

Notes about DA discussion

- Radar data exchange
 - OPERA does not provide 3D Volume data
 - Regional exchange necessary for the time being
 - Interaction with OPERA encouraged
 - National representatives
 - C-SRNWPW and EWGLAM meeting Oct ?
 - Data processing centres (MF, Met Office, SMHI?)
 - Work out a list of minimum requirements NWP
 - QC varies and difficult to enforce at source

Ensemble methods / 4D-VAR

- Open mind – both have strengths
- 4D-VAR provides full rank flow dependent B
- ETKF / EKF provide additional information
 - Balances at meso-scale (moist balance, hydrometeors?)
 - May provide non-linear effects (hybrid)
 - Scales automatically over # members

Displacement errors

- Have been shown to work and do things our linear methods cannot handle
- Several or many approaches
 - Morphing, field adjustment through cost function, ensemble weighting (hybrid, DWD)
- Will be continued

RUC and imbalances

- MF experience of short cycling
 - Spinup at 1 h
 - DFI / IDFI / Jc DFI / DFI forward only , frequency, which variables – choices and effects important
- HARMONIE RUC
 - Positive impact if ALL data (satellites used)
- Which observations provide extra benefit in RUC?