

WG3: Quality of precipitation forecast in CRM

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Data assimilation

- 4DVAR
 - Quite complicated to maintain and expensive
 - Effects is limited (~radar data nudging)
 - Be sensitive to e.g. convection paramterization
- ENKF
 - Very expensive but easy to maintain
 - It can estimate the background-error cov. Matrix.
 - Ensemble size should be much larger than we can afford.
- It is not clear which one is better!
- Observation data to be assimilated is important (water vapour by GPS, etc.)

Ensemble prediction

- How to construct members is still a big issue
 - DWD: members from different parent models, different physics
 - JMA: members from SVM
- How to use their products
 - Add information of uncertainty of models results
 - Attention: small forecasted spread is not equal to good forecast, e.g. far from observation.
 - Draw information of model or obs. deficits