

CGD SEMINAR



DATE: Tuesday, April 24, 2018

TIME: 11 a.m.

LOCATION: NCAR, 1850 Table Mesa Drive
Mesa Lab, Main Seminar Room

TITLE: ENSO teleconnections and climate
impacts over North America:
How well do we know them and how do
we evaluate models accordingly?

SPEAKER: Clara Deser, NCAR

ABSTRACT:

The canonical impacts of ENSO are generally assessed by compositing over a large number of events, thereby reducing the noise from internal variability unrelated to ENSO. In this talk, I shall discuss to what extent the 100-year observational record is adequate for revealing the true forced response to ENSO, with a focus on wintertime teleconnections and climate impacts over North America. I shall also discuss how to evaluate climate model simulations in the face of observational uncertainty in both the spatial pattern and amplitude of ENSO's impacts. Such observational uncertainty necessitates an approach to model assessment that considers not only the model's forced response to ENSO, but also its representation of internal variability unrelated to ENSO. I shall show results from so-called "Tropical Pacific Pacemaker" simulations with CESM1 and CM2.1 in which sea surface temperature anomalies in the eastern tropical Pacific are nudged to observations. The fully-coupled Pacemaker simulations will also be compared with CAM5 AMIP experiments. Finally, the role of ENSO diversity and non-linearity will also be discussed.

Live webcast: <http://ucarconnect.ucar.edu/live>

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