

# Session 4 summary

## System aspects and verification

Martin Janoušek

## HIRLAM/HARMONIE Monitoring System

Xiaohua Yang

with contributions from  
*Ulf Andrae, Kalle Eerola, Ole Vignes,  
Roger Randriamampianina, Markku Kangas*

HIRLAM/ALADIN ASM/WS 2008

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On some nodes, this jobstep has used more than % of the  
allocated amount of memory.
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**Ulf Andrae**

Xiaohua Yang, Sami Niemela,  
Andrea Storto, Ole Vignes,  
Roger Randriamampianina  
and others

HIRLAM/ALADIN ASM 2008

## Status of optimisation work on the NEC SX8R at Météo-France

**R. El Khatib**  
with the help of many :  
**Damien Lambert, NEC, Dominique Puech, Sami  
Saarinen (ECMWF), Yann Seity, Eric Sevault, Filip Vana  
(CHMI)**



## HirLam EPS script Updates and Experiments

by Kai Sattler

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# X.Yang: HIRLAM/HARMONIE Monitoring System

- collection and consolidation of tools monitoring
  - HIRLAM/HARMONIE model progress
  - the quality and usage of its inputs (obs monitoring)
  - the quality of results, incl. various models inter-comparison
- continuous improvement and extensions
- Appeal:
  - Share your tools
  - Try looking around first before inventing new wheels
  - Contribute to a common framework
  - ALADIN contributions welcome

# U.Andræ: The Harmonie mini-SMS system

- new system of Harmonie for
  - system building
  - experiment preparation, running and post-processing
- using mini-SMS for easier portability
- still under development

# K.Sattler: HIRLAM EPS script Updates and Experiments

- system for running HIRLAM within GLAMEPS
- several extensions and improvements presented
- GLAMEPS v0 experiments and verifications shown
- plans for future implementations

# R.El Khatib: Status of optimisation on NEC SX8R at Météo-France

- optimization of ARPEGE/ALADIN/AROME with regard to
  - vectorization (NPROMA tuning)
  - I/O (local vs. shared disk usage)
  - MPI
- methodology how to optimize different model configurations and tools
- still job to be done, especially on AROME

# Discussions

- access to SURFEX climate files creation tools at HIRLAM countries demanded
  - currently only at ECMWF
  - tools will be introduced into standard ArpAld libraries, but system is still under development
- request on "stand-alone" auxiliary library
  - currently only part of the overall system
- more optimization/benchmarking reports needed
  - use of standard tools like dr.Hook encouraged for easier results inter-comparison