

Global observations for advancing the assessment of climate model reliability

Joao Teixeira[†];

[†] Jet Propulsion Laboratory, USA

Leading author: teixeira@jpl.nasa.gov

Observations play an essential role in the development and evaluation of climate modeling systems. In particular, observations from satellite platforms often provide a global depiction of the climate system that is uniquely suited for model assessment. In this presentation an overview of current and future global observations, as well as the methodologies to use them in climate model assessment, will be presented. In particular, a project created to provide the community of researchers, which will access and evaluate the CMIP5 climate model results, access to analogous sets of satellite observational data, will be described in some detail. Novel methodologies such as satellite simulators and conditional sampling will be highlighted as particularly insightful diagnostics that utilize these global observations in new ways. A short discussion on the role of climate model assessment as a key activity that should provide input into the formulation and definition of future global observational systems will conclude the presentation.