Session overview

- Probabilistic Forecasting and LAMEPS.

Systems

- I.L. Frogner: EuroTEPS often performs better than EPS (with similar number of members) on the domain.
- H. Federsen: extensive <u>evaluation</u> of HirEPS, comparable to EPS (51 members). Inclusion of multiple models and stochastic physics: further positive impact.
- T. Iversen: GLAMEPS: first results for test periods are very promising.

Systems

- F. Weilde: LAEF-2 (operational since Feb. 2009), breeding and blending, perturbations for surface,...
- Impact of **clustering** for precipitation is very good, but reduces spread for e.g. T2m.
- L. Kalin: post-processing with **Logistic Regression** for precipitation. Largest improvements are for low thresholds.
- Poster: J-A Garcia-Moya: SREPS

Perturbations

- R. Stappers: **CAPE-SV**'s give more energy at lower levels, specific humidity.Some noisiness.
- A. Johansson: ETKF compared to TEPS SV's. The perturbations grow slower than SV, but larger spread in earlier phase. Impact of the number of observations.

Discussion: Extreme cases

- Standard verification doesn't tell so much about **extremes**. How should we optimise a system for extremes?
- This is difficult, because of the small number of cases.
- Use standard scores for longer periods, look at specific cases to check system for extremes.
- Access to climatological data (24h precipitation) to increase available data in extreme cases?

Discussion: LAM specific perturbations

- Methods: SV, ETKF, breeding
- How increase spread in first 12h?
- Perturbations of LBC's: large impact after 12h.
- Need to address surface perturbations.