

**Heat and the Heartbeat of the City:**  
central park climate change in sound

According to a 1999 report published by the [Environmental Defense Fund](#), New York City will be dramatically impacted by global warming in the near future. Average temperatures in New York could increase by one to four degrees fahrenheit by 2030, and up to ten degrees by 2100. The impacts of these changes on this major metropolitan area will be great (see the [Metropolitan East Coast Assessment](#))

[This site](#) presents a series of **sonifications** (musical compositions created by directly translating data to sound) that illustrate these dramatic changes focusing on the heart of New York City and one of the city's first locations for climate monitoring, Central Park. As you listen to the compositions, you will travel forward in time at an accelerated pace and experience an intensification of heat in sound.

**scientific collaborators:**

**Cynthia Rosenzweig, David Rind, and Richard Goldberg**, NASA Goddard Institute for Space Studies and Columbia University

**artistic collaborator:**

**Andrea Polli**, Associate Professor of Integrated Media Arts, Hunter College



**collaborator bios:**

**Andrea Polli** 's art work resides in the intersection between art and science, and she has developed projects related to perception and cognition, complexity science, and human behavior. Her projects are hybrids that feed into multiple areas of research and her work often offers new 'readings' of data produced by natural systems that bring to light unfamiliar aspects of the information. Projects she has created include a 1992 system using the Lorenz attractor as a structure to guide human/computer musical improvisation and a long-running performance project started in 1996, Intuitive Ocusonics, a system for performing sound using eye movements. She currently works in collaboration with meteorological and environmental scientists to develop systems for understanding storms and climate through sound, and a recent collaboration with Dr. Glenn Van Kowe, a lead scientist at MESO, called Atmospherics/Weather Works presents a spatialized sonification of highly detailed models of storms that devastated the New York area. More information at [www.andreapolli.com](http://www.andreapolli.com)

**Dr. Cynthia Rosenzweig** is a Senior Research Scientist at the NASA Goddard Institute for Space Studies, where she is the leader of the Climate Impacts Group. She is a Senior Research Scientist at the Columbia University Earth Institute and a Professor of Environmental Sciences at Barnard College. A recipient of a 2001 Guggenheim Fellowship, Dr. Rosenzweig focuses her research on the impacts of climate variability and change on systems and sectors at regional, national, and global scales. She is the Co-Leader of the Metropolitan East Coast Regional Assessment of the Potential Consequences of Climate Variability and Change (MEC), a study of how New York City and environs are likely to be affected by global climate change and how the city can prepare to adapt to changing climate conditions. A Convening Lead Author of the Intergovernmental Panel on Climate Change, Dr. Rosenzweig has led numerous national and international studies and published over 100 scientific articles and reports.