Aerial environment practice assignment

First part:
Choose **one station** from **one country** from the EMEP database for **ozone** and **heavy metal** (one metal is enough) concentration data. Create annual and seasonal trends from the data series.
- The ozone data is available hourly, while the heavy metal measurements occur in 4-8 day intervals. From this you have to calculate monthly averages.
- Please choose only such stations where the data is available from at least 2002. The time range of the analysis should cover **2002-2012**.

Second part:
The German Weather Service (DWD) publishes on their website the Hess-Brezowsky macrosynoptic weather types (grosswetterlagen) for Europe. Try to find correlations between the pollutant concentration and the weather types.
- The classification is available daily and a monthly summary can also be found; both from 2002 up until today.
- If seemingly there's no correlation between the monthly pollutant averages try extreme values or standard deviation.

Third part:
Write a short paper describing the results and used calculation methods, the length of the paper should be 5-6 pages long (figures included). In can be in either doc, docx, pdf or even tex format, no printed version required.

Notes:
- You can choose the method of data analysis software, or can either write a program for it in whichever programming language you prefer. The size of the database enables the use of Excel.
- If you have **any** questions you can find me in either person or by e-mail. It is easier if we first agree on an appointment by e-mail.
- From the Hess-Brezowsky classification – most of them are in German:
    o http://www.borenv.net/BER/pdfs/ber10/ber10-001.pdf - an example article on the correlation of HB and air pollution.
    o http://de.wikipedia.org/wiki/Gro%C3%9Fwetterlage – short description in German.
    o http://www.pik-potsdam.de/~uwerner/gwl/welcome.htm - long version in German (chapter 2 is the most relevant).
    o www.springerlink.com/index/y374h7070u738484.pdf - article on objective HB classification.

Deadline: 15 May, 2013. (23:59)