OVERVIEW

NOAA's 40th Climate Diagnostics and Prediction Workshop was held in Denver, Colorado on 26-29 October 2015. The workshop was hosted by the Physical Sciences Division (PSD) of NOAA's Earth Systems Research Laboratory (ESRL) and co-sponsored by the Climate Prediction Center (CPC) of the National Centers for Environmental Prediction (NCEP) and the Climate Services Division (CSD) of the National Weather Service (NWS).

The workshop addressed the status and prospects for advancing climate prediction, monitoring, and diagnostics, and focused on five major themes:

1. The evolution of climate diagnostics and prediction over the last 40 years;
2. Extremes and risk management: knowledge and products to connect the diagnostics and prediction of extremes with preparedness and adaptation strategies;
3. The prediction, attribution, and analysis of drought and pluvial in the framework of climate variability and change;
4. Diagnostics and prediction of high impact extreme climate events;
5. Prediction and attribution of Arctic climate variability, and the linkages of Arctic variability to lower latitudes.

The workshop featured daytime oral presentations, invited speakers, and panel discussions with a poster session event held in the evening on 27 October.

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.