

Voeikovo

Voeikovo ($59^{\circ}57'N$, $30^{\circ}42'E$, 72m above sea level) is located east of St. Petersburg, 12km away from its administrative frontier. The industrial zone of St. Petersburg wind direction sector is from 200 to 310 compass degrees.

Semi continuous CH₄ measurements (a week per month)

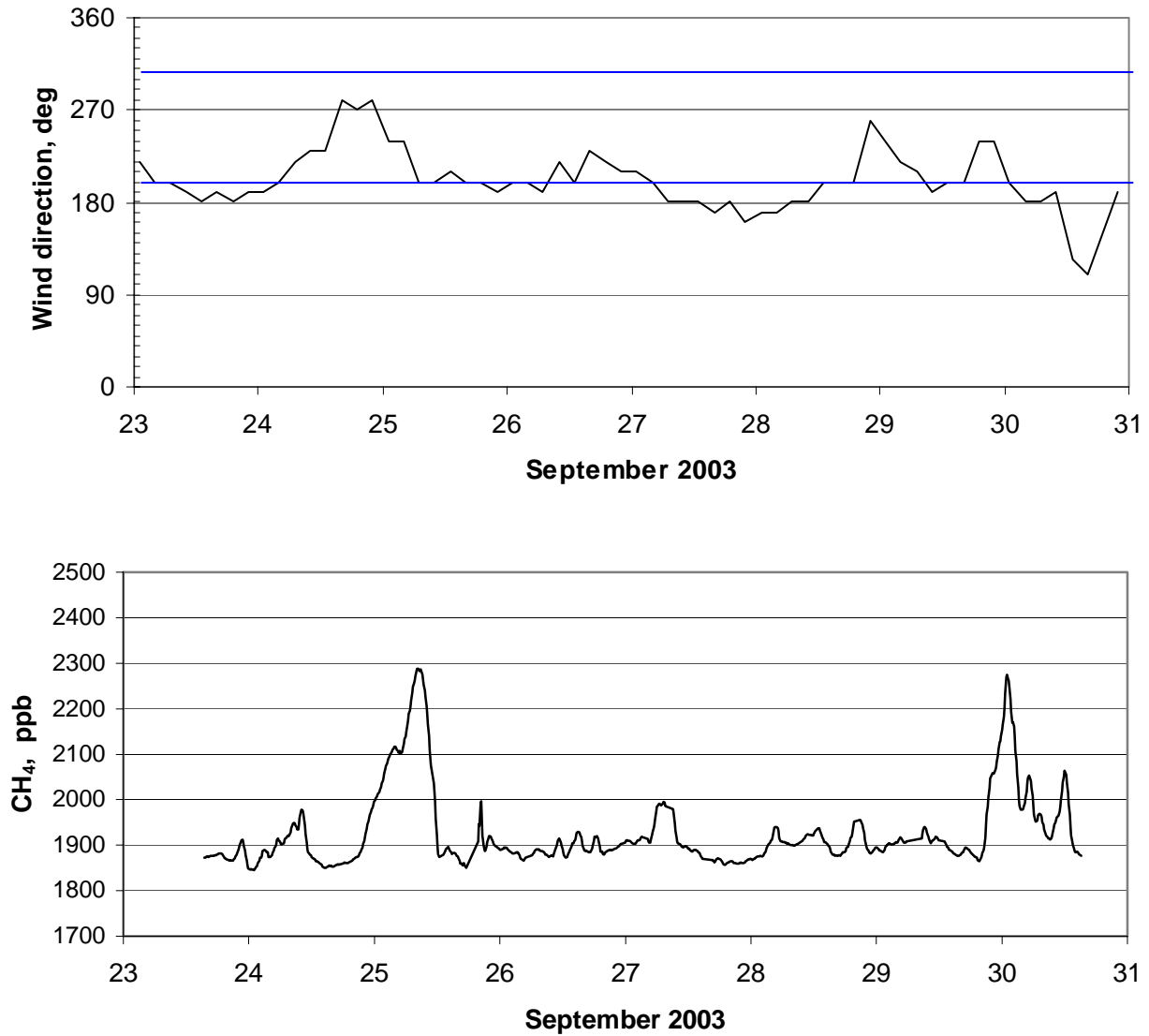


Fig.1. CH₄ concentration record at Voeikovo station

CH₄ measurements as monthly-integrated samples, collected in Voeikovo and St. Petersburg

