1035-86-931 Gerald R North* (g-north@tamu.edu), Department of Atmospheric Sciences, Texas A&M University, College Station, TX 77843. Status of Climate Change Research.

There is a broad consensus in the climate research community that global climate is changing, and that most of the change is being forced by human activities. This talk will begin with the nature of assessments of this statement and how they were arrived at. This is followed by the basic physical principles upon which the statement rests. For example, what are the types of data brought to bear on the question and how are mathematical models formulated and used to address the future of climate. There are important mathematical, statistical and even philosophical issues encountered in both of these arenas. The subject is broad and not especially easy to learn, but a number of opportunities exist for mathematicians and statisticians to participate in this exciting field. (Received September 17, 2007)