

CEN WG/43

Some present issues

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FAIRMODE → CEN

- A CEN process has been started to transform the FAIRMODE recommendations into a (draft) CEN standard.
- The basic definition of the Model Quality Objective in CEN is as previously defined in FAIRMODE.
- Several unclear issues in the Air Quality Directive still create problems when trying to create a formal definition of model quality assessment.

MQI / MQO

$$MQI = \frac{|\bar{O} - \bar{M}|}{\beta U_{95}(\bar{O})}$$

$$MQO: MQI \leq 1$$

The AQD requires that the modelling quality objective be fulfilled for at least 90% of the available stations. The practical implementation of this approach is to calculate the MQI associated to each station, rank them in ascending order and inferring the 90th percentile value according to the following linear interpolation (for nstat station):

You need at least 10 stations ...

Not enough stations

- In many smaller model quality studies less than the seemingly required 10 stations are available for model assessment.
- Possible solutions:
 - Use nearby locations: transferability
Assume model behaviour at nearby locations can be used.
 - Use indicative measurements
Palms tubes, other types of measurements.
 - Use less than 10 stations for evaluation
I.e. 10% of a number less than 10 is always 1.

Measurement quality

- Measurement data quality for use in the MQO
 - High quality / reference
 - Indicative measurements
 - Can indicative measurements be used in the MQO?
 - Sensor data?
 - Can we define sensible criteria?

Station representativeness

- Station representativeness is a long standing and complicated issue.
 - Is it reasonable to require all available stations to be used in a model assessment?
 - Ways out ?



