

## POSTER PRESENTATION

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Chemical Weather on Numerical Weather  
Prediction and Climate Modelling"

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### **P-15. Marje Prank: Contributions of different kinds of aerosols to aerosol optical depth**

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Dispersion calculations for pollution from anthropogenic, biogenic and wild-fire sources were performed for an episode during April-May 2006, when unusually hot and dry period with low-wind conditions resulted in a build-up of contamination over eastern Europe, which was accompanied by widespread wild-land fires over western Russia and intensive birch flowering in the same region. Analysis of the case showed that for total modeled aerosol optical depth at 550 nm, the largest contributions come from sulphates, nitrates and fine mode primary PM, while coarse particles and sea salt contributions are negligible. Wild-land fires appeared to be one of the major contributors of both PM and reactive gases in Europe during the episode.