

Discussion points for Plenary Session on Data Assimilation & Reanalysis (focused on coupled assimilation)

Over-arching questions:

- What are the **observational** needs and gaps for coupled assimilation and the related prediction?
- What the most critical improvement needed for the forward coupled **models**?
- What aspects of data assimilation need to be improved for coupled **assimilation**?

Some specific questions:

- How can we identify which data are best to inform state estimates?
- Which estimates carry the largest uncertainties and require more data?
- What observations are best to characterize different fields?
- How to really use subsurface information for climate predictions?
- How can we improve simulations of subsurface dynamics with existing observations - or what observations do we need that we don't have yet?