# Reporting on Session 1: Data assimilation and use of observations

## Chairpersons: Nils Gustafsson, András Horányi

## Additonal contributions: Claude Fischer

# THE PRESENTATIONS

- **Joint medium-term plans (Nils, Claude)**

- **ALADIN 3D-VAR**
  - **Installation at HIRLAM (metno, SMHI; Andrea, Magnus)**
  - **Latest news from ALADIN: 3D-FGAT, observations – AMV, SEVIRI – background errors, surface data, minimisation) (Gergő, Roger, Ludovic, Beni)**

- **HIRLAM**
  - **Balance equation as background constraint (Ole)**
  - **Assimilation of MODIS AMVs (Carlos)**
  - **Use of SAF sea ice and SST in surface analysis (Mariken)**

# ISSUES DISCUSSED (1)

- **Common medium-term planning (2070-2100)**
  - **Good basis for the start, BUT the „devil is in the details''**
  - **Comments, remarks are still welcome for improvement (to Claude and Nils)**

- **Installation of ALADIN 3D-VAR at HIRLAM countries**
  - **Met.no and SMHI, later others will follow**
  - **E zone problematics (biperiodic increments)**
    - ❖ **Technical solution: large E zone (but eliminate computations in the E zone)**
    - ❖ **Scientific solution (?): wavelets??**

# ISSUES DISCUSSED (2)

- **Dynamical balances: one of the key issue for the success**
  - **Simultaneous work in HIRLAM and ALADIN respectively (Ole, Loik)**
  - **How these activities are going to converge (to be introduced into the Jb term)?**

- **Best combination of observations**
  - **The sequential approach might not ba always the best**
  - **Need for „coherent impact studies"**
  - **Relation with structure functions (e.g. narrow ones)**

# ISSUES NOT DISCUSSED

- **Surface and soil data assimilation**

# NEXT STEPS

- **Finalisation of the medium-term plan**

- **Next steps for the observation operator intercomparison**

- **Realisationn of the plans**