

- General impression of evolution of HARMONIE cooperation
- Relevant developments of the past year (from HIRLAM point of view)
- Points of attention



General impression of evolution of HARMONIE cooperation

- **Strategical level:** strategies on the whole well aligned
- **Tactical:** scientific planning and coordination MG-CSSI continuing OK, even with CSSI changes.
- **Contacts between researchers**
 - Evolution of common workshop/ASM
 - Direct cooperation on the increase: Number of visits among researchers growing
- **Code maintenance and system aspects**
 - Routine growing, more common discussions on system aspects/tools
- **Common stands in SRNWP-related issues**

Relevant developments of past year from HIRLAM point of view

- Embedding of HARMONIE in HIRLAM institutes (soon 7), Ref.System
- Data assimilation: convergence to HARMONIE 3D-VAR; progress in radar, SEVIRI, IASI, GPS,...; obs operator convergence
- Model physics: syn HIRLAM UA developments completed, switch to work in HARMONIE context
- Surface: common plans made, set in motion; but slower than desirable
- GLAMEPS: setup and technical/meteorological testing of laboratory system
- System developments
 - Efforts on HARMONIE system environment; interactions on system development/tools; plans for replacement of HIRLAM system
- Increase of membership of both consortia
- Closer connections with ECMWF management on strategic/research issues

Points of attention

- Dynamics: man power shortages on short/long term
- Surface: Data flow, consistency issues, data assimilation; needs speeding up
- Convergence AROME-ALARO physics/interfaces
- GLAMEPS: Operational and practical aspects, use of resources
- Maintenance and phasing:
 - consider more decentralized, time-efficient phasing options without compromising integrity of phasing process
 - Further develop decision process of introduction of common developments
 - Keep pressure on researchers to switch to HARMONIE framework
- Common workshop/ASM: financial aspects
- Availability of model for research purposes:
 - coordination of activities on both sides, common licensing procedure
- Longer term: future development of (common?) organization

