

## **Anomalous diurnal variation of surface ozone concentration in St. Petersburg**

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Results of routine daily observations of surface ozone concentration in 1996 – 1998 are presented. The observations were carried out in winter in down town of St. Petersburg with hemiluminescent ozonometer. The new effect of sharp daytime decreasing in the concentration was found. The effect takes place in weekdays. Furthermore, the morning decrease and evening rehabilitation coincide with the beginning and end of working hours and traffic rush hours. On weekends the daily variations are close to that of norm for the non-polluted atmosphere. This, combined with the effect has never occurred under background conditions, suggests that the effect is associated with ozone depletion resulted from chemical reactions with pollutants in the atmosphere. Further study allows for using surface ozone concentration as an index for air quality in big cities.