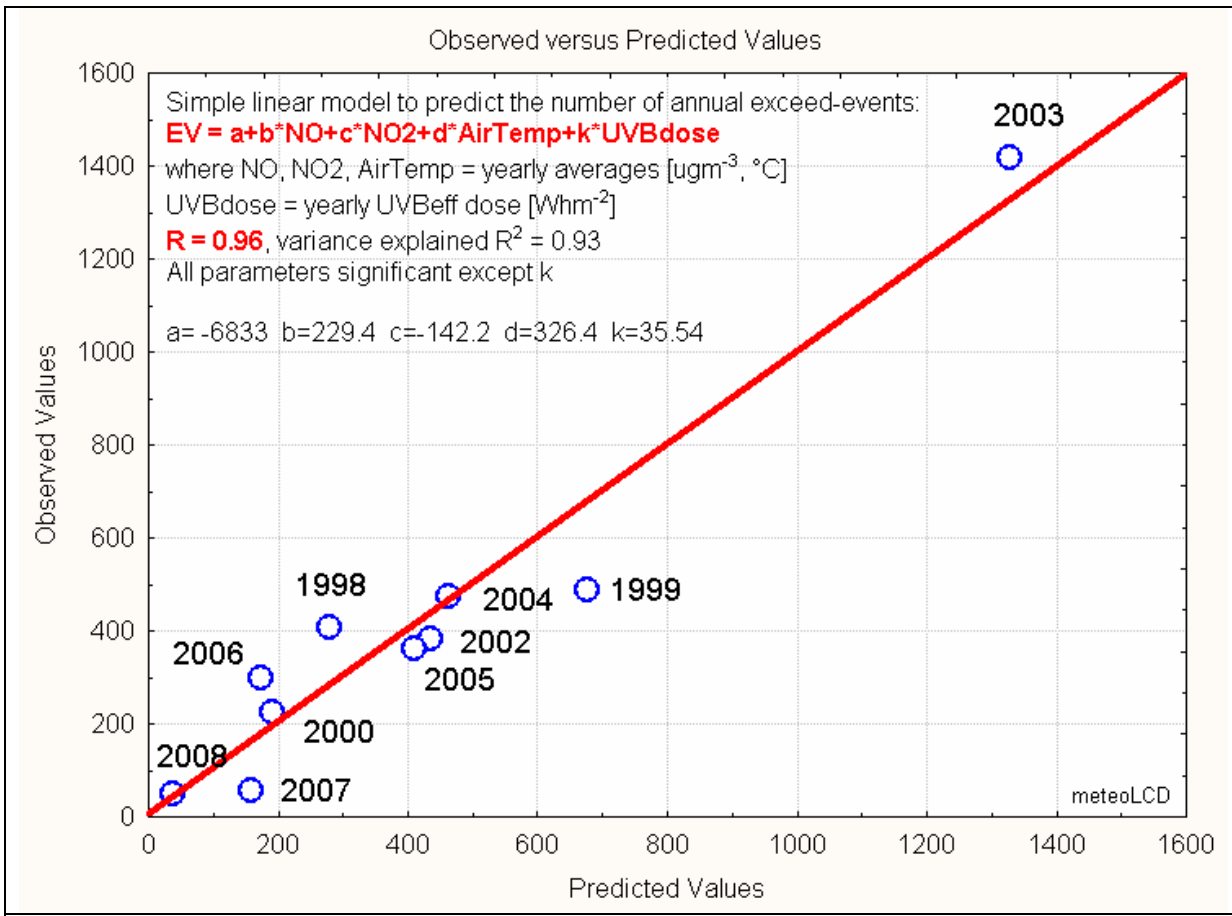
