



## **Climatology of precipitating convective clouds in ERA-Interim derived from the Emanuel and Živković-Rothman parameterisation scheme**

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The convective parameterisation scheme of Emanuel and Živković-Rothman (1999) was designed to represent cumulus convection with a special focus on convective water fluxes. This scheme is implemented in the Lagrangian particle transport and dispersion model FLEXPART (FLEXible PARTicle dispersion model, <http://flexpart.eu>) to calculate a redistribution matrix used for the transport simulation. In order to improve the wet scavenging through convective clouds in this model, we are statistically evaluating a global data set of cloud base and cloud top heights of precipitating clouds derived from the EZ99 scheme and based on ECMWF's ERA-Interim data. They have a spectral resolution of about 80 km and 60 vertical levels available every 6 hours. The results will be evaluated as a function of season and geographical region.