



Understanding or prediction: On the emergence of a prediction culture in climate modeling

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This paper examines the emergence of climate modeling as a culture of prediction in the formative period between ca. 1960 and 1985. Since the 1950s, a first generation of climate modelers pursued the development of models for heuristic purposes: to investigate, quantitatively describe and better understand complex physical processes in the atmosphere. Around 1970, a new generation of climate modelers began to push the use of climate models for long-term projections of climate change. Both heuristic climate modeling and climate prediction were controversial. These research domains represented new and very different scientific cultures compared to traditional climatology. They involved new presumptions, interests and epistemic and political values and were dependent on specific political and cultural contexts. The paper aims at showing the complex politics of science in the development of heuristic and predictive climate modeling cultures.