Climate Change Science Program Strategic Plan Announcement Department of Commerce Remarks July 24, 2003

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Good morning. One of the pleasures of my job is to meet and discuss science with the nation's best scientists. During the past two years, I have learned much from the community of climate scientists, and my conclusion is that Nature must be very clever to make things so difficult for us mortals to understand. A famous scientist once said that "Nature is not embarrassed by difficulties of analysis."

Climate science is difficult, and we should not be embarrassed to admit this truth. The complexity of the Earth's atmosphere, land, ocean, sea ice, fresh water, and ecosystems is enormous. Moreover, the components of the Earth system are continually interacting with each other. What really makes Nature so difficult to unravel is the very large range of scales of time and distance, from the rapid twinkling turbulence that mixes vapor in the atmosphere to the millennial wandering of earth's axis; from tiny wind-blown wavelets to planet sized streams of air and ocean. And all these scales mix among themselves.

Climate science has always been a subject of importance to the United States, even in colonial times. One obvious reason for this is the wide variety of geographical conditions within the continental U.S. Bounded by oceans on the east, south and west, laced by a high mountain chain on its western side, and, in the winter, receiving massive outbreaks of cold air from the north, the U.S. is home to extremely variable, and many times violent, weather and, to complicate the situation, there are very strong 3- to 7-year climate patterns.

Climate science has benefited greatly from a convergence of new and innovative ideas about how the complex machinery of the Earth works, of numerous new technologies to measure Earth's atmosphere, land and ocean, and of remarkable advancements in computing. Climate science continues to be an important asset of the United States for security from environmental events and for economic growth.

During the past year, an interagency group led by the Department of Commerce produced the Climate Change Science Program Strategic Plan. This report represents the U.S. Government's determined effort to outline the way forward from the present state of knowledge to find answers about why our climate continually changes, how much the climate is expected to change during the next year, next several years, next decades and next 100 years, and how much of climate change is predictable, including abrupt climate change. Rapid advances in ideas of climate science and in technology to accomplish climate science are expected to continue and will almost certainly require future revisions as the new knowledge accumulates.

For now, the plan before us outlines what we need to do next in climate science, based on the best current knowledge. On behalf of President Bush, I wish to express my deep appreciation to the hundreds of men and women who worked together to produce these documents, and particularly to Dr. James Mahoney for his leadership, and Secretaries Don Evans and Spencer Abraham for their oversight of this work.

Thank you.