

Purpose

Changes in climate, demography, technology, and subsequent environmental, economic, and geopolitical responses are driving efforts to modernize long-term planning strategies. Moving forward, extended range earth system predictions/projections will be incorporated into strategic decisions over the 2 to 30-year time range in order to mitigate cost and vulnerability of national security, economic vitality, infrastructure, and natural resources.

The present situation risks each user separately seeking potentially inappropriate information to inform multimillion-dollar decisions of long-term scope, or misunderstanding or misusing the information found. Limited resources do not permit any individual agency to address these issues comprehensively, nor do all the decisions fall within any one agency's individual mission. However, the commonality of the physical problem creates opportunities to pursue a coordinated capability across agencies.

This exploratory workshop will discuss the need for coordinated updating of physical earth system predictions to support a wide range of long-term decisions; the effort may draw on multi-agency expertise and existing or emerging capabilities. The workshop will focus on the challenges of providing and maintaining an updating but non-operational capability, including the potential dual use of ongoing research efforts for decision support. Discussions will emphasize collaborative efforts to create paths forward and facilitate inter-agency efficiency. Ultimately, the workshop will serve as a foundation for continued information exchange leading to a unified, reliable, and actionable prediction capability. The workshop is intended to build on the work of agencies involved in the USGCRP and USCLIVAR.

Attendance consists primarily of representatives from all Federal agencies participating in FCMSSR, most of them involved in the USGCRP, providing long-range predictions/projections, and using/potentially using long-range predictions/projections of the earth system in their decision processes.

<https://cpaess.ucar.edu/meetings/2019/interannual-to-decadal-workshop>

<https://earthsystemprediction.gov>

national.espc@noaa.gov



Workshop on Building an Interannual to Decadal (2 to 30 year) Prediction/Projection Capability for Decision Support

NOAA Center for Weather and Climate Prediction
College Park, MD
5-6 June 2019

Day 1 - Wednesday, 5 June

Opening Session

- 0830 Welcome and Purpose Michael Bonadonna
- 0845 Overview of NAS reports 2-30 yr Scott Sandgathe

User Needs

- 0915 Department of State Fernando Echavarria
- 0930 Sea Level Variation and Impacts Ben Hamlington
- 0945 NOAA/NWS Hendrik Tolman

1000 Morning Break

- 1015 USDA Mike Brusberg
- 1030 Department of the Air Force Michael Farrar
- 1045 Insurance Rob Galbraith
- 1100 [Discussion] The definition of needed capabilities Dave McCarren Scott Sandgathe

1200 Lunch

Present Capability and Research Efforts

- 1300 Department of the Navy Joshua Cossuth
- 1315 Department of Energy Renu Joseph Corrine Hartin
- 1335 USGCRP: National Climate Assessment David Reidmiller

1405 Afternoon Break

- 1420 USGCRP: Interagency Group on Integrative Modeling Renu Joseph

- 1435 [Discussion] Needs vs. Capabilities Jessie Carman
- 1530 Synopsis and Discussion Scott Sandgathe Brad Johnson

1600 Adjourn Day 1

Day 2 - Thursday, 6 June

- 0830 The decadal prediction grand challenge David Titley
- 0900 Overview of Day 1 Johnna Infanti

Emerging Capability and Research Efforts

- 0930 International challenges Shanna Pitter
- 0945 NASA Andrea Molod

1000 First Break

- 1015 Academia Lisa Goddard
- 1030 Commercial Sector Mary Glackin
- 1045 NOAA Tom Delworth
- 1100 UCAR/NCAR Stephen Yeager

1115 Second Break

Fulfilling User Needs

- 1130 Advancing operational infrastructure Arun Kumar
- 1200 [Panel] Next Steps John Cortinas Jin Huang Andrea Molod
- 1245 Closing Discussion Jessie Carman Scott Sandgathe

1330 Adjourn