Introduction

The purpose of this paper is to update the findings and concepts summarized in *Human Impacts on Weather and Climate* by Cotton and Pielke (1995). In that book we describe the concepts related to purposeful weather modification by cloud seeding, inadvertent modification of weather and climate on regional scales, and human impacts on global climate change. We also discuss the methods and status for evaluating a cause and effect between human activities and observed weather and climate changes. I will focus specifically on revisions to Part I of that book which we call ``The Rise and Fall of the Science of Weather Modification by Cloud Seeding''. While this book was first published by Cambridge Press in 1995, prior to that it was self-published by ASTeR Press in 1992. Because Part I was the earliest chapter written, we update this part for the period beginning about 1989 through 1997.

In this paper I will focus only on three methods of seeding clouds. The first two are related to supercooled clouds and are called the ``static mode'' of cloud seeding and the ``dynamic mode'' of cloud seeding. The third method is the modification of warm clouds by hygroscopic seeding.

http://rams.atmos.colostate.edu/gkss_node1.html