

Malopolska Pilot Region

FAIRMODE Technical Meeting, Tallin 27.06.2018

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Pilot Exercise for Malopolska

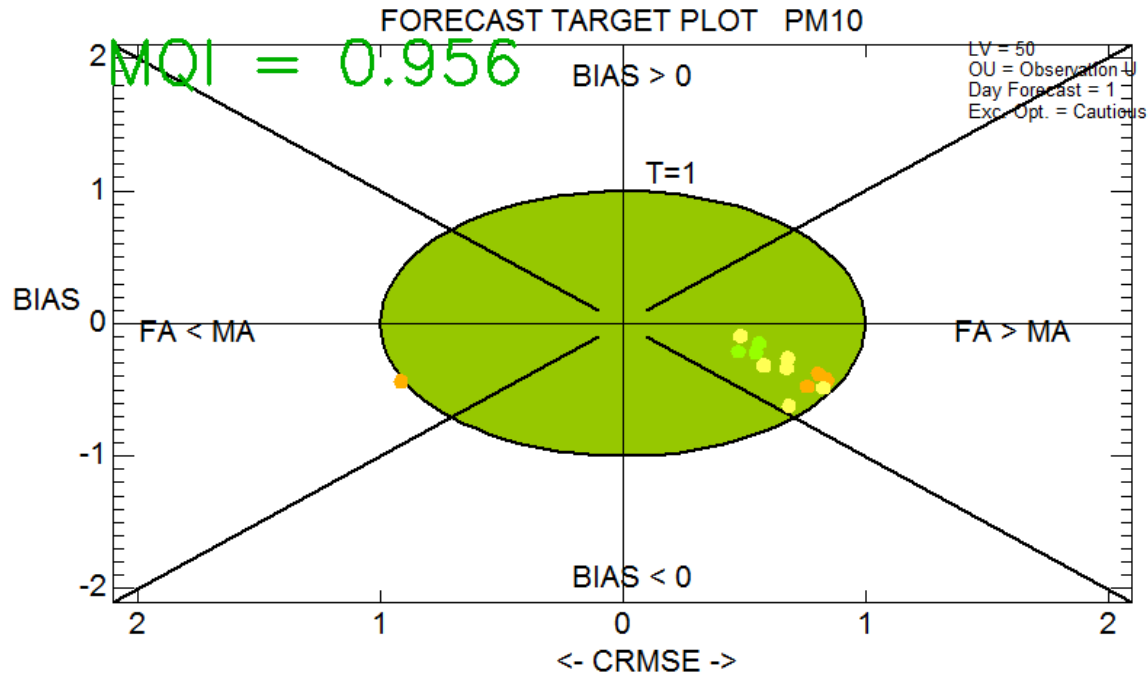
Main conclusions on the assessment

- Our modelling activity in Malopolska started in 2010 – in terms of the emission analysis and the evaluation of modelling results the use of **FAIRMODE tools offers standardization** but does not bring additional information – for the moment (new forecast delta!)
- Concentration benchmarking tools are **useful as tools for comparison of different models/years/region.**
- In the case of Malopolska there are several issues that should be taken into account in terms of the improvement of air quality modelling results (complex topography, transboundary transport, proximity to the industrial Silesia region, strong contribution from household heating) → **improvement of emission inventory and correct contribution from Czech and Slovakia are crucial**

“Delta tool” – Malopolska region

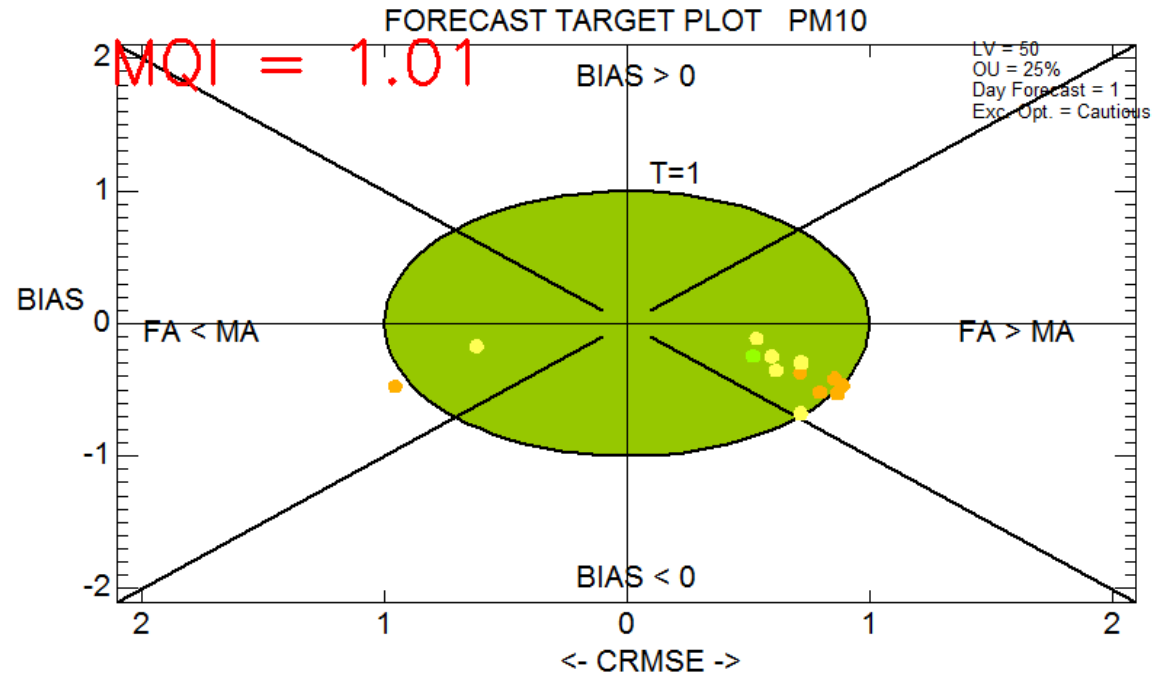
- We already have quite a lot of experience with the Delta Tool
- Target Plot shows good agreement of modelled concentrations vs. observations (two methods for uncertainty calculations)
- Summary plot – a very informative representation of the model performance

