ALADIN

(Discussion help for the Agenda Item N° 8)

Ljubljana, 8/11/07

Verification

- The starting point is quite OK:
  - Slovenian common project for conventional scores;
  - Steps towards an INCA-linked scoring for precipitations;
  - Other international efforts;
  - Several 'home // suite' testing systems giving general guidelines.
- But the system lacks ambition for new developments and for EPS verification. A very recurrent ALADIN issue => warning signal coming from the MO EUMETNET initiative.
- New medium-term impulse needed. Possible tracks:
  - Clearer manpower commitments;
  - Political acceptance of a system that shall point out temporary divergences of quality (scoring should not lead to abandon the flexible structure of the ALADIN application scheme => quality =/= good scores).

Dynamics (and more particularly NH-VFE issue)

- A trademark of the ALADIN Programme, in danger of fading out.

- Key issue for the future links with IFS = NH-VFE work (trying to get the best of the IFS HPE and ARPEGE/ALADIN NH worlds). Very promising results of the work done in SHMU and MF, but break of continuity in manpower availability.

- More general diagnostic:
  - Dynamics people seem to be good at any trade (kind of 'profile'?);
  - In front of new demands, the easiest way is to fully shift them elsewhere, rather than searching more sophisticated combinations that would preserve the continuity of the efforts on the dynamics (especially now for NH-VFE);
  - The issue can also be seen as a lack of 'generation-turnover'.

Convergence steps for AROME and ALARO physics and phys-dyn interfacing

- A very complex issue, marked by many legacies which have crystallised along a single line of separation, while this should in principle not have been the case (in the IFMG spirit).

- A lack of reciprocal positioning before taking low-level decisions => this ultimately leads to reinforce the detrimental mix between science, operations and policy.

- Presently: 'prisoner dilemma' => way out = accepting on each side to do joint steps without attaching any moral value to this acceptance.

- Encouraging and stabilising short-term steps were decided at a meeting in Paris on 19/10/07. Ongoing work to concretise them.

- One still lacks a method for keeping this impulse without hampering the future operational steps and without creating 'false twins' => need of a dispassionate methodological brainstorming in the community.

Contribution to GLAMEPS (and/or EurEPS)

- For the time-being Météo-France's main interest in short-range EPS is not LAM-bound (PEARP).

- We have however many LAM-EPS opportunities within ALADIN, given the unclarified status of the topic at the international level.

- Given the scientific uncertainties, the HIRLAM-driven GLAMEPS project appears as the 'most promising' path.

- But LAEF and GLAMEPS have by construction a complex interplay: they are neither complementary nor competing.

- We need a better harmonisation of priorities, some way to link to PEARP issues and a spirit of readiness for if and when EurEPS takes off => good ideas for all this urgently needed.

Surface modelling- and data assimilation issues

- Even if complex to initiate, externalisation steps (realised for models, planned for DA) avoid most of interfacing problems we have elsewhere.

- A lot of scientific & operational competency exists in HARMONIE.

- Aggregation of those assets is not a 'summation exercise'. Rationalisation is needed in anticipation of future advances.

- Toulouse and Oslo meetings recognised these needs and set-up plans accordingly.

- But realisation needs some amount of 'critical manpower' which is needed everywhere => less stress on other issues (no harm meant but indirect harm done when commitments are not fulfilled where people could be interchanged).

Maintenance aspects

- Quite good present situation (except for the rather strong imbalance between countries), see CF's presentation.

- But we need to anticipate heavy forthcoming evolutions in order to keep alive this 'more than crucial' asset.

- Clues:
  - Relying on ECMWF for transversal decisions (externalisation, cleaning, …);
  - Decentralisation, with two bets (not falling on the same problems as for science; having the IT security at a level that allows it);
  - Being a bit more concerned about 'consumption' and a bit less about 'upward compatibility' (Heisenberg's principle of maintenance);
  - Being far more preventive than nowadays, especially for the inclusion of externally developed pieces.