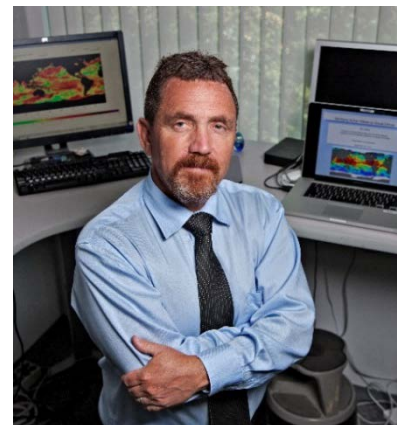


HOW A SENTENCE CHANGED CLIMATE SCIENCE: LESSONS LEARNED FROM THE 1995 CLIMATE REPORT

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Monday, March 5, 2018

1:30-2:30 p.m.

Burton D. Morgan Center, Room 121

In November 1995, after three days of deliberations in Madrid's Palacio de Congresos, the Intergovernmental Panel on Climate Change (IPCC) reached the historic finding that "the balance of evidence suggests a discernible human influence on global climate". This sentence changed the world. While other individuals and national scientific organizations had reached similar conclusions before Madrid, the "discernible human influence" statement marked the first time that the international climate science community had spoken so clearly and forcefully. The reaction was swift. The "discernible human influence" conclusion led to Congressional investigations, charges of "scientific cleansing", allegations of corruption of the peer-review process and professional misconduct, and claims of political tampering. Santer spent several years addressing such criticism. This lecture is a reflection on some of the scientific and personal lessons he learned after publication of the IPCC's 1995 Report. Many of these lessons still have relevance in today's world.

Ben Santer joined Lawrence Livermore National Laboratory in 1992 where he is a senior scientist and member of the Program for Climate Model Diagnosis and Intercomparison. His research focuses on such topics as climate model evaluation, the use of statistical methods in climate science, and identification of natural and anthropogenic "fingerprints" in observed climate records. His early research on the climatic effects of combined changes in greenhouse gases and sulfate aerosols contributed to the historic "discernible human influence" conclusion of the 1995 Report by the Intergovernmental Panel on Climate Change (IPCC). His recent work has attempted to identify anthropogenic fingerprints in a number of different climate variables, such as tropopause height, atmospheric water vapor, ocean heat content, and ocean surface temperatures in hurricane formation regions.

In 2011, Santer was elected to the National Academy of Sciences, and a fellow of the American Geophysical Union. In 1998, he received a McArthur Foundation Fellowship (Genius Award). He has also received the Ernest Orlando Lawrence Award and a Distinguished Scientist Fellowship from the U.S. Department of Energy, and the Norbert Gerbier award from the World Meteorological Organization.

Santer holds a Ph.D. in Climatology from the University of East Anglia, England. After completion of his Ph.D. in 1987, he spent five years at the Max-Planck Institute for Meteorology in Germany, where he worked on the development and application of climate fingerprinting methods.

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