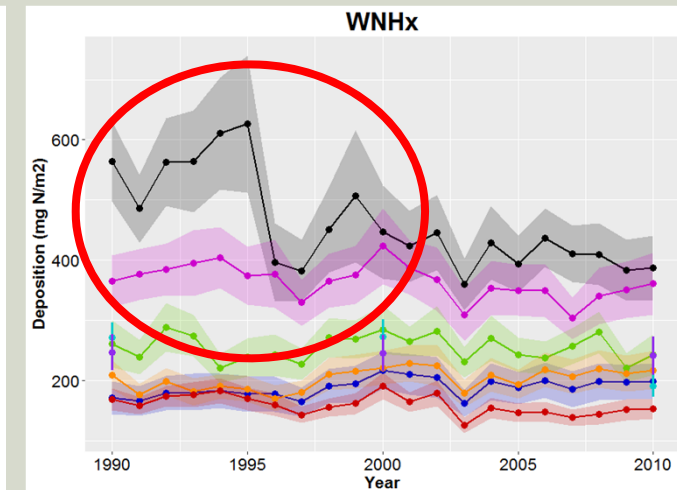
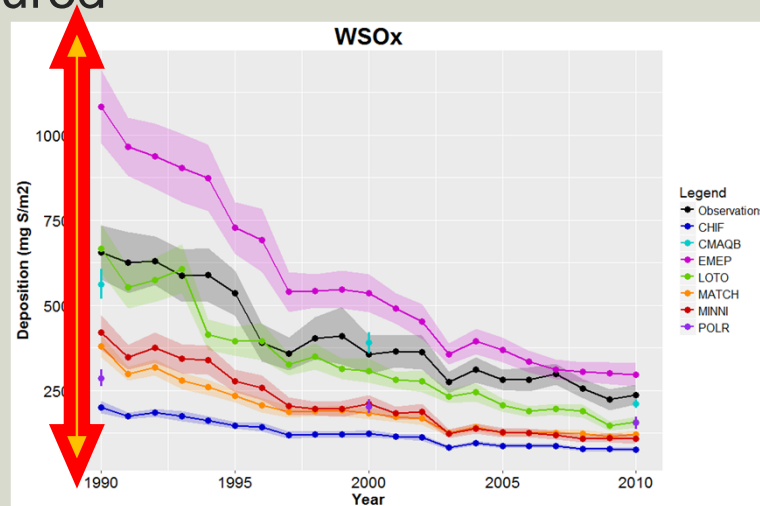
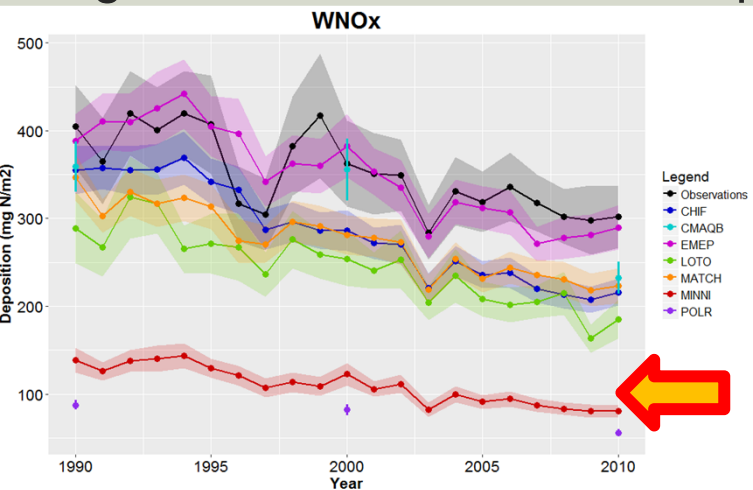
EMEP/MSCW behaves well, some improvement for others

W_{SOx}, W_{NOx}, W_{NHx}: Very large spread of models

W_{NHx}:

Missing variability in 1990s

Stagnation of in 2000s well captured



WORKPLAN 2016-2017

Trends	Observation Report TFMM, CCC, MSCW, MSCE Eurodelta-Trends (workshop 13-14/11/2017)
Eurodelta3 (EMEP campaigns)	Report + 3 papers
Twin sites	Observation report being drafted Ongoing modeling exercise (workshop 19/9/2017)
Linkages with WGE	Ongoing Eurodelta-Trends modelled deposition analysis, POD, Health Impacts
Condensables	Workshop with TFEIP in 2016 Action plan
Monitoring data quality	Workshop in 2016 (CCC)
Field campaign (w/ACTRIS)	Carbonaceous aerosol winter 2018 (30+ sites, ACTRIS)
HM&POP case studies	Done: Belarus (Pb) Czech Republic (POP), and United Kingdom (Pb) Ongoing: Spain (BaP), Poland (Cd), France (BaP)
Linkages with CAMS	Near real time observations (CCC) Twin sites (MSCW)

REVISED TFMM MANDATE

REVISED TFMM MANDATE

6. The functions of the Task Force will be to:

a) Provide a forum for the Parties to share knowledge, experiences, views, suggestions and develop recommendation on the issues related to air quality, efficiency and sufficiency of EMEP measurements and modelling.

b) Provide an opportunity for the Parties and EMEP Centres (MSC-E, MSC-W, CCC) to discuss performance of measurements and models (EMEP models and those developed by the Parties), and their improvements, bearing in mind the scope and range of their application (such as for national assessments of air quality, assessment of transboundary fluxes and their influence on air quality, trend analyses, etc.);

c) Plan and conduct its technical work towards implementation of the Monitoring Strategy of EMEP taking into consideration challenges encountered at national levels, best practices available and recommendations provided by the EMEP Manual for Sampling and Chemical Analysis;

REVISED TFMM MANDATE

d) Interpret and assess the observations and modelling results related to air pollution levels, assess its temporal and spatial trends and contribute to the evaluation of the effectiveness of the implementation of the Convention and its Protocols;

e) Ensure the coordinated efforts of Parties in organization and conduction of the intensive measurement periods and focused case studies, following data processing, model interpretation and results dissemination;

f) Provide support and facilitate involvement of Parties in Eastern Europe, the Caucasus and Central Asia for example with respect to setting up monitoring stations and national programs, case studies, use of models and promoting the tools developed under EMEP during workshops and other dedicated meetings;

g) Collaborate with CCC, MSC-W, MSC-E, CEIP, TF-EIP, TF-HTAP, TF-IAM, and Working Group on Effects to evaluate emission inventories, improve the modelling tools to serve the integrated modelling and effects assessment, ensure the consistency between the regional and hemispheric scale analyses;

h) Strengthen linkages with the European Union scientific programmes and infrastructures (like Copernicus or ACTRIS) with a focus on development of common tools and regional assessments; develop joint activities with European and international organizations and conventions (e.g. JRC, EEA, WMO) to ensure synergies between regional and global scales, strengthening national activities,

WORKPLAN 2018-2019

WORKPLAN 2018-2019

Monitoring

Revision of Monitoring Strategy

Winter 2018 Field Campaign

Micro-sensor « Position paper »
(WMO)

Modelling

HM&POP case studies

Condensables

Assessment of emissions inventories

Deposition

- LRT O3 and aerosols
- **Monitoring&Modelling**
 - Twin Sites
 - Ammonia
 - Black Carbon « Modelling & Monitoring factsheet »
- **WGE**
 - Joint activities (monitoring/modelling)

19TH ANNUAL TFMM MEETING

KINDLY HOSTED BY WMO AND SWITZERLAND

IN GENEVA 2-4 MAY 2018