中央研究院統計科學研究所
學 術 演 講

講 題：Climate Modeling and Opportunities for Statistical Analysis
演 講 人：Dr. Yi-Hsuan Chen（陳毅軒 助研究員）
　　　　　Research Center for Environmental Changes, Academia Sinica
時 間：2025-04-28（Mon.）10:30-12:00
地 點：Auditorium, B1F, Institute of Statistical Science；The tea reception will be held at 10:10.
備 註：Online live streaming through Cisco Webex will be available.

Abstract

Climate models are essential tools for understanding the Earth's climate system and projecting future changes. These models generate vast amounts of data—exceeding 20 petabytes—which support scientific research and inform climate assessments at both global and regional scales. The massive volume and complexity of this data present unique challenges and rich opportunities for statistical analysis. In this talk, I will briefly introduce climate models, covering the underlying physical principles, numerical approximations, and overall model structure. I will then highlight several statistical methods in my research, with a focus on quantifying model uncertainty. This talk aims to foster interdisciplinary dialogue and explore potential collaborations between climate science and the field of statistics.

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