



Evaluation of HARMONIE using a Single Column Model in the KNMI Parameterisation Testbed

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Like most of the NWP models, HARMONIE has a corresponding single column version dedicated to the validation of physical parameterisations. Since January 2010 this single column model (SCM) has run on a daily basis in the KNMI Parameterisation Testbed (KPT). The HARMONIE SCM is run with different options from which the output can be compared with observations and other participating SCMs as well as with the corresponding columns from 3D models.

The supersite Cabauw in the Netherlands offers a wide variety of quality observations to do that comparison. The KPT has been successfully used for evaluating HARMONIE model performances for fast processes, like shallow convection, turbulence and surface processes. Numerous bugs have been fixed and parameterisations have been evaluated to advanced observations. In this talk we present case-studies which clearly show the benefit of this daily monitoring and evaluation.