Referee#4

Comment 5 *Please consider simplifying the results presented in section 2.2 "constraints of precision", by synthesising the results in tables. The text is very hard to read at the moment with many symbols and numbers.*

Reply We agreed and added a table after page 5197, line 23:

Table 1. Review of the specifications of NO/NO$_2$ analyzers under well defined (laboratory) conditions. Results are from data simulations (random number application), for details of simulation conditions see text (Sect. 2.2). Ranges of minimum detectable NO$_2$ compensation point concentrations ($m_{comp,NO2}$), correspond to ranges of NO$_2$ deposition velocity and the goodness (R^2) of relation between the ambient *vs.* sample NO$_2$ concentration measurements. Sample NO$_2$ concentrations ($m_{s,NO2}$), where the precision of NO$_2$ concentration measurements ($= s_{m,s\_NO2}/m_{s,NO2}$) exeeds the 10 % level, are also given.

characteristics of NO/NO$_2$ analyzer	unit	1985 - 1995	1995 - 2005	present (most advanced)
$LOD(m_{s,NO2})$	nmol m^{-3}	44.6	4.5	0.4
	ppb	1.0	0.1	0.01
minimum detectable $m_{comp,NO2}$	nmol m^{-3}	17.5 - 99.4	3.6 - 21.3	0.8 - 4.0
	ppb	0.39 - 2.23	0.08 - 0.48	0.02 - 0.09
$m_{s,NO2} (s_{m\_s,NO2}/m_{s,NO2}) >10 \%$	nmol m^{-3}	150	14.8	1.5
	ppb	3.36	0.33	0.03