

# 氣候變化與長期天氣預報

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## 摘要

本文是提出長期天氣預報中從月到季尺度之氣候變化中有關大氣溫室效應增加所造成溫室潛勢預警。首先評估在長期預報技術所能達到之條件下美國目前作業化之情形。其次強調溫室預警發佈及其對區域候與天氣之關連，同時綜評目前國際間正在進行有關溫室效應之研究，影響及衝擊，與對策。最後要討論未來研究展望及改進區域性之長期天氣預報。

## CLIMATE CHANGE AND LONG-RANGE WEATHER FORECASTING\*

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### *Summary*

This paper addresses the long-range weather forecasting on the time scales of month to season in the context of climate change, in particular the greenhouse warming potential due to increasing atmospheric greenhouse gases. Three parts are included. First a brief review of the current status of the long-range weather forecasting is presented with emphasis on the operations in the U. S. So far skillful long-range forecasts can be made, although the accuracy depends highly on the regions. The second part focuses on the greenhouse warming issue and its implications to regional weather and climate. The international on-going activities concerning the research, effect and impact, and policy related to the greenhouse effect are also summarized. The third part discusses future research strategy and planning to improve long-range weather forecasting on the regional basis.