

***Interactive comment on “Analysis of exceedances in the daily PM<sub>10</sub> mass concentration (50 µg m<sup>-3</sup>) at a roadside station in Leipzig, Germany” by C. Engler et al.***

**Anonymous Referee #2**

Received and published: 20 July 2011

The manuscript is written in a very detailed manner on exceedances of the PM<sub>10</sub> limit values over 5 years of measurement. The analyses of the results are interesting indicating the major source contributions, which is significant for local authority to implement air quality strategies. It should be published as it is with a few minor corrections or clarifications as the followings.

1) The results showed very similar PM<sub>10</sub> concentrations at the urban background (UB) and the rural background (RB) sites, which resulted in very low urban source contributions. Are the PM<sub>10</sub> mass at UB corrected (normally by 1.3 times), which may lead to the low UB concentrations?

C6650

2) The PM mass at the urban road (UR) and the RB sites is gravimetric. It is normally difficult to weigh the quartz/quartz fibre filters. What are the weighing conditions or how is the weighing room controlled?

3) In Table 3, the calculation of the probability of exceedances (%) should be mentioned in the text.

4) In Figure 7, the results showed are at the RB, not at the UB stated.

5) In Figure 7, high concentrations of Cl in winter may relate to road salt during severe weather conditions (?).

---

Interactive comment on Atmos. Chem. Phys. Discuss., 11, 15831, 2011.

C6651