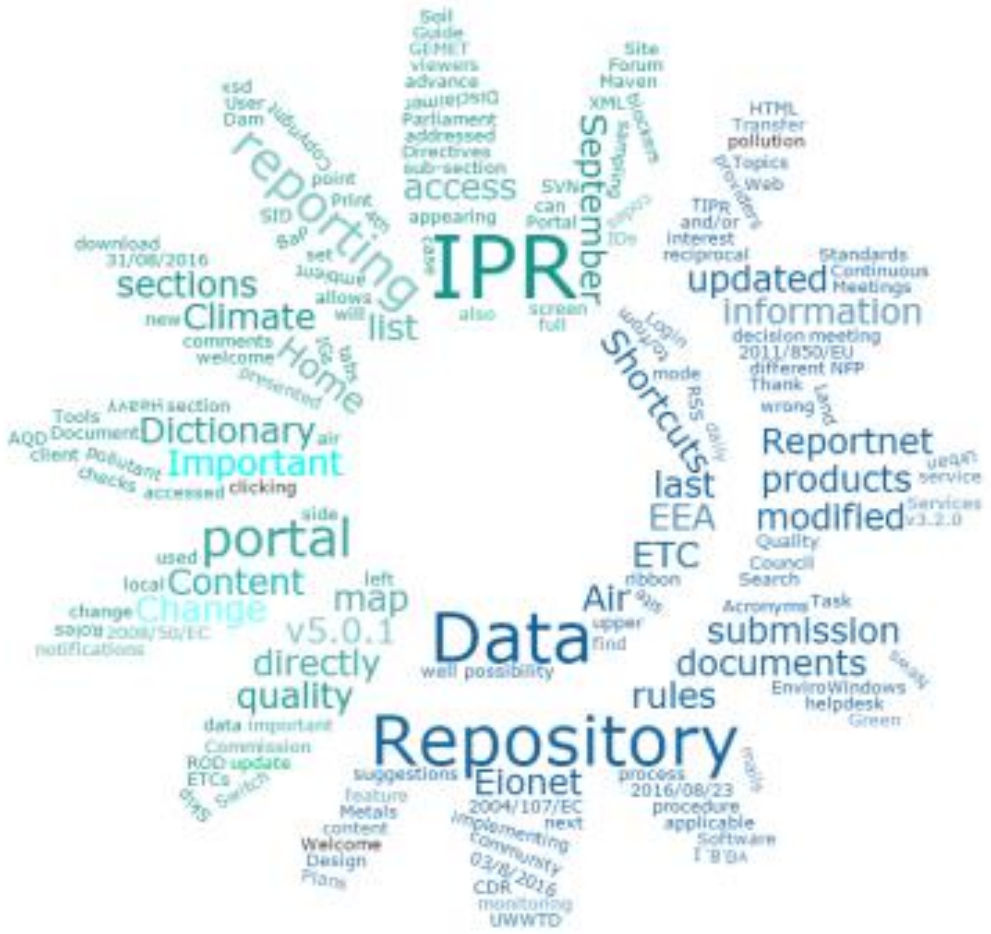


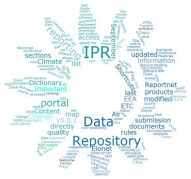
6th IPR Technical Meeting

Copenhagen (EEA), 5 – 7 November 2019

Plenary meeting – 6 November

Session 5

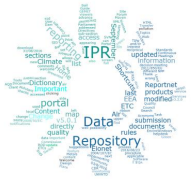
Discussion on technical points



1 Reporting uncertainty

- From the AQ Directive, measurement uncertainty is applicable to:
  - individual measurements
  - averages *"over the period considered by the limit value (or target value in the case of ozone …. The uncertainty for the fixed measurements shall be interpreted as being applicable in the region of the appropriate limit value (or target value in the case of ozone). "* (Annex 1/A).

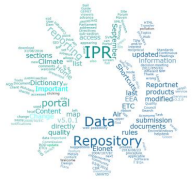
- In the MS and EC's Common Understanding of the IPR Decision 2011/850/EU (or IPR guidance part 1 v2.0.1), it is specified (p. 47) that:
  - *"…the data quality objectives, i.e. measurement uncertainty, data capture and data coverage, will be reported with the measurement configurations in Dataset E and F (Aggregated data) whilst information on the limit of detection is reported in Dataset D (Information about assessment methods)."*
  - *"The current reporting scheme only allows reporting one value for uncertainty. Until a solution has been found, the best practice would be to report the highest uncertainty to indicate the upper bound."*



1 Reporting uncertainty

Questions:

- Which uncertainty do you calculate / is available in your country?
- Since F is not reported, where to report the uncertainty corresponding to the LVs? In G?



