### MAIN QUESTIONS AROUND ALADIN/ALADIN-2/AROME

Questions raised in the last year AROME meeting in

**Prague** (2003)

Recent questions (2004)

## Prague: ALADIN/AROME workshop, 11-12 April, 2003

#### TOPICS OF DISCUSSIONS (physics)

- Problematics of physics in view of AROME (timestep organisation, diabatic forcing, convection scheme, problems related to the "grey zone", physicsdynamics interface, first preliminary results, etc.)
  - How to coordinate the different developments (ALADIN, meso-NH, AROME) for a smooth convergence?
  - How to maintain and merge the different versions?

#### TOPICS OF DISCUSSIONS (data assimilation)

- " Upscaling/downscaling" difficulties, cost issues, longer range plans for 4d-var, new observations
  - How to distribute (share) the development work (AROME and ALADIN)?
  - How the coordination between the two teams would be ensured (more general)?

#### TOPICS OF DISCUSSIONS (coupling and dynamics)

- Coupling (progress at HIRLAM for revisiting the Davies scheme, two-way coupling)
  - How to tackle the revisit of coupling strategy?
- Non-hydrostatic dynamics (robust NH dynamics, ,, chimney" problem)
  - No real obstacles foreseen, common for ALADIN and AROME

#### TOPICS OF DISCUSSIONS (general)

<u>Upscaling or downscaling (2-3 km to 10 km or reverse)?</u>

Cost issue (driven by physics, but applying everywhere)?

Maintenance, phasing (who, when)??

# Prague: ALADIN/ALADIN-2/AROME coordination meeting, 13 February, 2004

- Do we need 2 or 1 transition step?
- What are the naming conventions (proposal of Dominique and Gwen)?
- Is there a need for coordination between the 3 projects?
- If yes: How to achieve this coordination?
- What is the role of the Assembly in the new system (any other new body?)?
- In what way can we take part in these projects?

- How the codes will be managed??
- In what form we will have the prototype AROME version?
- How to perform and merge developments?
- How to evolve from ALADIN to AROME (operational)??
- How the toolbox will look like and how we take into account the constraints of the toolbox during the development?
- HIRLAM relation?!?

