
Problems on „ data quality“

1.a. intra-station comparison

(Please use the file: LAU_hourly_winter06.xls for this question).

At the Lausanne NABEL site, a completely different behaviour is visible for CO and NO in the period of 15.12.2006 until 20.12.2006 in comparison to before and afterwards. The Federal Office for the Environment FOEN asks whether this is a real effect or whether this has to do with a problem in data quality.

- Please provide an answer to FOEN by using available data. Justify your decision.
- Why does ozone behave differently during that period? Please discuss briefly (use also data from the rest of December 2006 to answer the question).
- What happens at 03.11.2006 at 07:00 to the O₃ and the NO?

1.b. inter-station comparison

(Please use the file: *exercise LAE-PAY.xls* for this question).

In the data of the Laegern site of NABEL (rural/forest site near Zuerich) an error has occurred in October 2008 for the ozone measurements. Detect the error by comparing data sets from Laegern and Payerne at the same time. Justify your selection and propose a solution, from when onwards data should be flagged.