

Operational suite at IRM

January – June 2004

The current operational version is ALADIN-25, running on 16 processors of a SGI Origin 3400 computer.

The ALADIN-Belgium domain has been extended to 240×240 grid points, at the same resolution of 7 km. The model is coupled to ALADIN-France (and Arpège for forecasts up to 60h).

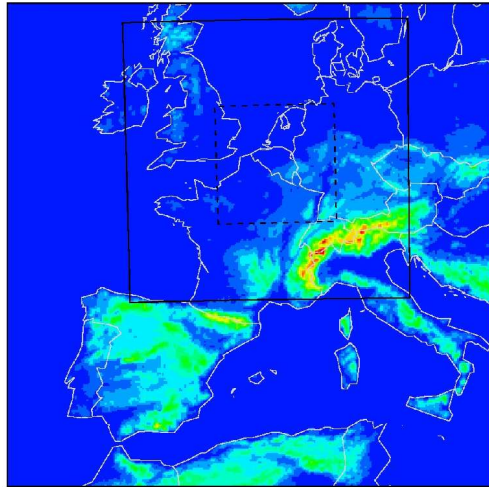
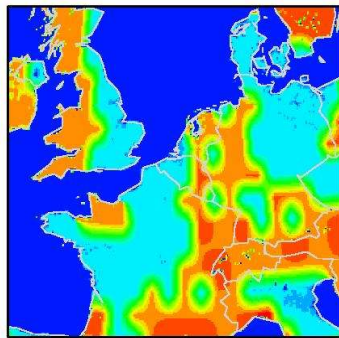


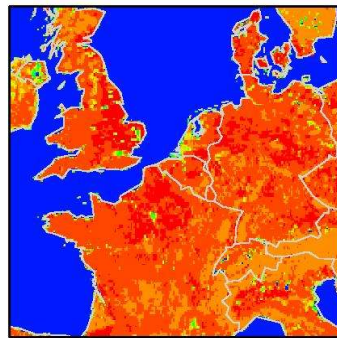
Figure 1: The old and new ALADIN-Belgium domains embedded in the ALADIN/France domain.

In June 2004 we found a severe problem with forecasts of 2m temperatures, which were up to 5 degrees too high at noon. The error was caused by the "clim" files. In the e923 script used to produce the "clim" files, part 5, which improves the vegetation index for Europe, had been suppressed.

SURFPROP.VEGEATAT
old clim

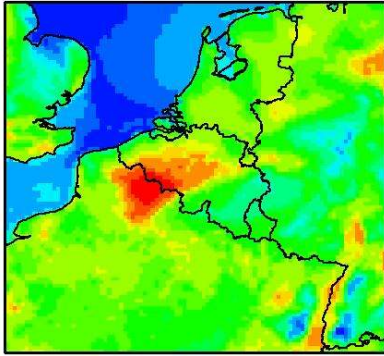


SURFPROP.VEGEATAT
corrected clim

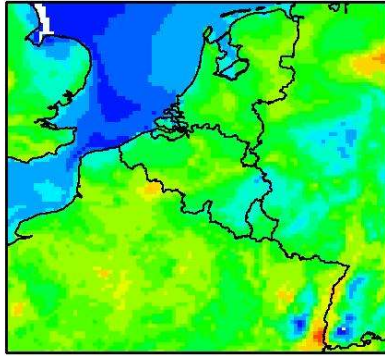


The effect of this error is very clear when comparing the original and corrected forecasts of e.g. May 10, 2004 :

CLSTEMPERATURE
2004/5/10 z12:0 +24h



CLSTEMPERATURE
2004/5/10 z12:0 +24h



In a plot of hourly temperature forecasts and observations in Uccle for the whole of June 2004, the impact of the new "clim" files (introduced on 16/06/2004) is very clear :

