Video:

https://jpl.webex.com/recordingservice/sites/jpl/recording/31184dbf89de4915abd692fc9c927898

Abstract

Earth system modeling: can we stay ahead of what's actually happening?

Over the last forty years, Earth System Models have become more and more comprehensive and detailed. They have assimilated previously independent modeling efforts in ocean circulation, atmospheric composition, the stratosphere, land surface, and the cryosphere, and are today demonstrably more skillful than earlier efforts. Yet the structural uncertainty in the latest model projections is actually increasing. Meanwhile, impacts of climate change on, for instance, wildfires, tropical cyclones and sea level, appear to be increasing faster than we have been able to predict. I will address some of the current issues at the bleeding edges of model development and the continuing importance of model evaluation.