

Model Validation Methods

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This talk will briefly review some of the basic approaches to model validation, indicating aspects of the simulated climate that may require attention in various problems. It will also discuss extensions, such as climate change detection and attribution of change, that may be viewed as model validation exercises. Limitations that hamper the ability to assess models will be discussed, as will some directions for further research. A difficulty that emerges is that validation procedures are often not integrated with specific model applications. Instead, they seek to determine whether a simulated climate is significantly different from the observed climate in one or more aspects. The point is made that there is a need to determine acceptable model performance for a given application, and that in many instances it may be desirable to assess models against these standards rather than precise standards based on observed climatology.