PPAI Breakout Panel Summary

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Agenda & Discussion

- **Introductions**

- **CLIVAR & PPAI background**
  - *Is an enabling mechanism* **for "…coordinating and advancing research within the U.S."**

- **Past milestones (WGs; …)**

- **Achievements since last summit**
  - **NCAR summer colloquium on "Carbon-climate connections in the Earth System" ; Hurricane working group workshop ; Extremes working group workshop**
  - **Contribution to the U.S. CLIVAR Science plan**

Agenda & Discussion

- MAPP (Modeling, Analysis, Predictions, and Projections) activities and Task Forces (*Annalisa Mariotti)*

  - Prediction/Predictability/Reanalysis/Model development/Drought

  - Task Forces

    - CMIP5 / Climate Predictions / Drought/ *Reanalysis*

- Joint session with POS on reanalysis

  - Summary of GSOP Ocean fluxes workshop

  - Discussions on next steps

Agenda & Discussion

- **National multi-model ensemble (Jin Huang)**
  - Interagency supported
  - Availability of seasonal forecast data archives for prediction and predictability research
  - Moving from seasonal to sub-seasonal predictions

- **Session 2: Communication and decision support**

Agenda & Discussion

- **Role of CLIVAR science in decision making** (Lisa Goddard)
  - Advances in science <u>not</u> proportional to their use in decisions
  - *Challenge*: Pathways from forecast providers (CLIVAR) to decision makers

- **Role of CLIVAR science in support of adaptation** (Robin O'Malley – USGS)
  - DOI/USGS Climate Science Centers
  - Addressing management challenges driven specific questions
  - Usable/Actionable science
  - Horizon ~ 30-50 years; But would like to have information on 1-20 years

- **Application Process Teams (APTs)** (Gregg Garfin; Andrea Ray)
  - Collaboration with application communities
  - To help facilitate and organize communication
  - Discussion of various practical concepts for APTs

Recommendations and Actions Items

- **Review and revise the ToR (30th November, 2013)**

- **Ideas for workshops**
  - **A gathering of CLIVAR and application community to understand research requirements**
  - **Predictability of high latitude climate variability**

- **Integration with the other panels**
  - **Communicate application relevant metrics**
  - **Seek input while revising TOR**
  - **Coordinate with POS on reanalysis strategy and foci**
  - **Inform on observing systems requirements necessary to maintain, and enhance, prediction skill (e.g., tropical Pacific)**

Recommendations and Actions Items

- **Liaise with MAPP**
  - Liaise with MAPP task force on
    - Climate predictability & predictions
    - Reanalysis
  - Promote concept of CMEP like activity for assessment of seasonal predictability & predictions using NMME data sets
  - Feasibility of MAPP tasks forces as science teams

Recommendations and Actions Items

- **Develop some anchoring themes, and self organizing activities within PPAI; for example:**

  - Connecting process studies, observations, and data assimilation → PSMIP; POS

  - Assimilation and onset of model biases → PSMIP; POS

  - Observing simulations experiments (equatorial Pacific ocean observing system) → POS

Recommendations and Actions Items

- **Scope the concept for the Application Process Teams (APT)**

- **Develop connection with appropriate boundary organizations (e.g., DOI; NOS;...)**

Recommendations and Actions Items

- **Papers (or a thematic issue) in CLIVAR Variations, for example:**
  - Address outstanding questions in
    - Communication and utilization of uncertainty in decision making
    - Connecting predictions and applications
    - Pathways to operations