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The results of the comparison of seasonal and daily variability of surface ozone (O_3) and nitrogen dioxide (NO_2) at urban monitoring stations in Moscow (Mosekomonitoring), Berlin, and Warsaw (European Environment Agency) for 2017-2018 are presented. Observational data indicate a leading role of vertical mixing in the atmospheric boundary layer in the formation of seasonal and daily regimes of surface ozone. Both seasonal and diurnal variations in O_3 and NO_2 are in good agreement at all stations. In the warm season, the anthropogenic factor becomes a key one for the formation of the daily maximum and increased levels of surface ozone under favorable meteorological conditions for active photochemical processes. The frequency of occurrence of high ozone values is determined, and an episode of atmospheric ozone values dangerous for public health is analyzed.

Keywords: meteorological conditions, surface ozone, seasonal variation, diurnal variation, episodes of high ozone values

Tab. 1. Fig. 3. Ref. 19.