




Trends and changes in stratospheric ozone at Legionowo, Poland since 1979

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The beginning of regular ozone soundings at Legionowo (52.4°N, 21.0°E), Poland in 1979 coincided with the global speeding up of ozone depletion, which was especially strongly manifested in the high latitudes. For trend estimation a multivariate regression model including NAO, QBO and SF 10.7cm was applied to the monthly deviations in ozone profile. During winter and spring, a significant negative ozone trend was found in the lower stratosphere for OSE (Brewer-GDR) series 01.1979-05.1993. From that time the ECC ozone sensor has been in use. Since 1997 a significant ozone increase has been found at heights above 22km. Special attention has been paid to changes in the UTLS region. A new algorithm for the ozone tropopause has been elaborated. Trends and changes in the vicinity of the ozone and thermal tropopause will be presented.