Target Plot



- FAR < 0.2
- 0.2 < FAR < 0.4
- 0.4 < FAR < 0.6
- 0.6 < FAR < 0.8
- 0.8 < FAR < 1.0

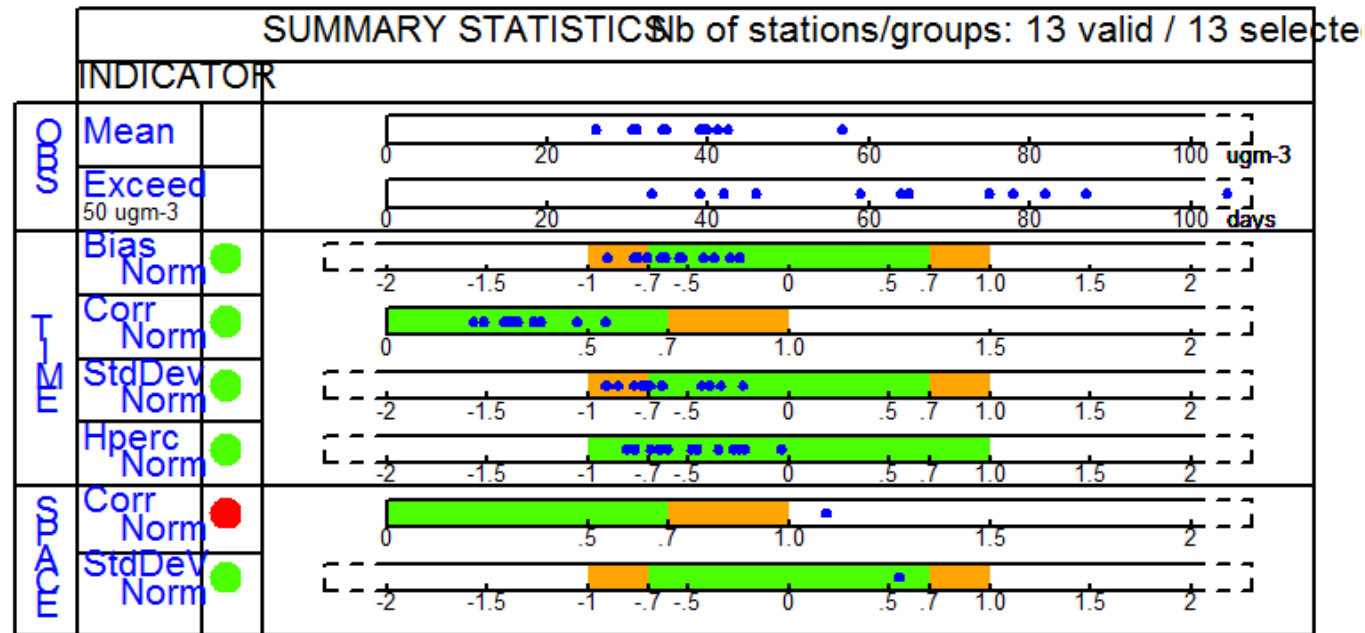
Strt/end Ind: 1-8784
 Model (s): GEMAQ
 Parameter: PM10
 Scen: 2016
 Extra Values: 50./999/2.0/1.0
 Season: Year
 Day hours: All 24h
 Time Average: Preserved
 Daily stats: Mean



