

# THE REGIONAL NWP SYSTEMS AT METEO-FRANCE: Introduction to poster

EWGLAM/SRNWP 2009



**METEO FRANCE**  
Toujours un temps d'avance

# Aladin France

- New operational suite from February 2009
  - Prognostic TKE scheme
  - Shallow convection mass-flux scheme KFB
  - ECUME: sea surface turbulent fluxes scheme
  - 6 spectral bands for radiation (instead of 2)
- Next E-suite (autumn 2009):
  - Increase of Arpege resolution: T800c2.4
  - Increase of Aladin resolution: 7,8/8km
  - Doubling of density of radiances



# Arome

- Arome France is operational since Dec 08
  - 600\*512 grid, 2.5km resolution, 41 levels
  - 3-hourly 3DVAR assimilation cycle
  - NH model with 5 species microphysics, 1D TKE scheme, EDKF for shallow convection, ECMWF radiation
  - SURFEX
- Next parallel suite: Arome v2
  - Increase of vertical resolution: 60 levels
  - New version of EDKF
  - Fog sedimentation
  - Direct coupling with stretched Arpège T800c2.4
  - Assimilation of radar reflectivities



# Convective scale predictability studies with Arome

- Evaluation of uncertainty:
  - **On synoptic scale initial conditions and LBCs**  
Downscaling of PEARP with ALADIN+AROME forecasts
  - **On mesoscale initial conditions**  
AROME RUC with perturbed observations+AROME forecasts
- Results on a mediteranenan heavy precipitaion event shown on poster.