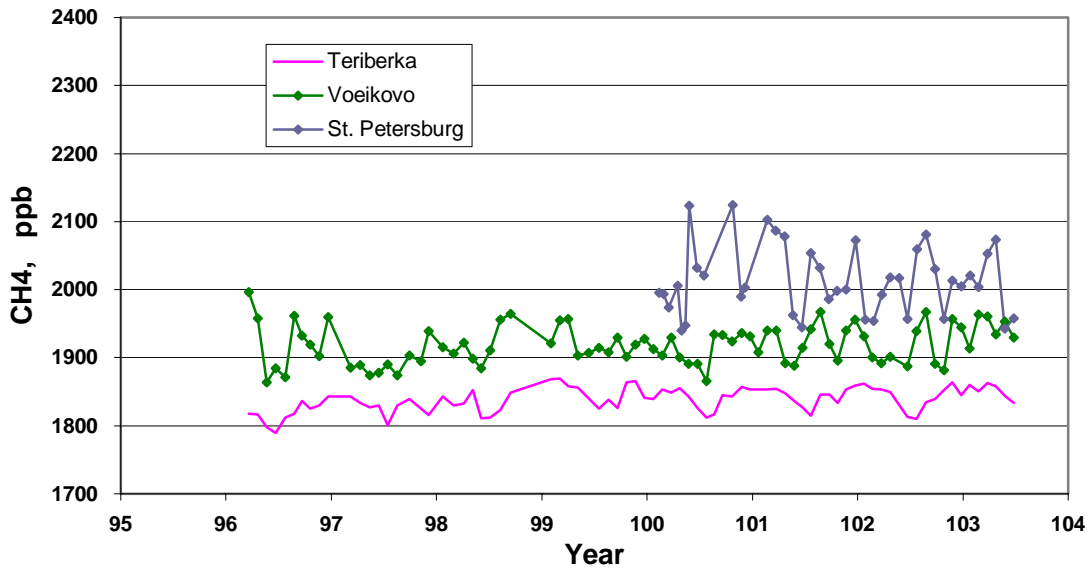


Fig.2. Monthly mean concentration in ambient air at Voeikovo and Saint- Petersburg with concentration data at the Arctic coastal station Teriberka

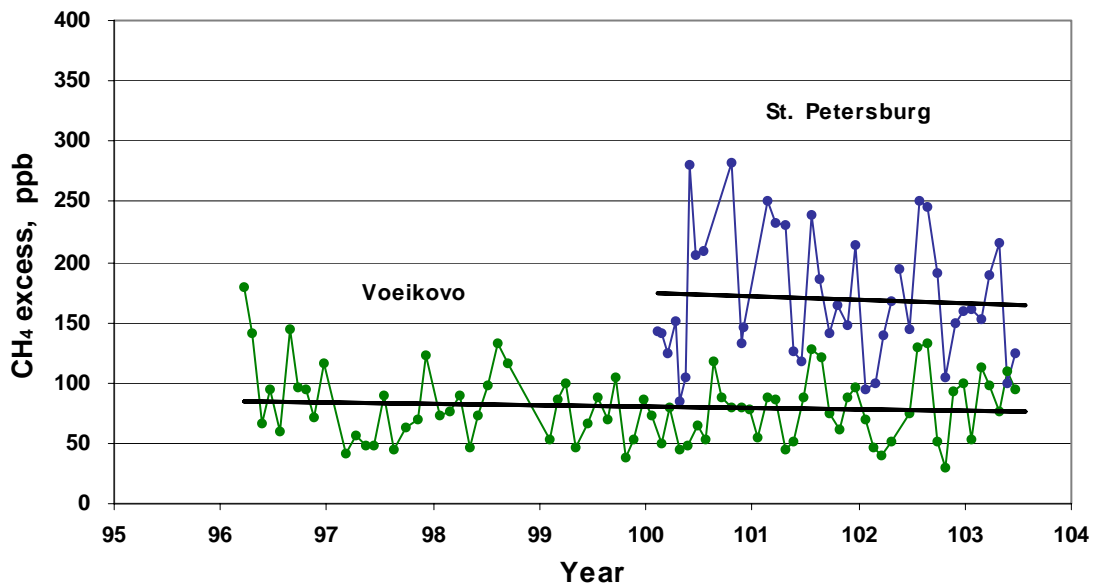


Fig. 3. CH₄ excess in Voeikovo and St. Petersburg relative to the Teriberka background level

Mean excess in Voeikovo is 80 ± 30 ppb
 Mean excess in St. Petersburg is 170 ± 53 ppb
 Linear trend of the mean Voeikovo excess is -1.2 ± 1.6 ppb/year and varies depending on statistical sample from -6 to $+6$ ppb/year
 Linear trend of the mean St. Petersburg excess is -7.1 ± 9.1 ppb/year