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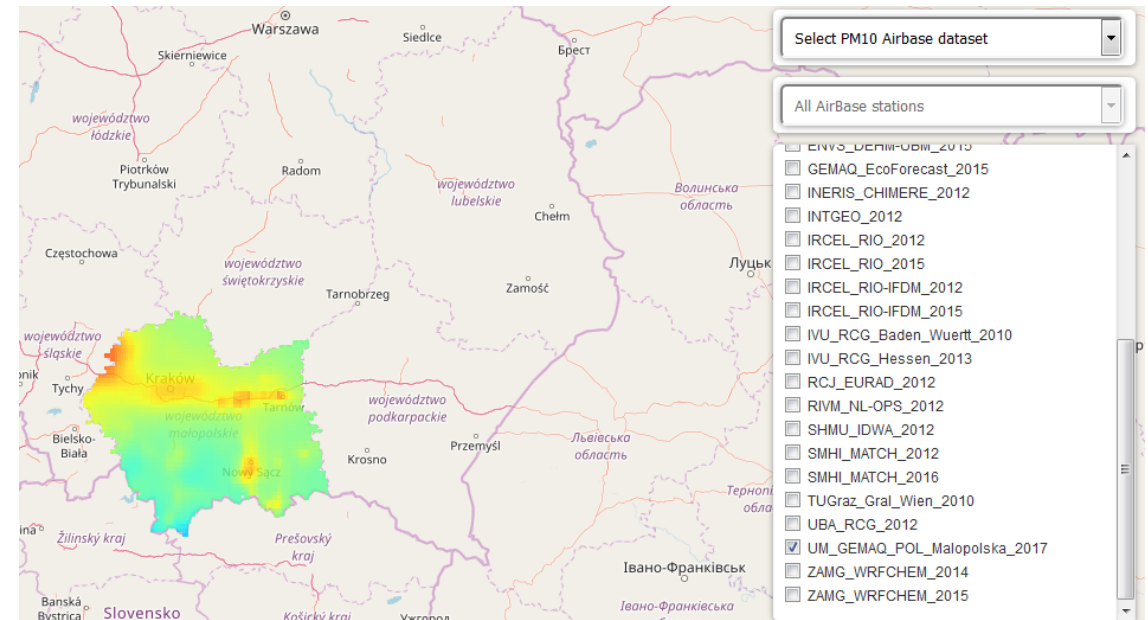
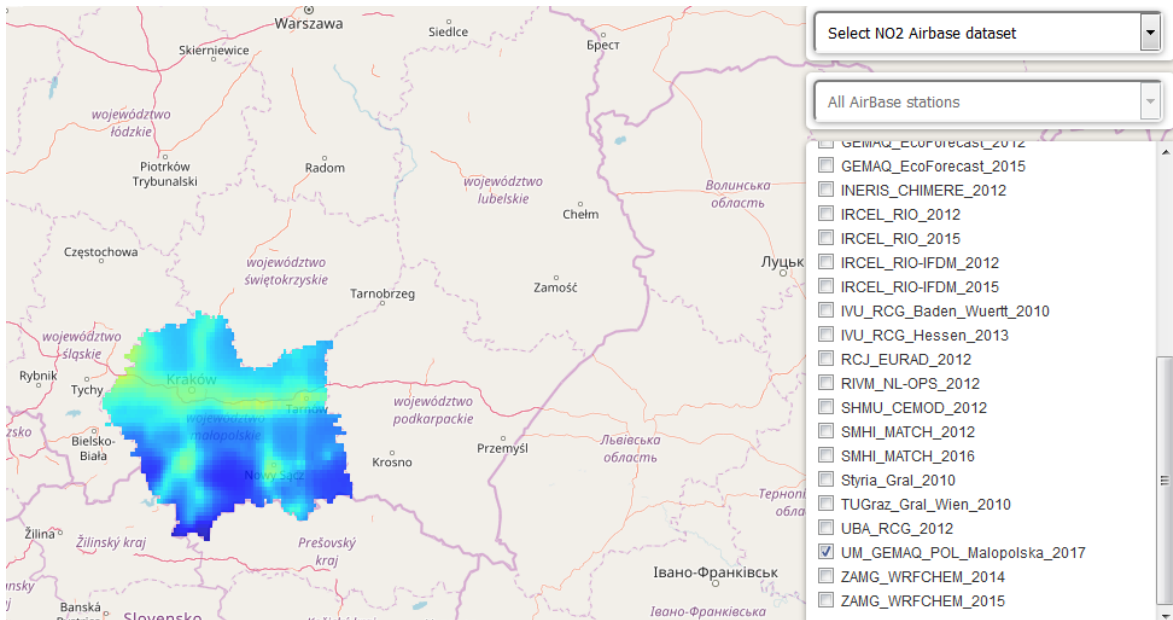
Summary plot



- Performance Criteria satisfied
- Performance Criteria satisfied; Error dominated by corresponding Indicator
- TIME: >90% of stations fulfills the Performance Criteria
SPACE: Dot fulfills the Performance Criteria
- TIME: <90% of stations fulfills the Performance Criteria
SPACE: Dot does not fulfill the Performance Criteria

“Composite mapping concentrations” – Malopolska

- A more strict data selection should be applied (e.g. – comparison only for the pilot regions)



Additional comments - Malopolska

- A new bottom-up emission inventory is being prepared for Malopolska
- In November 2018 air quality assessment based on new emission dataset will be calculated for Malopolska region in order to evaluate the emission inventory
- We plan to apply the Emission Delta, Delta Tool and composite mapping for this exercise