

## Preface

During the last 100 years, the rise of the global mean surface temperature is real. This warming trend may be closely related to the significant increase of greenhouse gasses which are produced by human activities. It is expected, according to scientists' prediction, that the temperature of atmosphere will continuously go up and bring serious impacts on the society and economy of the world as well as China. The impacts of climate change on agriculture, ecosystem, water resources and sea level rise have received a special concern. With response to this situation, the National Natural Science Foundation of China initiated a project entitled under "Unusual Climate Change and Its Impact upon Agriculture and Ecosystems in China" in 1989. Late Professor Ma Shijun was the principal scientist of the project. With great enthusiasm, he had made much to organizing, coordinating and implementing this project. Here, all of his coworkers and colleagues earnestly would like to express their appreciation for his significant contribution and efforts.

The present collection is the second volume of the achievements made in the past three years by the scientists of the project. It covers five areas: (1) the numerical simulation of the climate change caused by increase of CO<sub>2</sub> concentration and nuclear winter effect, with a special focus on the region of China; (2) the impact of climate change on agriculture in China; (3) the impact of climate change on the ecosystem in China. An ecological model with inclusion of climate-vegetation interaction has been developed; (4) the impact of climate change and air pollution on agricultural pest in China; and (5) the effect of atmospheric aerosols on climate change and UV-B radiation reaching the surface.

The issue of the impact of climate change upon socio-economic aspects is a very complicated and interdisciplinary scientific problem. The results provided here are deemed to be the first step toward this issue.

Many thanks go to the Editorial Board of *Journal of Environmental Sciences* (English edition) for their encouragement and assistance.

丁一汇

Ding Yihui  
Research Fellow and Professor  
Deputy Director of Chinese  
Academy of Meteorological  
Science