

Shallow Clouds, Water Vapor, Circulation and Climate Sensitivity

Workshop

8 – 12 February 2016

The World Climate Research Program has identified six Grand Challenges in climate research for the coming decade. The Grand Challenge on “Clouds, Circulation, and Climate Sensitivity” is one of them. Its main goal is to improve knowledge on how clouds mediate the strength and intensity of large-scale rainfall maxima in the tropics and mid-latitudes, and on the role of cloud-scale processes in climate, particularly at low latitudes where cloud-environment interactions have a large impact on climate and its sensitivity to forcing. The objective of this workshop is to discuss what new satellite observations would be most useful in addressing these issues. Observations over land are fairly dense and can be integrated using techniques from weather forecasting, but much of the tropics is oceanic. This is where climatically-relevant low clouds are most prevalent, our existing observations most lacking, and satellite observations hold the most promise.

Conveners

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