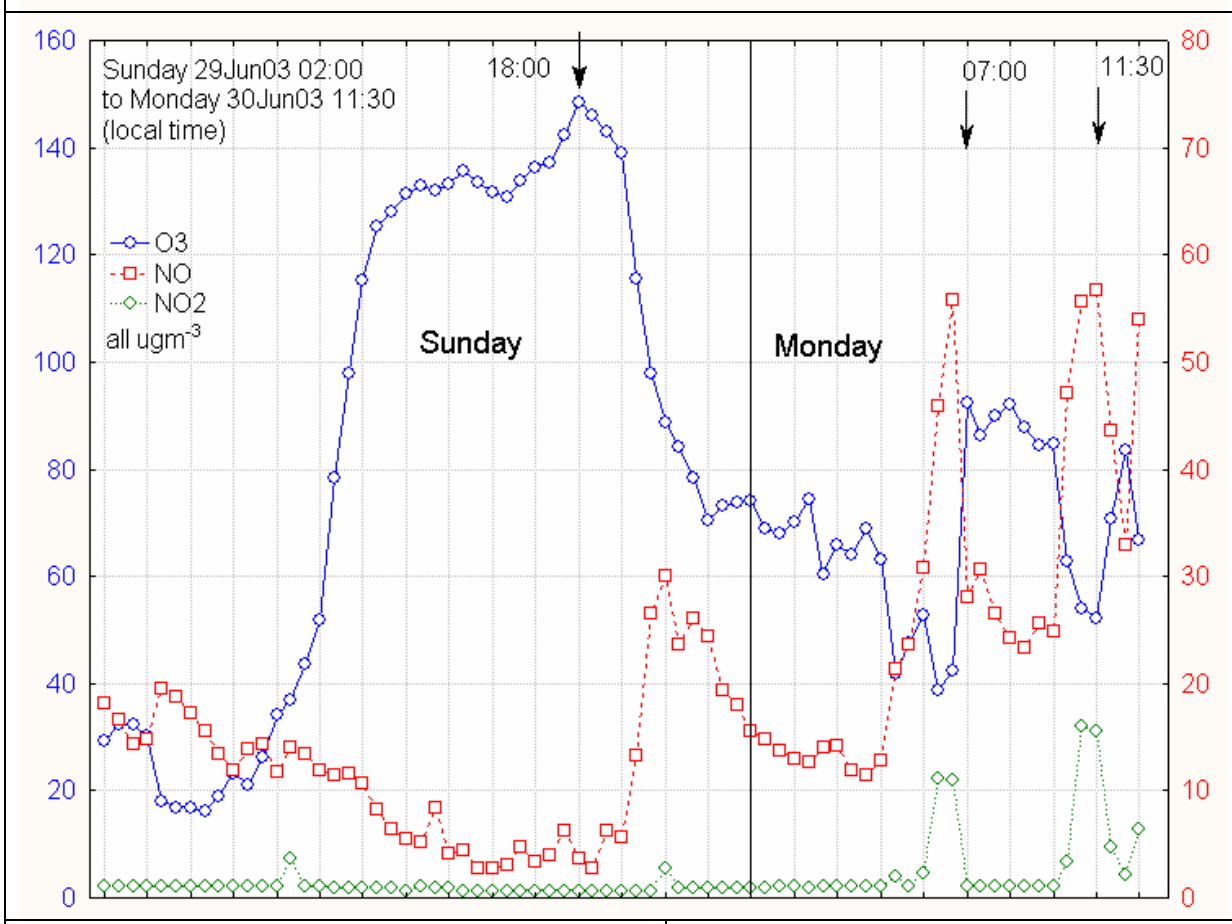


