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Carbon gases in the London air - the 2000–2006 record

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CO_2 and CH_4 records in air monitored at Egham, west of London, over the 2000-2006 period have been compared with the Atlantic marine boundary layer record as measured at Mace Head on the west coast of Ireland. The time-series comparison shows that the CO_2 growth rate close to London is at least as rapid as in background air at Mace Head. This implies that the underlying emissions growth rate in SE England is as strong as, or possibly stronger than the growth rate in the source regions of the air crossing the Atlantic (such as eastern North America). In contrast, the 'excess' methane in Egham air declined significantly compared to Atlantic background air over the period. Isotopic records of $\delta^{13}C$ in CH_4 also show a convergence of the records over the 1995-2004 period consistent with a reduction in fossil fuel sources in SE England. These results imply that CO_2 emissions control measures in SE England are having limited impact compared to CO_2 in source regions of air masses reaching Mace Head; but that measures to reduce CH_4 may have had more success, at least in the earlier years of the study period.