

*5th WGNE Workshop on Systematic Errors in Weather and Climate
Models*

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**Systematic errors across space and time scales and their relevance to
future projections of climate change**

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Interest in climate model “metrics” has grown considerably in recent years. This presentation will describe some lessons learned and key challenges inherent in the selection and use of tests that quantify the agreement between the observed and simulated climate. Particular attention will be given to the implications for model development and tuning.

The advent of the CMIP DECK (an ongoing Diagnosis, Evaluation, and Characterization of Klima) and historical experiments provides the opportunity for more efficiently documenting the baseline characteristics of all new simulations made available for research. In support of this, several teams are developing tools to quickly evaluate and document CMIP class simulations as they are contributed to the Earth System Grid Federation. One such package being developed by PCMDI will be described, which emphasizes the application of a diverse suite of summary statistics across space and time scales. Other efforts will also be discussed and it will be argued that some coordination between these developing capabilities could benefit the model development process.

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