

Dr. Clara Deser is a Senior Scientist at the [National Center for Atmospheric Research](#) where she leads the [Climate Analysis Section](#). She earned her B.S. degree in Earth and Planetary Sciences from MIT in 1982, and Ph.D. in Atmospheric Sciences from the University of Washington in 1989 under the supervision of [John Michael Wallace](#). Deser was a postdoctoral fellow with Maurice Blackmon at the [Cooperative Institute for Environmental Sciences](#) at the University of Colorado, and joined the [National Center for Atmospheric Research](#) in 1997.

Research

Deser's research encompasses global climate variability and anthropogenic climate change. She is known for her observational and modeling studies of the interactions among the atmosphere, oceans and sea ice that give rise to modes of climate variability on interannual-to-multidecadal timescales, and for delineating their role in projections of regional climate change. She has studied a range of natural phenomena including El Niño-Southern Oscillation (ENSO), Pacific Decadal Variability and Atlantic Multidecadal Variability, and investigated anthropogenic influences on climate at regional scales. Deser uses numerical models of the earth's climate system to understand the physical processes governing these natural modes of variability and their predictability, and for elucidating the mechanisms of human-induced climate change, especially the regional effects of greenhouse gases and aerosol emissions. The role of sea ice loss on global climate is another major research focus. Deser pioneered the use of large ensembles of climate model simulations to probe the combined influences of natural and human-induced contributions to climate variability and change. Such large ensembles provide a quantitative framework for assessing the risks of climate change and associated impacts on extreme weather, and provide crucial information for adaptation and mitigation efforts. Deser has co-authored nearly 200 peer-reviewed publications.

Awards and honors

- 1999: Meisinger Award, [American Meteorological Society](#)
- 2008: Fellow, [American Meteorological Society](#)
- 2014: Fellow, [American Geophysical Union](#)
- 2016: [Community Earth System Model](#) Distinguished Achievement Award
- 2017: [Bjerknes Lecture](#), American Geophysical Union
- 2018: [University of Oslo "Inspiration Award"](#)
- 2020: Charney Award, [American Meteorological Society](#)
- 2021: Elected to the [United States National Academy of Sciences](#)
- 2021: [Revelle Medal](#), American Geophysical Union

External links

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- [Clara Deser's publications](#) indexed by [Google Scholar](#)