



## **Simulation of the recent evolution of stratospheric aerosols by the MOSTRA Simulation of the recent evolution of stratospheric aerosols by the MOSTRA microphysical/transport model**

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We present recent advances in the development of a microphysical/transport model for stratospheric aerosols, called MOdel for STRatospheric Aerosols (MOSTRA).

MOSTRA is a 3D model describing the evolution in time and space of the stratospheric aerosol distribution described using a set of discrete size bins. The microphysical module used in this model makes use of the PSCBOX model developed by Larsen (2000). The transport module is based on the flux-form semi-Lagrangian scheme by Lin and Rood (1996).

The model structure will be presented with simulations of the evolution of the volcanic aerosol plume after recent volcanic eruptions.

### References:

N. Larsen, Polar Stratospheric Clouds, Microphysical and optical models, Scientific Report 00-06, Danish Meteorological Institute, 2000

Lin, S.-J. Rood, R.B., Multidimensional Flux-Form Semi-Lagrangian Transport Schemes, Monthly Weather Review, 124, 2046-2070, 1996.