



## **Yearly course of the selected characteristics of the ozonopause and tropopause at the ozonesonde stations over the globe.**

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There are various ways how to define the tropopause. Here we use a thermal and chemical (by the ozone mixing ratio) definition of the tropopause. We calculate the yearly courses of heights of the tropopause defined thermally and chemically and compare them. The yearly course of the difference between the ozonopause and tropopause and the correlation coefficient between heights of the tropopause and ozonopause are calculated. At the majority of stations we observe in the height of the tropopause and ozonopause an annual variation with a maximum in summer and a minimum in winter. In the high latitudes of the Southern Hemisphere we observe the opposite yearly course. At most stations in spring the ozonopause is above the tropopause, while in summer the ozonopause is below the tropopause and in autumn the ozonopause goes again above the tropopause. At high latitudes of the Southern Hemisphere in summer the ozonopause is above the tropopause, while in the early spring the ozonopause is below the tropopause or the ozonopause is at the same level as the tropopause. The highest values of the correlation coefficient between the height of the tropopause and ozonopause in the middle latitudes of both hemispheres we observe in winter and the smallest ones in summer, while at the high latitudes of both hemispheres we observe the maximum values of correlation coefficient in summer and the minimum ones in winter. There is no correlation between the height of the tropopause and ozonopause at the Antarctic stations during presence of the ozone hole in the early spring.