

Specifications for the LES runs:

It is asked to each participant to provide one simulation with the following aspect :

Duration : 24h

Domain: $L_x=L_y=1\text{km}$, $D_x=D_y=5\text{m}$; $L_z=1000\text{m}$, $D_z=2\text{m}$

Boundary conditions :

- lateral:periodic

- top : in order to minimize reflection of upward propagating gravity waves, you may use a sponge layer for damping perturbations (if so bottom of the sponge layer at 700m)

The existence of an absorbing layer at the top of the domain is at the convenience of the participant

- bottom : surface temperature prescribed (cf driver2*nc file)

Initial profiles and large-scale forcing:

are provided by driver2*nc file

Radiation code should be used. Note it is important to provide the right vertical profile up to 20km to the radiation code and not use a climatological profile -> use the vertical profiles of the driver2*nc. No aerosol or Tegen climatology.

Initial perturbations :

random fluctuation of theta of +/- 0.1 K should be used when initializing the model

Other parameters :

latitude :-75.10

longitude :123.33

At most two additional sensitivity tests to resolution or domain or parametrization can be provided by participant. The domain should be at least 1km wide and if possible 3km wide.

If any information is missing please ask to fleur.couvreux@meteo.fr