



*Fourth Distinguished Ogura Lecture in 2024*  
日本気象学会第四回小倉特別講義

# Regional climate change and the role of internal variability and atmospheric dynamics

**Dr. Clara Deser**

**Senior Scientist**

**Climate and Global Dynamics Division**

**National Center for Atmospheric Research (NCAR)**

**Date: 15 November (Fri), 2024, 9:30 – 11:00 JST**  
**(Fourth day of the 2024 MSJ Fall meeting)**

**Place: Leo Esaki Main Convention Hall,**  
**Tsukuba International Congress Center**

**Lecturer profile: Please see page #2**

**Remarks: The lecture will be given in English (free for attendance). Please consider joining an associated MSJ session on ‘Dynamical understanding of climate system variability and change’ in the afternoon of the same day (please see page #3 for details).**

## Dr. Clara Deser

Dr. Clara Deser is a climate scientist at the National Center for Atmospheric Research (NCAR). Her research area encompasses internal climate variability and anthropogenically forced climate change. Through observational and modeling studies, she has investigated interactions among atmosphere, ocean, and sea ice, and their roles in modes of climate variability from interannual to multidecadal time scales. She pioneered the use of a large ensemble of climate model simulations for advancing understanding of the combined influence of natural and anthropogenic contributions on climate variability and change. Nowadays, the large ensemble simulation datasets are used as fundamental resources for attributions of climate change and extreme weather, assessments of climate change risks, and information for adaptation and mitigation efforts.



Dr. Deser earned her B.S. from the Massachusetts Institute of Technology (1982) and Ph.D. in Atmospheric Sciences from the University of Washington (1989) under the supervision of Prof. John Michael Wallace. After serving as a Research Associate at the Cooperative Institute for Research in Environmental Sciences, University of Colorado, she joined NCAR in 1997. Since 2011, she has been leading the Climate Analysis Section of NCAR.

Dr. Deser is a member of the U.S. National Academy of Sciences and a fellow of the American Geophysical Union and the American Meteorological Society. She obtained the Charney Award from the American Meteorological Society in 2020 and the Roger Revelle Medal from the American Geophysical Union in 2022. In WCRP CLIVAR, she served as a member of the Pacific Implementation Panel, Scientific Steering Committee, Working Groups on Decadal Prediction and Arctic-Midlatitude Weather Linkages, and Research Focus Group on Marine Heat Waves. She co-chaired the US CLIVAR Working Group on Large “initial-condition” Ensembles and the WCRP CMIP6 “Polar Amplification Model Intercomparison Project”. Throughout her academic career, she has published more than 200 peer-reviewed papers, with total citations of ~44,000 and an h-index of 99 (Google Scholar).

*The Ogura Lecture Associated Session*  
日本気象学会小倉特別講義連携セッション

## **Dynamical understanding of climate system variability and change**

**Date:** 15 November (Fri), 2024, 13:30 - 15:55 JST  
(Fourth day of the 2024 MSJ Fall meeting)

**Place:** Leo Esaki Main Convention Hall,  
Tsukuba International Congress Center

### **Program**

13:30 - 13:35 Introduction

13:35 - 14:00 **Satoru Okajima** (The University of Tokyo)  
Seasonality of the North Pacific storm track activity and its change under the changing climate

14:00 - 14:25 **Masato Mori** (Kyusyu University)  
Selective enhancement of teleconnection pattern by extratropical atmosphere-ocean coupling

14:25 - 14:50 **Yoko Yamagami** (JAMSTEC)  
Impacts of oceanic mesoscale structures and western boundary currents on large-scale climate variability revealed by climate model simulations

14:50 - 15:15 **Youichi Kamae** (University of Tsukuba)  
Forced response and internal variability of mid-latitude climate extremes

15:15 - 15:40 **Yukiko Imada** (The University of Tokyo)  
Potential seasonal predictability of the risk of regional rainfall extremes and the role of global-scale interannual variability

15:40 - 15:55 Discussions and Concluding remarks