

Measurements of some trace species at Tsukuba with FTIR

Isao Murata[1]; Hideaki Nakajima[2]

[1] Environmental Studies, Tohoku Univ.; [2] NIES

http://pat.geophys.tohoku.ac.jp/members/members_staff.htm#murata

The vertical column densities of N₂O and CO were observed at Tsukuba with a High-resolution Fourier transform spectrometer since December, 1998. N₂O column increased at the rate of 0.86%/year from 1999 to 2005. It corresponds to 2.8ppb/year at the surface and is about three times higher than other measurements. There is little inhomogeneity in the N₂O distribution because its lifetime in the troposphere is so long. We should check our result again. CO column increased at the rate of 1%/year from 1999 to 2005 but it is ambiguous because there is large daily variation. There is a possibility that increasing pollution around megacity and forest fires in Siberia affect the CO amount.