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Preliminary results of the GABLS4 intercomparison

Eric Bazile (1), Patrick Le Moigne (1), Fleur Couvreux (1), Bert Holtslag (2), and Gunilla Svensson (3)

(1) Météo-France, CNRM/GAME, Toulouse, France (eric.bazile@meteo.fr), (2) Wageningen University, Wageningen, The Netherlands, (3) Stockholm University, Stockholm, Sweden

The GABLS4 intercomparison, launched in summer 2014, aims to study the interaction between the boundary layer and the surface in strong stability and during the diurnal transition focussing on the decrease of the turbulence. For this, the observation site of Dome C on the Antarctic Plateau was chosen mainly for two reasons: the availability of the in-situ measurements and a homogeneous surface with a low conductivity such as snow on a flat topography.

The intercomparison will consist of 3 inter-comparisons : Single Column Model (SCM), Large Eddy Simulation (LES) and land-snow model (LSM). It is organized in two steps.
The first one is dedicated to the LSM and the SCM with an interactive surface (snow) scheme. Then, in the second one, the observed surface temperature will be prescribed in the SCM and in the LES models.

The first GABLS4 workshop is organized in May 2015 in Toulouse (France). 12 groups with LSM/SCM and 7 LES/DNS sent already the results or announced their participation to the intercomparison.

The preliminary results for the SCM intercomparison with observations and LES will be presented and the outcome of the Toulouse workshop will be discussed.
More details are available on the GABLS4 Web page (http://www.cnrm.meteo.fr/aladin/meshtml/GABLS4/GABLS4.html).