



National Institute for Public Health
and the Environment
Ministry of Health, Welfare and Sport

QA/QC for annual AQ assessment; Dutch practice & comments to CT2

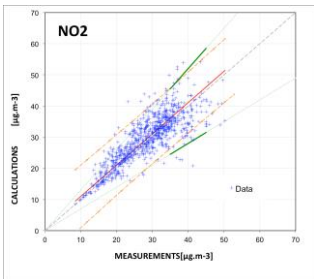
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NL Air Quality issues



- In the Netherlands, yearly average NO₂ concentrations are still an issue in some cities, temporal peaks are no real issue.
- Around livestock farming/industry yearly average PM₁₀ is an issue, as are daily exceedances (which correlate quite well with yearly averages).
- Mistakes in input or incomplete input are causing the most and largest mistakes in AQ assessment.
- Strong focus on quality of input to AQ assessment, no explicit modelling of temporal variations.
- All input/output for official yearly assessments are publicly available on the web.



- Most formal rules concerning environmental issues are regulated in the Dutch law on “Environmental Management”, based on the AAQD.
- Little “freedom” in setup/performing of AQ assessment.
- Three official calculation methods for air quality assessment.
- Every few years RIVM collects the official AQ data as well as all indicative measurements performed by (mostly) municipalities to check the models.
- Practically all input/output/parameters/models/... available to the public.
- Reports and issues are discussed in parliament.

Comments CT2: variability

*Chapter 1: The ability of [these] modelling assessments to capture both the **spatial and temporal variability of the air quality** situation becomes therefore an important question, especially when such modelling results are to be used to support environmental policies.*

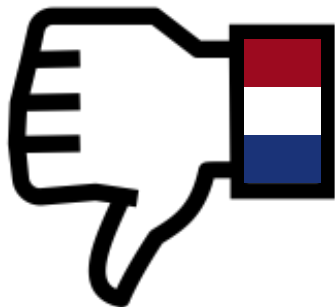


- Air quality issues differ from country to country, main issues can be *average concentrations* and/or *temporal variations*.
- It is up to the countries to make sure the relevant aspects of their AQ assessment are working correctly.
- No need for all models/systems to fully describe all spatial and temporal variability of the air quality.



Comments CT2: Mandatory tests

*Chapter 6: The main drawback of the MQO's is that they provide a single summary pass/fail information for a modelling application. ... This is why complementary tests are **required** and proposed below for a more exhaustive QA/QC process.*



- It is good to discuss more (extensive) tests to better assess, discuss and compare both model quality and the quality of the full AQ assessment.
- The Netherlands strongly objects to additional mandatory quality requirements.



Comments CT2: stations

Chapter 4: Finally, we also assume that the station classification and station types currently proposed by the IPR apply in the context of this QA/QC protocol. When various (sub)models in a modelling chain need validation, this IPR concept of “station type/classification” will be efficient to select appropriate stations for partial evaluations (one sub-model) of the modelling chain. The same classification will be very useful to structure the QA/QC tests within the protocol.

- How does this relate to the discussions in and recommendations of WG1 regarding using all stations in model testing in complex area's?





Comments CT2: QA/QC protocol

Definitions in section 5 (QA/QC Protocol: documentation of modelling application) leave much room for interpretation.



- the model has the **appropriate** spatial and temporal resolution for the intended application;
- the model is **adequately** validated for the particular application, and is **well** documented;
- the model contains the **relevant** physical and chemical processes **suitable** for the type of application, the scale and the pollutant for which it is applied;
- the **relevant** emission sources for the application are **adequately** represented;
- **suitable** meteorological data are available.



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Questions ?