Predictability, Prediction and Applications Interface (PPAI) Panel Report

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18 July 2012
What is the Charge of PPAI?

Global Framework of Climate Services (GFCS)
PPAI - Some Past Milestones

• Predictability : Working Groups
  – MJO; Drought; Decadal; Hurricane; ENSO Diversity; Extremes

• Predictions
  – Developing framework for verifications (MJO, Decadal); CMEP; DRICOMP; Participation through WCRP (WGCM, WGSIP,...); Reanalysis

• Application
  – Postdocs Applying Climate Expertise (PACE)
  – Participation in various assessments
PPAI Action Items from 2011 Summit

• PPAI to propose a Working Group on the “Large-scale climate patterns responsible for climate extremes
  – WG proposed submitted and WG was approved

• PPAI members Annalisa Bracco and Curtis Deutsch to propose a joint Working Group on the “Climate and Carbon”
  – WG proposed submitted and WG was approved

• PPAI members to resubmit a Working Group prospectus on “Sea-ice variability”
  – Based on the comments from the CLIVAR SSC, this was not pursued further
PPAI Action Items from 2011 Summit

• PPAI encourages to propose a Working Group on “Decadal Variability in the North Pacific”
  – WG idea was not developed any further. Might come back to it in the next call for WGs

• PPAI to explore the possibility to organize a Summer Colloquium in conjunction with the ASP on ‘Climate and Carbon’
  – Discussions under way with NCAR to organize the summer colloquium in 2013
PPAI Action Items from 2011 Summit

• PPAI to propose organizing a workshop focused on interfacing U.S. CLIVAR with Applications
  – No explicit action taken as part of CLIVAR...
  – Many activities related to NCA in which PPAI members participated. PPAI breakout session has further details
  – Convened a workshop on “Extreme climate events and their regional implications for water management: Floods and Droughts”
Other Activities Related to the PPAI

• Hurricane WG – Working group report
• Decadal Predictability WG – Working group report
• Participation of PPAI members in various relevant activities (WCRP/WGSIP; National Climate Assessment; CLVIAR/SSG; Organizing committee of “Dynamics and Predictability of High-Impact Weather and Climate Events; NCAR CESM WG on “social dimensions;
Other PPAI & CLIVAR Relevant Activities: NMME

- National Multi-Model Ensemble
  - Focus on “real-time” seasonal and intra-seasonal predictions
  - A multi-agency effort (NOAA, NASA, DoE, NSF)
  - Participation includes: NCEP, GFDL, IRI, NCAR, COLA, U. Miami, U. Colorado, NASA/GMAO
  - Seasonal hindcasts available from IRI data library
  - Data sets will facilitate further studies on seasonal predictability and assessment of prediction skill
  - A more detailed presentation in the PPAI breakout session
Other PPAI & CLIVAR Relevant Activities : ESPC

• ESPC – A US effort on developing an “Earth System Prediction Capability”

• Established in 2010 to improve collaboration across Federal agencies to improve global prediction at the weather to climate interface

• A set of working groups targeting specific prediction issues and requirements, e.g., tropical cyclones; blocking; extremes etc.

• A more detailed presentation in the PPAI breakout session (Daniel Eleuterio)
Other PPAI & CLIVAR Relevant Activities : NCPP

- **NCPP**: National Climate Predictions and Projections Platform

- **Mission**: Supports state-of-the-art approaches to develop and deliver comprehensive *regional climate information* and facilitate its use in decision making and adaptation planning.

- **Strategic Approach**: A *participatory community enterprise* where climate information users, infrastructure developers, and scientists come together in a collaborative problem solving environment.
Some Other PPAI & CLIVAR Relevant Activities

- WWRP/WCRP Project on Sub-seasonal and Seasonal Predictions
  - Exchange (and development of central repository) of monthly forecasts from operational centers
- WGSIP – Climate Historical Forecast Project (CHFP)
- CMIP5 – Projections and initialized decadal predictions
- National Climate Assessment (NCA)
- Global Framework for Climate Services (GFCS)