



Blocking effect of Ural Mountains on transboundary transport of pollutants from Europe to Northern Asia

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In this paper we present data on spatial distribution of trace gases and aerosols obtained during airborne measurement campaign carried out across vast territory of Russia from Novosibirsk to Black Sea coast. The cross-sections obtained during this survey enabled the analysis of atmospheric impurity distribution in the neighbourhoods of Ural Mountains aimed to reveal footprints of Western European pollutions in the Siberian air shed. It is shown that direct latitudinal transboundary transport of pollutants from Europe to Asia takes place only in the free troposphere (above 2 km). The transport within the atmospheric boundary layer can occur only along the trajectories enveloping Ural Mountains in the North or South.

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