## P2. Continuous measurement of soil respiration at a larch forest in Eastern Siberia

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## Abstract

Soil respiration (CO<sub>2</sub> efflux) was measured continuously at a natural larch forest near Yakutsk, Eastern Siberia during the growing seasons of 2003, 2004 and 2005 using an automated closed/open chamber system with 5 chambers. Soil respiration changed seasonally almost in parallel with soil temperature on a daily basis; daily mean soil respiration showed an exponential relationship with soil temperature. During midsummer, however, soil respiration frequently decreased in the daytime as soil temperature rose. Thus, the dependence of soil respiration on temperature was weak in this period. This weak temperature dependence was probably caused by the direct and indirect effects of water deficiency on root and microorganism respirations.

We will show the interannual comparison of the temporal variations and environmental dependence of soil respiration along with the seasonally cumulative soil  $CO_2$  efflux among three years.