



# Highlights of the past year

Jeanette Onvlee

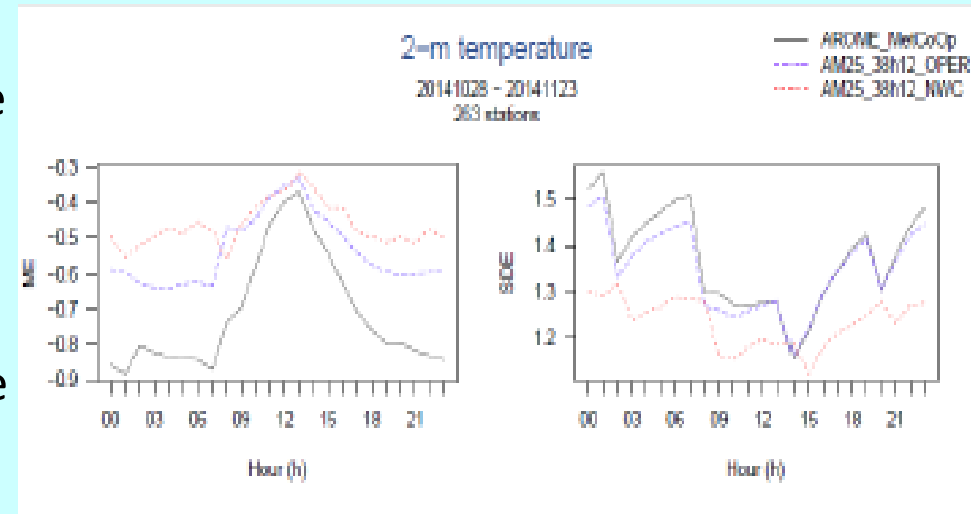
Workshop/ASM 2017, Helsinki

3 - 6 April, 2017

# Towards optimal use of high-resolution observations and assimilation algorithms, also in nowcasting range

- Harvesting past efforts: Extension of observations in operational suites, making use of each other's expertise
- Intensive experimentation to improve 3D- and 4D-Var impact and performance, address weaknesses (B-formulations, thinning, large scale treatment, convergence, ...)
- Introduction/ testing nowcasting setups
- Contributions to OOPS

See presentations in DA/SY sessions



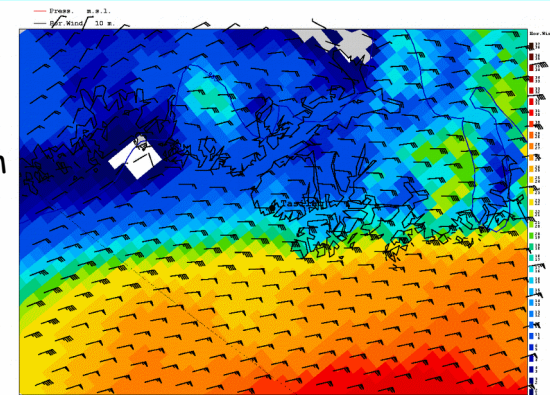
1h rapid refresh setup at  
MetCoop, 15m cutoff time

# Forecast model developments

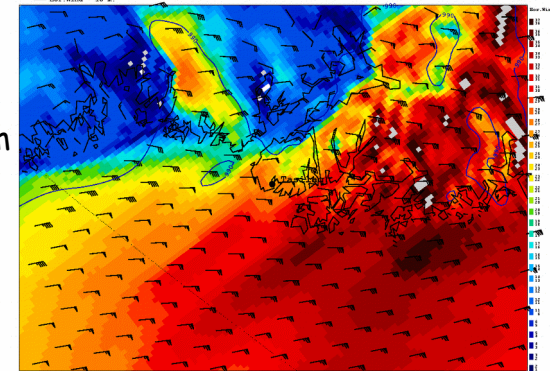
- MWR publication on Harmonie-Arome forecast model configuration
- Dynamics day (Nov 2016): common view on longer-term plans for dynamical core developments
- Cloud-radiation-microphysics-aerosol developments: really getting together now
- Planned: WG on higher-resolution modelling

See presentations in DY and PH sessions

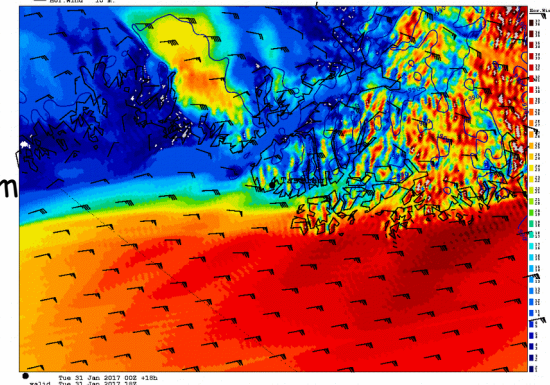
HIRLAM-K05 5 km



Harmonie-IGA 2.5 km



Harmonie-TAS 750m



# Surface analysis and modelling

- More staff working in this area
- Push for implementation of more advanced surface assimilation
- Modelling: 2-patch experiments; work on assessing new v8 schemes and sensitivity studies for forecast parameters starting



