



Cloud processes and climate change: robust and non-robust behaviours

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Through their control of the general atmospheric circulation and of the Earth's radiation balance, cloud and moist processes play a prominent role in climate and climate change. The difficulties of large-scale models in representing these processes thus challenge the ability of Earth System Models to provide robust information about future climate change. Based on the analysis of CMIP5 model outputs, this presentation will assess the role of cloud processes in different aspects of climate projections, with a focus on climate sensitivity and regional precipitation changes. Robust behaviours will be highlighted, physical interpretations will be proposed, and finally implications and open questions will be discussed.