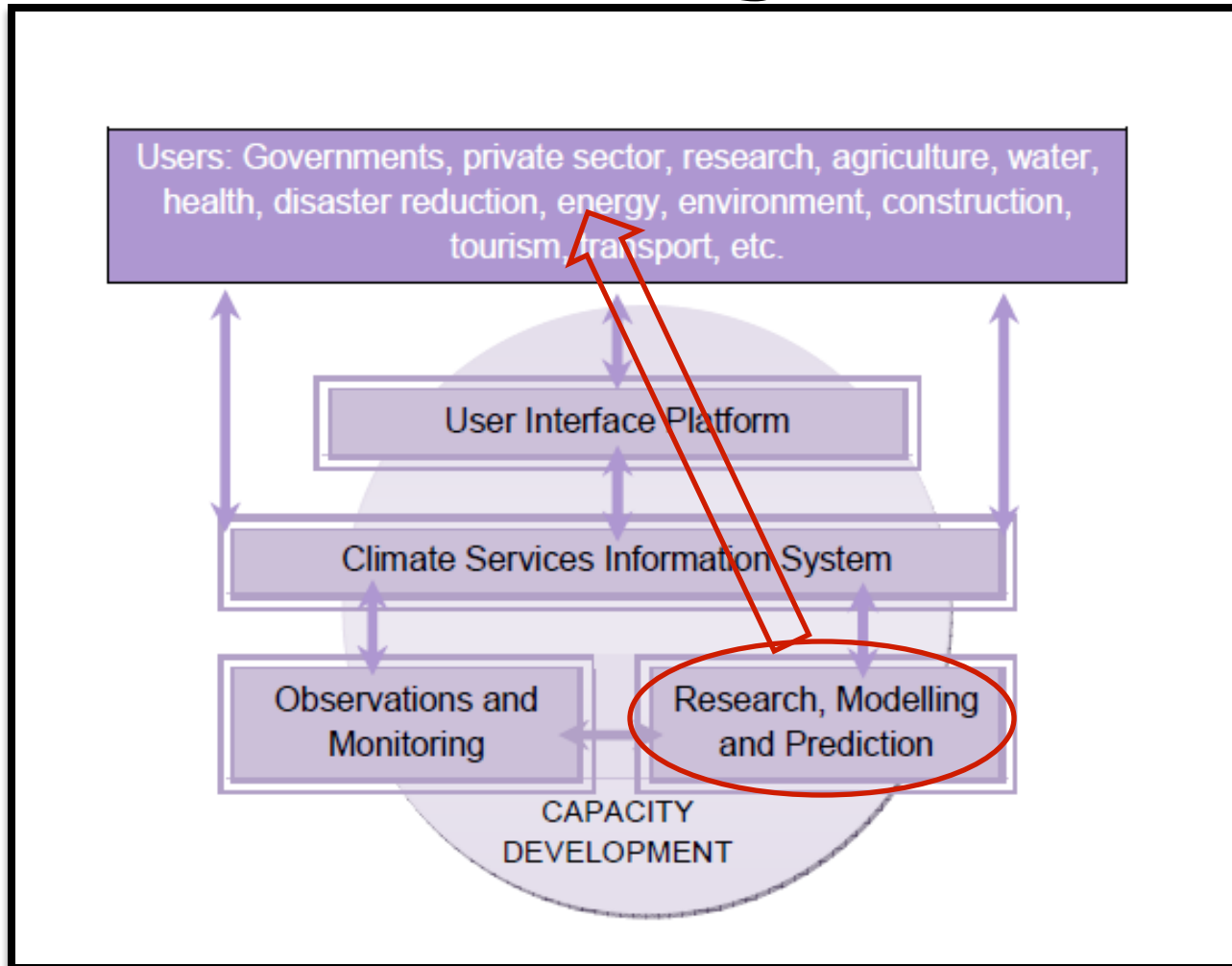


Predictability, Prediction and Applications Interface (PPAI) Panel Report

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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, COAL, 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)**

Summary of 2012 Breakout Session

Breakout Session Summary

- **Status of CMIP5**
- **Summary of “National Multi-Model Ensemble”**
- **Joint session with POS on “National Climate Assessment”**
- **US initiative on “Earth System Prediction Capability (ESPC)”**

Possible PPAI Action Items and Recommendations to CLIVAR

- **Develop a special session on NCA to investigate common synergies (during next year's summit)**
- **Recommend existing Working Groups to explore contributions to NCA Topical reports on: state of knowledge of interest to NCA; observational needs for NCA;...**
- **Review recommendations that will be in the NCA final report and their connection with CLIVAR science foci**
- **Possible application workshop (action from the last year) with NCAR/CESM "Social Dimension" group, RISAs,...**
- **Explore CLIVAR connection with the climate service organizations and centers, e.g., DOI Climate Services Centers, RISAs,...**
- **Recommend a science team on "decadal predictions and predictability"**

Possible Action Items and Recommendations to CLIVAR

- **Recommendation to the WGCM or US Modeling Centers on better practices for data availability**
- **CLIVAR Webinars in between two summits**
- **CLIVAR to provide reviews to various US science plans**
- **NMME – A overview paper in “CLIVAR Variations”**
- **Develop metrics of success for US CLIVAR output and accomplishments**