

FAIRMODE WG4 – Planning Activities

» Alain Clappier

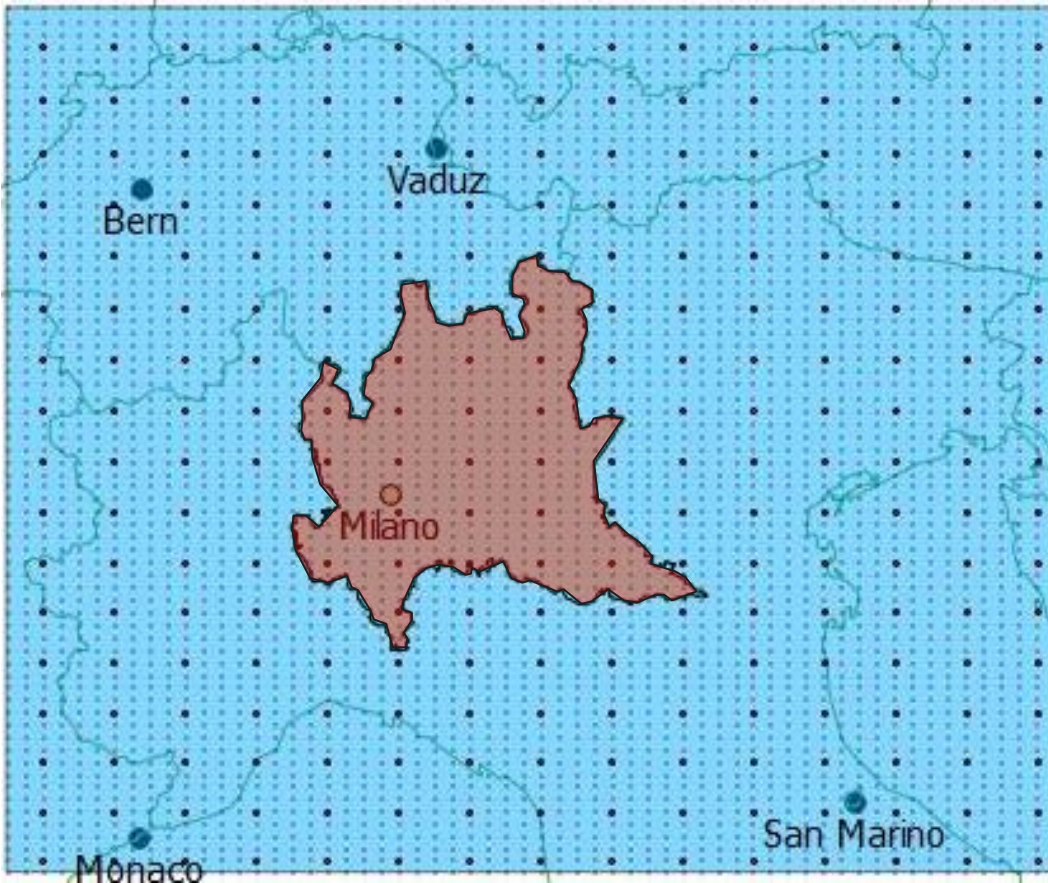
WG4 activities: Overview

Goal of the WG4: identify a common and simple methodology to evaluate model performances with regards to the simulation of emission reduction scenarios.

- The methodology which could be used (A. Clappier)
- The tool which provide graphic indicators (K. Cuvelier)
- Results over Portugal (A. Monteiro), Belgium (P. Viaene)
- Inter-comparison between reduction effects over North Belgium, South Poland and Po Valley (A. Clappier).

Indicators

Reduction area:



Calculation of potencies,

for **all precursors**:

$$p_{\alpha} = \frac{\Delta C_{\alpha} / C}{\alpha}$$

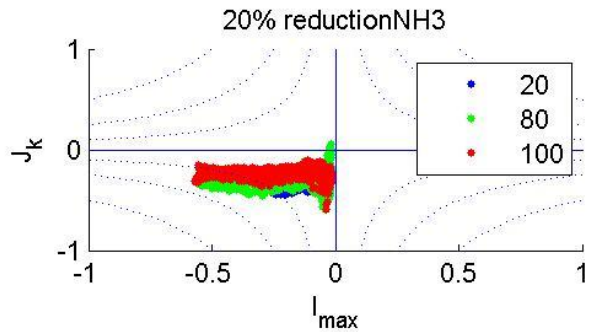
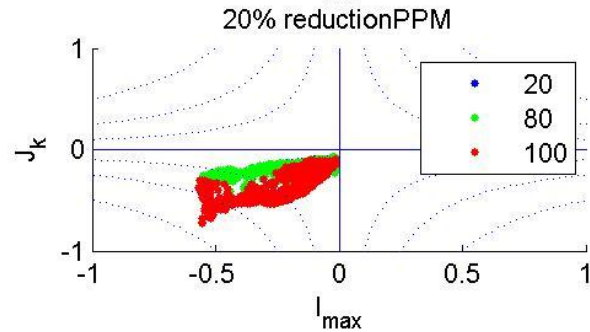
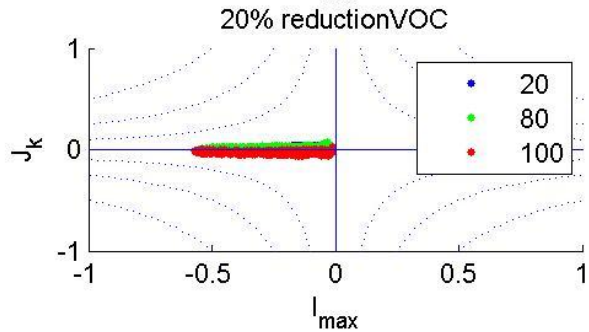
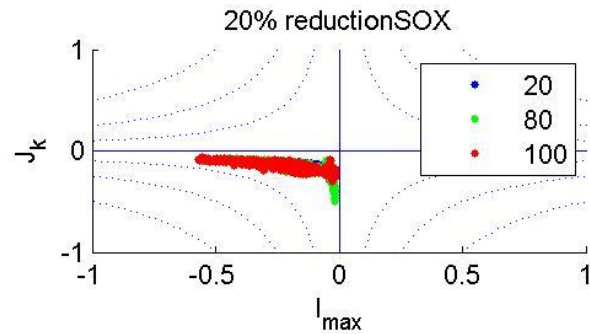
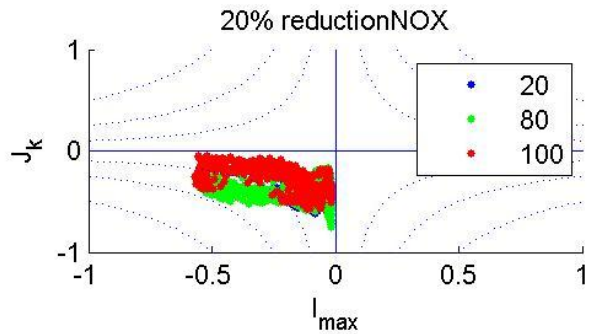
$$\alpha = \Delta E / E$$

for each **single precursor**:

$$p_{\alpha_{NOx}} = \frac{\Delta C_{\alpha_{NOx}} / C}{\alpha_{NOx}}$$

$$\alpha_{NOx} = \Delta E_{NOx} / E_{NOx}$$

Indicators



WG4 activities: Overview

Goal of the WG4: identify a common and simple methodology to evaluate model performances with regards to the simulation of emission reduction scenarios.

- The methodology which could be used (A. Calppier)
- The tool which provide graphic indicators (K. Cuvelier)
- Results over Portugal (A. Monteiro), Belgium (P. Viaene)
- Inter-comparison between reduction effects over North Belgium, South Poland and Po Valley (A. Clappier).

WG4 activities: Work-plan

Level 1 participation:

Tasks: Participants will run their models in order produce the required scenario runs to plot the indicator graphics. Each of them will **use the model and the data they want over the domain and the time period they want.**

Participants:

- Barcelona Supercomputing center
- NILU
- MetNo
- INERIS
- VITO
- Aveiro

Deadlines: **September 2014** to provide the tool (JRC)
October 2014 to provide the results (participants).
December 2014 to provide the interpretation and decide if an additional meeting is necessary in **February 2015**.

WG4 activities: Work-plan

Level 2 participation:

Tasks: Participants will run their models in order produce the required scenario runs to plot the indicator graphics. Each of them uses his model but with a **common set of data** and over a **common domain and time period**.

Participants: ?

Deadlines: After February 2015 (we will wait for other benchmarking activities in other WG).

Thank you