Linear model to predict the number of yearly exceed-events (half-hour > 120)

The best result (highest R) is given by a linear combination of the annual averages of air temperature, [NO] and [NO2] and the annual UVBeff dose.

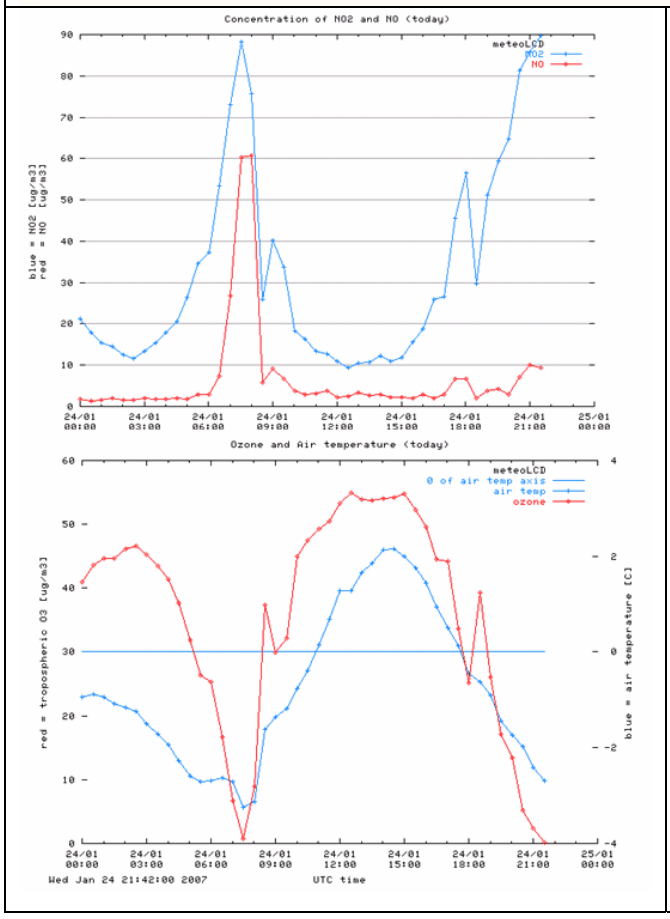
R = 0.96

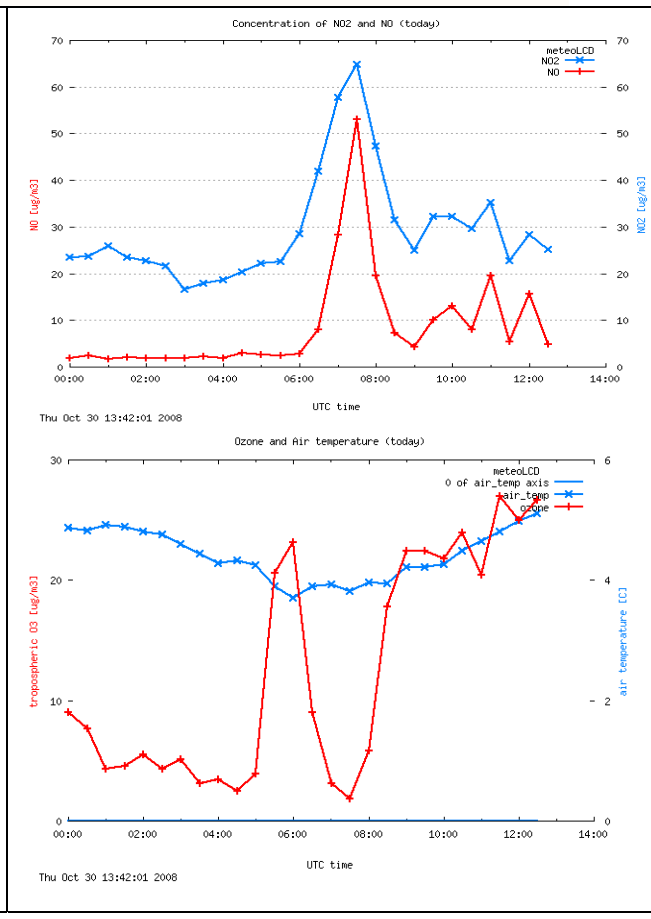
This suggests no abrupt or fundamental changes during the last 10 years.



NOx titration:

O3 destruction by NO is shown here for Sunday and Monday (29 to 30 June 03). No morning traffic on Sunday. High Monday 07:00 NO peak by commuters lowers [O3]. A second [O3] lowering caused by 11:00 traffic.
Often NO remains trapped in the morning inversion layer and reacts very quickly with O3, eventually bringing O3 concentrations to nearly zero (especially during colder days).





Example of a near total O3 destruction by NO peak during cold January morning (16Jan07) and fall (30Oct08).

Over the 10 years:
[NO] trend is flat,
[NO2] trend is +1 $ugm^{-3}y^{-1}$

Mean [NO] and [NO2] are very low. Averages from 1998 to 2007:
[NO] = 9.9 ugm^{-3}
[NO2] = 18.5 ugm^{-3}

[NO2] (blue) and [NO] (red)
Air temperature (blue) and [O3] (red)