OVERVIEW

NOAA's 43rd Climate Diagnostics and Prediction Workshop was held in Santa Barbara, California on 23-25 October 2018. The workshop was hosted by the Earth Research Institute and Department of Geography at the University of California Santa Barbara 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 focused on five major themes, with an emphasis on climate prediction, monitoring, attribution, diagnostics, and service delivery related to:

1. Improved understanding of the coupled atmosphere-ocean climate system through dynamical and statistical models and methods, forecaster practices and protocols, reanalysis data and model improvement, and scientific concepts;

2. Prospects for improved understanding, prediction, and simulation of intra-seasonal, seasonal, and inter-annual climate variability, including the extratropical annular modes, stratosphere/troposphere coupling, tropical-extratropical interactions, land-surface forcing, atmospheric river events and drought/precipitation events etc.;

3. Climate variability and prediction in relation to the hydrologic cycle and in particular Western water resources.;

4. Observation, prediction and attribution of recent high impact weather and climate events, and implications for extreme precipitation and temperatures, heat/cold waves, droughts and wildfires;

5. Improving climate information delivery for impact-based decision support services through the application of new technologies, including GIS, statistical tools, and software development practices.

The workshop featured daytime oral presentations, invited speakers, and 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.