

WG2-CCA: Emissions Models & measurements expectations on emission data

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Objectives | FAIRMODE structure

Steering Group [JRC, VITO, NILU, U. Strasbourg, DG ENV, EEA] WG1 WG2 WG3 WG4 **Emissions Planning** Assessment Source App. Lead: VITO Lead: (NILU) Lead: JRC Lead: U Strasbourg Co-lead: JRC Co-lead: (U Madrid) Co-lead: JRC Benchmarking (Methodology) Guidelines & Guidance Capacity Building and communication Spatial Representativeness (JRC) Forecasting (INERIS) Monitoring & Modelling (U. Aveiro)

Objectives | following last WG2-SG1...

To deal with inter-WG about the use of monitoring and modeling to support assessment and planning applications.

- To promote best practices on the combined use of models and monitoring for Directive related applications
- To develop and apply quality assurance practices when combining models and monitoring
- To provide guidance on station representativeness and station selection for the combined use of monitoring with modelling and for validation purposes

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Requests for participants | Meeting April 2014

1. REVIEWING METHODOLOGIES

Compilation of monitoring & modelling practices/experiences

2. GUIDANCE ON MODEL VALIDATION WHEN USING M&M

- Monitoring data compilation
- Quality control/quality assurance of the monitoring data

3. USE OF M&M FOR PLANNING PURPOSES

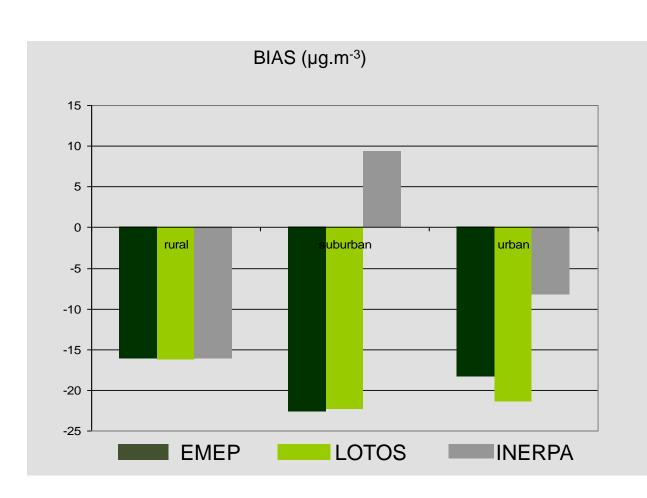
- List of planning exercises already applied and under study
- Experiences on using monitoring data for air quality management purposes

4. QUALITY OF MONITORING DATA: NETWORK QUALITY

- Criteria for the monitoring network
- Network design
- Problems and questions

Q1. Can air quality modelling results contribute to the improvement of emission inventories?

Emission inventory comparison based on PM10 model results



Is there PM emissions overestimation by INERPA inventory?? Monteiro et al., 2006

Q2. For urban areas and focusing on traffic road emissions ...



... does it make sense to use air quality monitored data from traffic stations to improve emissions? Q3. Can we use source apportionment methods to improve emission estimates?

Q4. Can satellite observations provide consistent data on atmospheric composition for improved emissions inventories?

Q5. Can Ensemble Kalman filter also be used as valuable technique to improve emission data?

More questions?