

Ensemble Forecasting WG

The background of the slide features a dynamic, abstract design. It consists of several thick, flowing, wavy lines that sweep across the frame from the bottom left towards the top right. The primary colors are a vibrant red and a deep blue, which blend into each other and into the black background. The lines have a slight gradient, giving them a three-dimensional, ribbon-like appearance.



"The future is probabilistic."

- Cliff Mass

- Ensembles are one way to produce probabilistic forecasts
 - Especially if interested in unlikely events
 - Ensembles have been produced operationally for little more than a decade, even less for short-range

Be an ensemble advocate!

- Include ensemble perspective within parameterization and assimilation scheme development

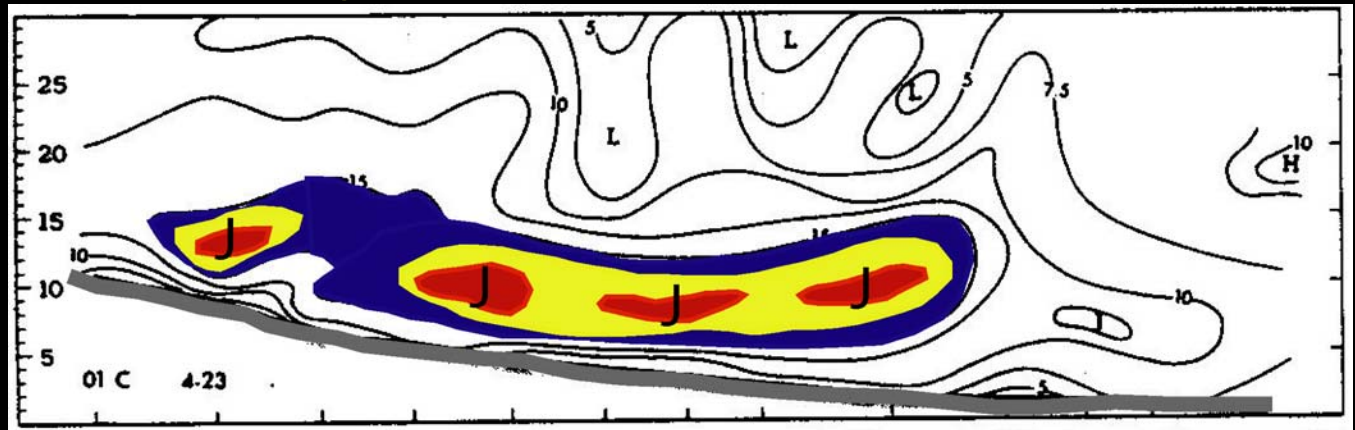
Define tunable parameters and specify reasonable range of values

Outline strengths and weaknesses of scheme from the outset if possible

Uncertainty in covariances

Important Questions

- Initial condition perturbation strategies
 - Application dependent (certainly short-range and medium-range perturbations likely will need to be different)
- Model/physics variability
- Mesoscale and small-scale analysis uncertainty





Capability

- Ability to reproduce known features and behaviors with greater specificity.

Value

- Defined by users. How well forecasts can be applied to particular problems of interest and help people make decisions.