



FAIRMODE

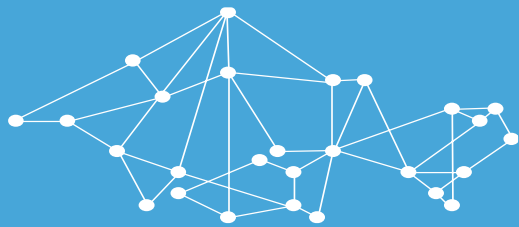
Forum for air quality modelling in Europe

CT8 – #1:

SPATIAL REPRESENTATIVENESS OF MONITORING STATIONS

TOWARDS RECOMMENDATIONS

MARCH 3, 2022

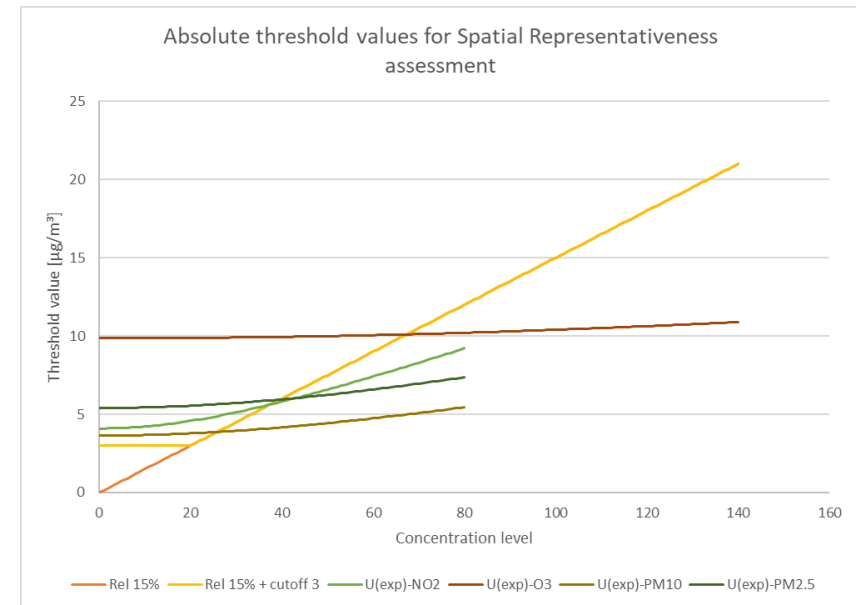


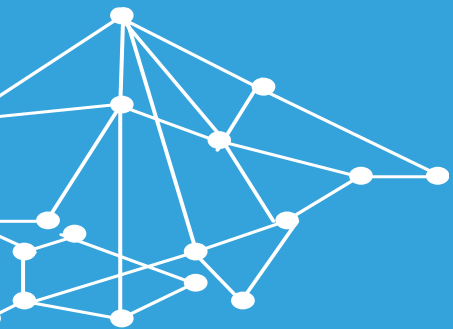
AGENDA

- » 14:00 - Introduction and recap (Stijn Janssen)
- » 14:05 - Results of additional threshold/tolerance analyses
 - » Giovanni Bonafè (ARPA FVG, IT)
 - » Roberta Amorati (ARPAE, IT)
 - » Matthew Ross-Jones & Kristina Eneroth (EPA-SE, Stockholm)
 - » Other?
- » 15:00 - German reflections about Spatial Representiveness (Jutta Geiger, LANUV-NRW à tbc)
- » 15:15 - FAIRMODE recommendations for SR assessment (all)
 - » Contribution for the FAIRMODE recommendations
 - » User Guide for SR assessment
 - » ...
- » 15:50 - Any other business
 - » CT8#1 Presentation at HARMO
 - » ...
- » 16:00 - End

RECAP: CONCLUSIONS OF PREVIOUS MEETING

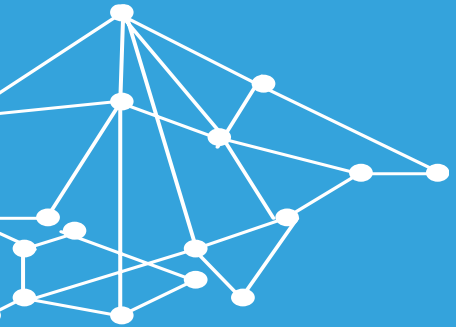
- » SR area is defined:
 - » in a discontinuous approach
 - » limited by the AQ zone → if needed the area can be reduced (e.g. based on expert opinion)
- » SR similarity criterion based on annual mean concentration (for the time being), but:
 - » **Test the possibility of a source specific SR** → important for e.g. AQ planning
- » SR threshold as a 15% relative value with lower cut-off, but:
 - » Test various cut-off values (e.g. 2 - 4 $\mu\text{g}/\text{m}^3$)
 - » **Test the measurement uncertainty curves of the FAIRMODE MQI**
- » SR inter-annual variability (e.g. due to meteorological effects) is a reality, but:
 - » Relevance depends on the application domain → **more testing to assess the impact**
- » SR assessment requires a fit-for-purpose model with low model bias
 - » What is an acceptable bias at individual station location?
- » SR benchmarking against a uEMEP for all EU stations
 - » **Compare bottom up analysis with uEMEP statistics**
- » SR area can be reported as a shape in the e-Reporting





Results of additional threshold/tolerance analyses:

- Giovanni Bonafè (ARPA FVG, IT)
- Roberta Amorati (ARPAE, IT)
- Matthew Ross-Jones (EPA, SE)



German reflections about Spatial Representativeness

FAIRMODE RECOMMENDATIONS FOR SR ASSESSMENT

- » Next steps:
 - » Provide input for the FAIRMODE Recommendations
 - » Compile a Guidance document/note on model based assessment of SR area (ongoing CT8-#1 work)
 - » Integrate with Guidance on Exceedance Situation Indicators (ongoing CT8-#2 work)

 - » Circulate to the wider CT8 community, National Contact Points (2^e half of March)
 - » Present to the FAIRMODE Plenary Meeting (27-28 April 2022, Brussels)

- » HARMO-21 abstract:
 - » Overview of the CT8-#1 activities, findings and recommendations
 - » Deadline March 15, 2022
 - » If accepted, presentation in Aveiro, 27-30 September 2022
 - » Co-authors?

