

**Climate Prediction Program for the Americas (CPPA)
FY2010 Information Sheet (Revised on May 21, 2009)**

The Climate Prediction Program for the Americas (CPPA) is a competitive research program with the goal to improve operational intraseasonal to interannual climate and hydrologic predictions. To achieve its goal, CPPA has the following major objectives: to improve the predictive understanding and model simulation of ocean, atmosphere and land-surface processes; to quantify the sources and limits of predictability of climate variations on intra-seasonal to interannual time scales; to advance NOAA's operational climate forecasts, monitoring; and analysis systems and to develop climate-based hydrologic forecasting capabilities for decision support and water resource applications.

In FY2010, CPPA is soliciting proposals with the following research priorities:

1. Predictability and prediction of intraseasonal to interannual (ISI) climate and related impacts over the Americas: Proposals are solicited **1)** to evaluate the ability of IPCC-AR5 class models to simulate and predict ISI climate, and to examine ISI climate variability and its impacts over the Americas under a warming climate. Investigators are encouraged to analyze simulations, predictions and projections from Phase 5 of the Coupled Model Intercomparison Project (CMIP5) of WCRP; **2)** to improve understanding of climate predictability at ISI time scales focusing on stratosphere-troposphere coupling, land memory effects and weather-climate links, and **3)** to experiment with novel numerical techniques to improve ISI climate model predictions at regional scales.

2. Process studies and modeling: CPPA seeks to improve understanding and process modeling of **1)** cloud, planetary boundary layer and microphysics including, but not limited to, VOCALS post-campaign data analysis and process modeling in GCMs including diagnosis of biases and improvement of NOAA's CFS and GFDL models, and **2)** land surface physics including soil moisture, vegetation, snowpack, groundwater and processes in complex terrain. Land surface water and energy budget studies on regional scales are also encouraged. CPPA will also support participation in US multi-agency Climate Process and Modeling Teams (CPTs). For guidelines regarding the CPT proposal submission, please see the CPT FY2010 information sheet located at http://www.cpo.noaa.gov/opportunities/2010/pdf/FY10_CPT_Information_Sheet.pdf.

3. Climate-based hydrologic and water management applications at regional scales: CPPA solicits proposals to improve hydrologic predictions at regional scales at ISI time scales. Efforts include development and improvement of integrated (i.e. coupled snow, surface water, soil moisture and groundwater) hydrologic models at drainage basin to regional scales, data assimilations, model evaluations against high-resolution datasets, and parameterization of water management (e.g., irrigation, reservoir storage and release, groundwater withdrawal, etc.) for use in basin- to continental-scale models.

More information on the CPPA program including currently funded projects can be found at http://www.climate.noaa.gov/cpo_pa/cppa/. For further information on CPPA FY2010

priorities, investigators may contact CPPA program managers (Jin Huang, 301-734-1226, Jin.Huang@noaa.gov or Annarita Mariotti, 301-734-1237, Annarita.Mariotti@noaa.gov)