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About Contribution of Ox-, HO_x -, NO_x -, ClOx- and BrOx-cycle in the Stratospheric Ozone Depletion in the XXIst Century

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Based on the previously proposed algorithm of calculation of limiting stages of the reaction prolongations in stratospheric ozone depletion cycles* a contribution of Ox-, HO_x -, NO_x -, CIOx- and BrOx-cycle in ozone destruction at the end of the XXIst century at the latitude of 50° N for different seasons have been calculated. Calculations have been performed using a two-dimensional interactive model SOCRATES, and data on the concentrations of the main greenhouse gases listed in the scenarios of the Intergovernmental Panel on Climate Change (IPCC) RCP 4.5, according to which the stabilization of radiative forcing to occur by the end of the XXIst century. The work presents data on the absolute rates of ozone destruction in the cycles and their relative contribution to the destruction of ozone in 1995 and 2100 respectively in the altitude range 15-55 km for March, June, September, and December at 50° N.

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