



## **Belgium National Poster**

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# **Improving the deep convection parameterization in high resolution limit (3MT for Alaro-1)**

Consistent behaviour across resolutions of <8km down to a few hundreds of meters.

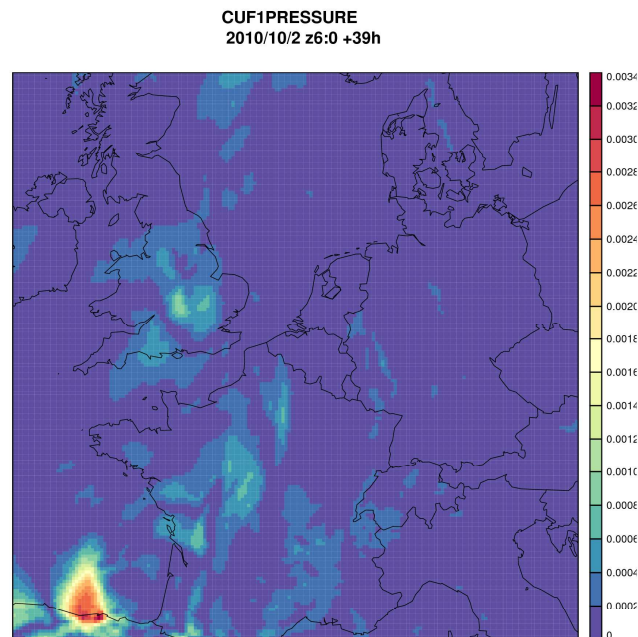
Balance subgrid and resolved.

# Improving boundary-error restarts (BER) with gridpoint nudging

- We monitor the difference between Surface pressure in the coupling model (Arpege) and the value interpolated from 3h coupling files. When the difference surpasses a threshold (fast moving storm crossing the boundary) an alert is given and a Boundary Error Restart is initiated with the storm inside the domain.
- To keep the large evolution from the run, gridpoint nudging is used to combine pressure data from the coupling model with the LAM run.

# Improving boundary-error restarts (BER) with gridpoint nudging

UPDATE: this past weekend, the operational CUF  
monitoring gave a first alert:



# **Effects of urbanization and climate change on surface runoff of the Brussels Capital Region: a case study using an urban soil-vegetation-atmosphere-transfer model**

- A study of urban surface runoff using SURFEX coupled to ERA-40 (downscaled with ALADIN to 10 km resolution)
- Effects of increased impervious area.
- Effects of future climate scenarios.