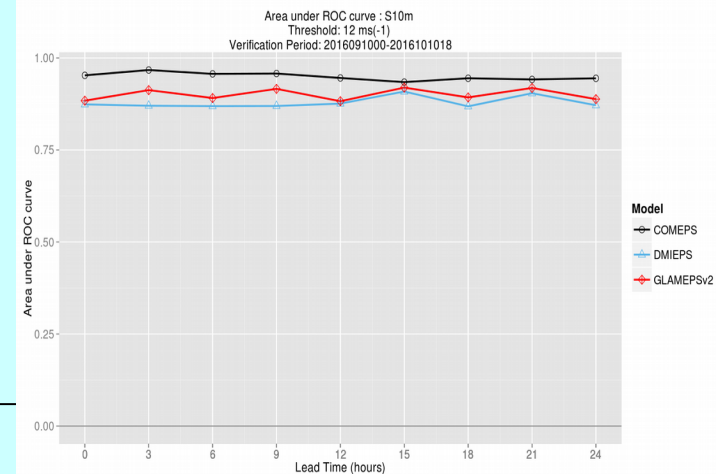
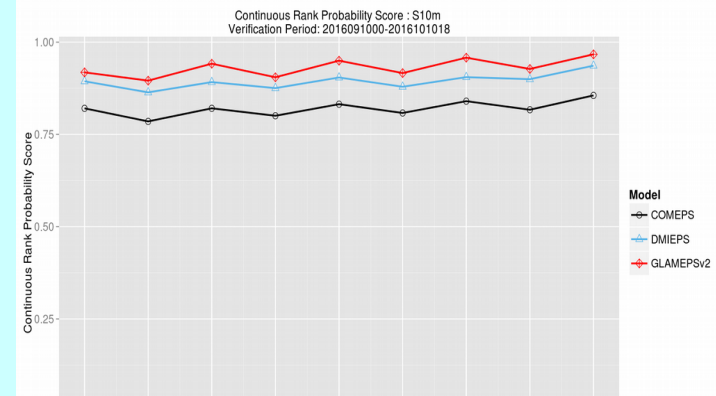
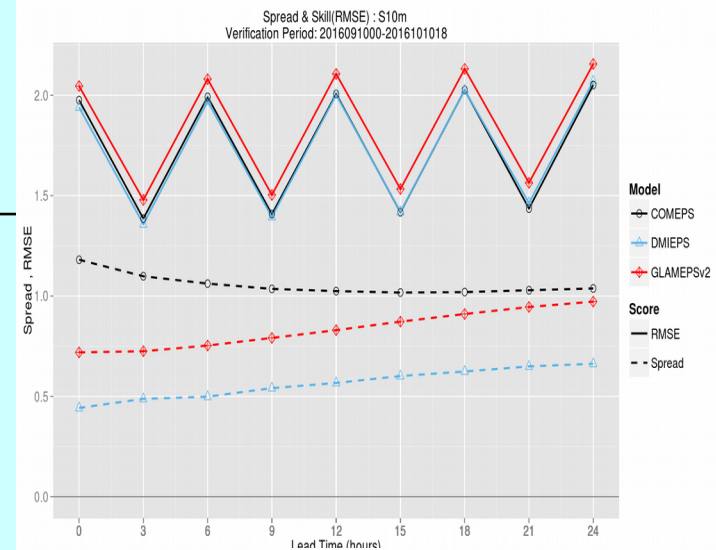
Zagreb Surface assimilation meeting, Oct. 2016

See presentations by Patrick and others in SU session

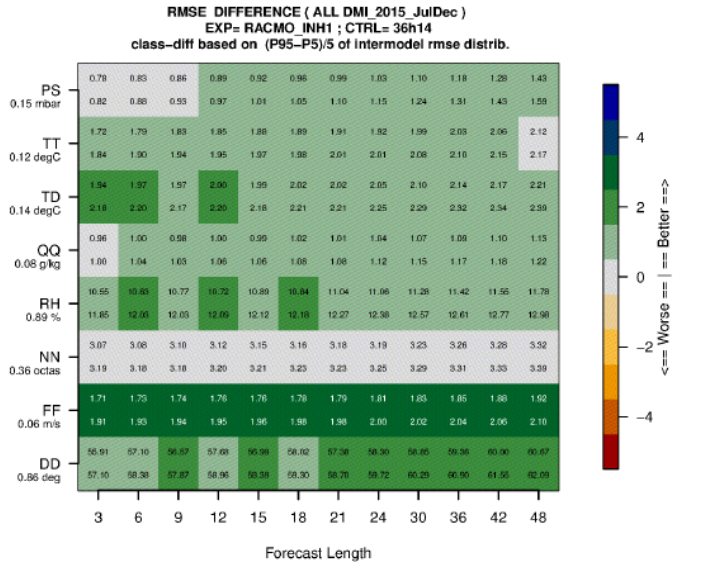
# Probabilistic forecasting

- Milestone for HarmonEPS: operational introduction, good performance of several new suites
- testing of various new types of perturbations (physics, surface, EDA...)

See presentations in EPS session



# Verification, system and scalability aspects



- Development and first demo of HARP spatial tools

- Communication with users on model experiences taking shape: <https://hirlam.org/trac/wiki/CommunicationWithUsers>

- Construction of Cy40h1.2, preparations for Cy43h1

- Good progress in Scalability programme, ESCAPE

See presentations in QUC, System and scalability issues sessions



Exploring different schemes for the same "functionality" on different hardware

# Coordination and communication



- More frequent interactions within teams (e.g. hangout web meetings, increased use of wiki)
- A new scientific secretary (Frank Lantsheer)
- Replacement of PL Atm. Forecast Model

# Towards a single consortium



## Convergence actions:

- Joint strategy meeting 26-28 April: good opportunity to share ideas on scientific ambitions and priorities
- New ALADIN-HIRLAM cooperation agreement signed, data policy issues settled
- 7 April: decisions on process of writing common plan for 2018



So, both on the scientific and organizational side...

Plenty of things to work on together and to  
look forward to!



Have a good meeting and enjoy Helsinki!