What does USCLIVAR need from Reanalyses?

- Previous major activity: Earth system analysis workshop
- Request recommendations from CPTs, WG's and Science teams?
  - What are critical metrics for success? Global, regional, physical dynamical
  - Based on well known data (ECVs?) that have connection to less well known data
    - Obs4MIPS - Possible Reanalysis Inter. Project
  - Forecast Departures - use to improve models and also detect issues with the assimilated data
- Define Reanalyses uncertainty
Research Challenges and Reanalyses

• Decadal Variability
  – Observationally-based diagnostic tool
  – Ocean or land reanalyses for initialization of coupled experiments
• Extremes
  – ENSO Variability
  – Rarity of events (provide consistent coverage)
  – Processes: interactions with large scale
• Polar Climate
  – Minimal observations
  – Coupled analyses
• Marine Carbon/Biogeochemistry
  Developing constituent analysis and physics processes