2 PM adjustments to reference methods (tour de table about current practices)

- Under D, for non reference methods, equivalent status is declared

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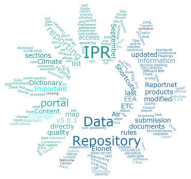
▼<aqd:dataQuality>
```

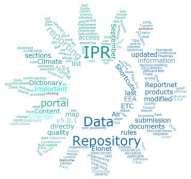
- However, we do not have any information on UTD / validated data on if/when/how data is adjusted…

- How should you report this information?



3 Modification of ozone cross-section

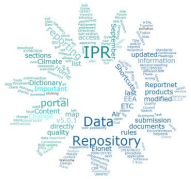
- Absorption cross section is a measure for the probability of an absorption process.
- The present ozone absorption cross-section is probably going to be modified in the coming years depending upon the adoption by the BIPM (applicable in 2022?).
- The new value will increase the measured ozone concentrations by about 1.23%.
- As a consequence, the number of exceedances could potentially increase significantly, in particular AOTs.



3 Modification of ozone cross-section

Questions:

- How do you plan to deal with this modification?
- What about the date of change? (synchronisation between countries)
- How to proceed with the historical data ?



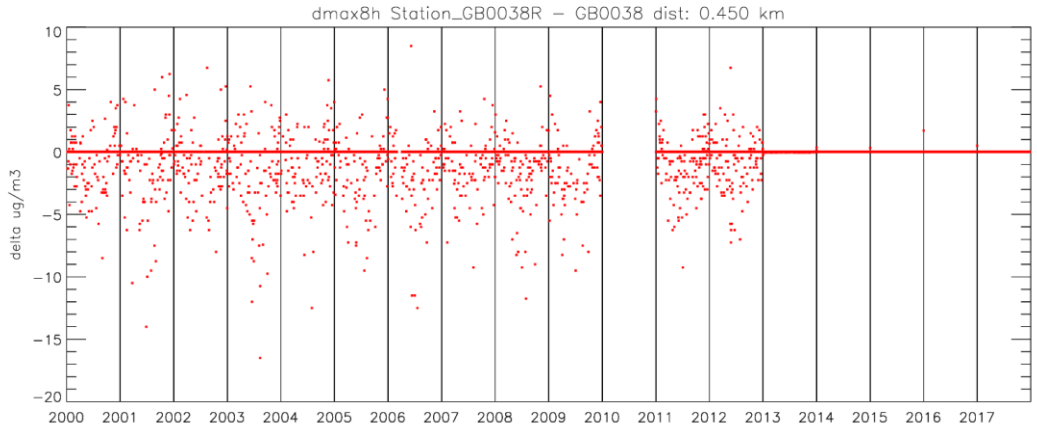
4 Detection of inconsistent O3 data in Airbase/AQ e-Reporting (a spin-off from ETC/ATNI Task 1.1.2.2)

- **Background:**
  - Long-term trends analysis for various pollutants using EEA's Airbase/e-Reporting data
  - Comparison between data from EMEP (EBAS) and from EEA's Airbase/e-Reporting for O_3 data.
- **Method:**
  - Plotting the difference in daily 8h maximum O_3 concentration for the same station reported for both datasets, over 17 years.
- **Conclusions:**
  - the analysis has revealed a number of issues:
    - **Local time vs UTC**: differences in the specification of the time zone
    - **Coordinates:** differences in the specification of the coordinates
    - **Very large differences in concentration for some sites/years** (Unknown reason)
    - **Errors in the units**: differences in the specification of the unit

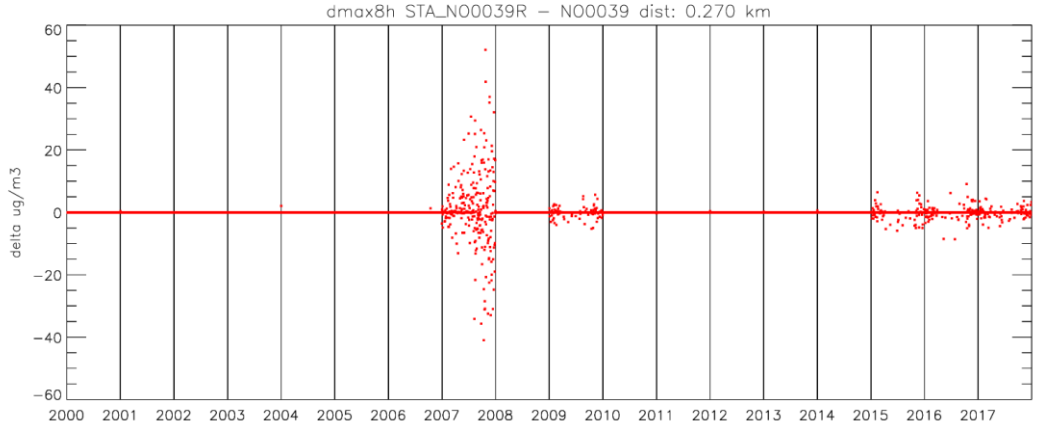
Joana Soares & Sverre Solberg– EEA/NILU

4 Detection of inconsistent O3 data in Airbase/AQ e-Reporting (a spin-off from ETC/ATNI Task 1.1.2.2)

