



4 years of PM10 pollution in Poland - observations and modelling

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Poor air quality is a health issue in Poland, especially during winter. In central and northern part of the country, the primary source is low-level domestic emissions. In larger cities and agglomerations traffic emissions are also an issue.

Quantification of the contribution of transboundary pollution sources is still an open issue.

Analyses of 60 episodes for the period 2013-2016 with high PM10 concentrations were carried out under a contract from the Chief Inspectorate of Environmental Protection in Poland. Analyses of synoptic conditions and calculation of back trajectories were undertaken. A tropospheric chemistry model GEM-AQ was run at 10km resolution to calculate contributions from surface, line and point sources.

We will present trajectories for different types of episodes, maps with contributions for specific emission sources and transboundary pollution. Also, mean distribution of PM10 concentrations during episodes will be shown.