

## OVERVIEW

NOAA's 41<sup>st</sup> Climate Diagnostics and Prediction Workshop was held in Orono, Maine on 3-6 October 2016. The workshop was jointly hosted by the University of Maine Climate Change Institute and School of Earth and Climate Sciences and co-sponsored by the Climate Prediction Center (CPC) of the National Centers for Environmental Prediction (NCEP) and the Climate Services Branch (CSB) of the National Weather Service (NWS).

The workshop addressed topics in climate prediction, monitoring, and diagnostics, and focused on five major themes:

1. ENSO and recent climate anomalies;
2. The prediction, attribution, and analysis of high impact extreme climate events (drought, heat waves, severe weather, tropical cyclones) in the framework of climate variability and change and including the use of paleoclimate data;
3. Arctic climate variability and change, and linkages to lower latitudes. What paleoclimate data from the Arctic can tell us about our current and future climate;
4. Model and multi-model ensemble predictions and predictability. Strategies for calibration, consolidation, and optimal use of sources of predictability, including diagnostics of coupled model climate change projections for potential use in shorter timescale climate predictions;
5. Climatic events and risk management: knowledge and products to connect the diagnostics and predictions with preparedness and adaptation strategies.

The workshop featured daytime oral presentations, invited speakers, and panel discussions with a poster session event in one evening.

This Digest is a collection of extended summaries of the presentations contributed by participants. The workshop is continuing to grow and expected to provide a stimulus for further improvements in climate monitoring, diagnostics, prediction, applications and services.