- **Local time vs UTC**: For a number of sites we find some minor differences in the hourly time series that are due to errors in the specification of the time zone.



Before 2013: there is an is a difference of 1 h in the reporting

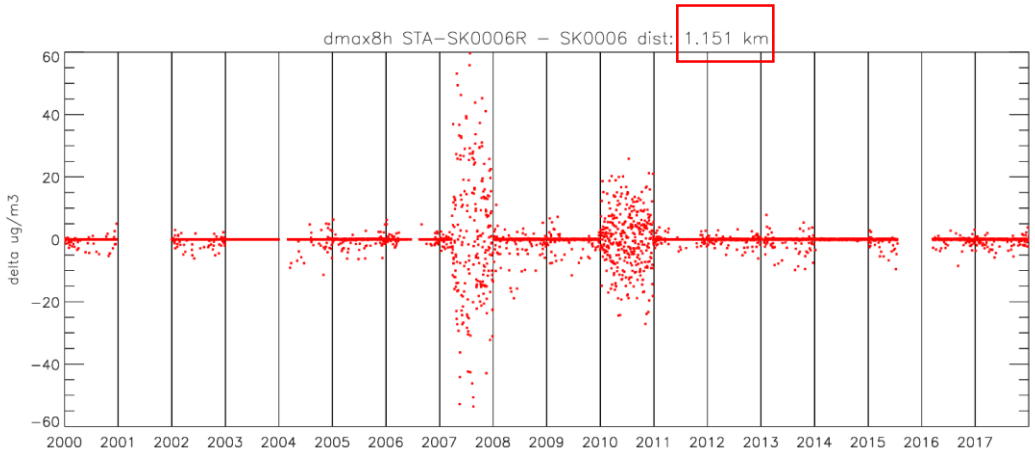


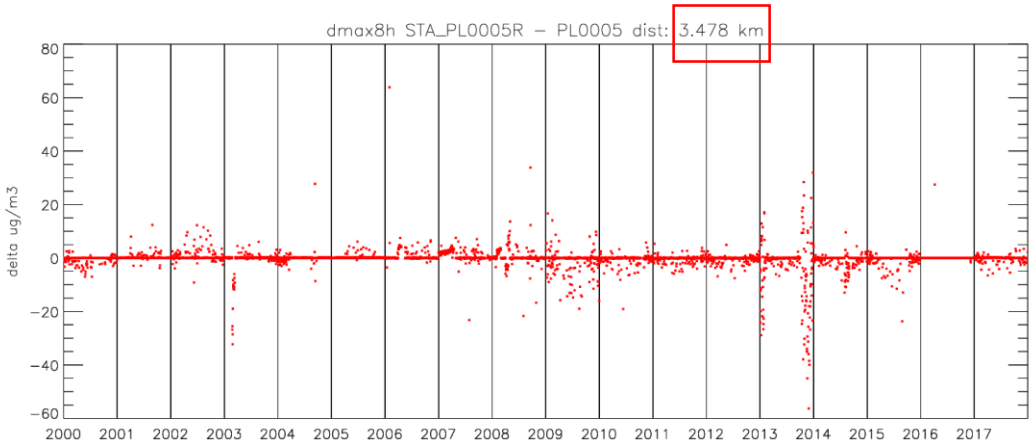
Errors in the reporting of time zone in 2009 and 2015 and onwards

Joana Soares & Sverre Solberg– EEA/NILU

4 Detection of inconsistent O3 data in Airbase/AQ e-Reporting (a spin-off from ETC/ATNI Task 1.1.2.2)

- **Very large differences some sites/years** (Unknown reason)



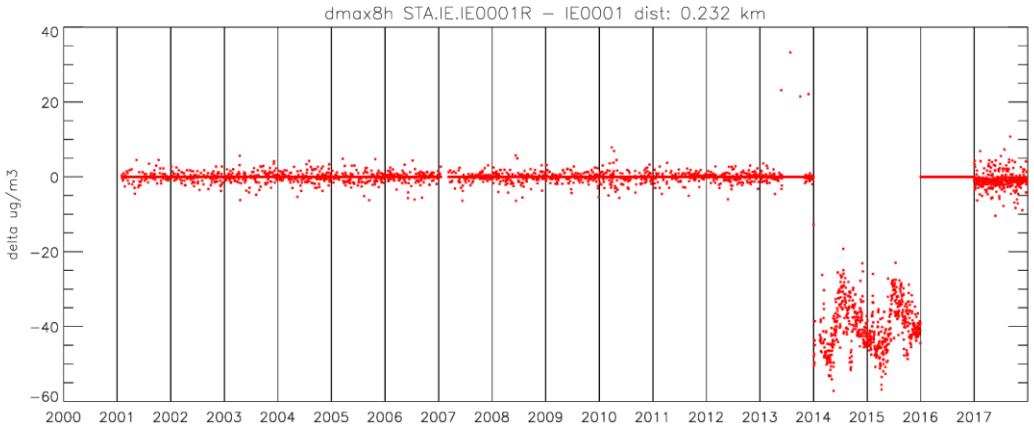


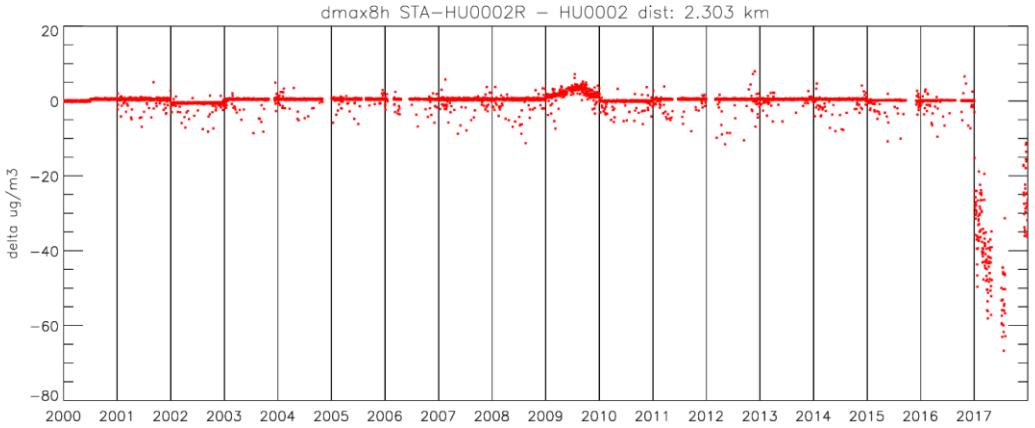
Large differences in the data in certain years. Here up to 60 ug/m3 in difference between datasets
There is a large physical distance difference between the sampling points

Large difference in terms of

4 Detection of inconsistent O3 data in Airbase/AQ e-Reporting (a spin-off from ETC/ATNI Task 1.1.2.2)

- **Errors in the units:** ppb vs ug/m3





unit in EEA vs EMEP database disagree on 50%, suspecting of a mistake between ppb vs ug/m3

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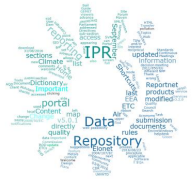

Thank you for your attention!