

## **SEMINAIRE CNRM / GAME**

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### **WHAT INFLUENCES THE SKILL OF CLIMATE MODELS OVER THE CONTINENTS ?**

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**en salle Bret (salle GMME n° 200)**

#### Résumé :

Climate modelling groups from four continents have submitted simulations to the CMIP5 project. With climate impact assessment in mind, we test the realism of the seasonal averages of temperature, precipitation and sea-level pressure, compared to two observational datasets. Non-dimensional skill scores have been generated for the global land and six continental domains. For most cases the 25 models analysed perform well, particularly CNRM-CM5, and overall this CMIP5 ensemble shows improved skill over the earlier CMIP3 ensemble of 24 models. This improvement is seen for each variable and continent, and in each case is largely consistent with the increased resolution on average of CMIP5, given the correlation between scores and grid length found across the combined ensemble. In addition to this apparent influence on skill, the smaller average score for the 13 Earth System models in CMIP5 is consistent with their mostly lower resolution. There is some variation in the ranking of models by skill score across the global and continental results, and this prompts consideration of the potential influence of a regional focus that model developers might have. This is addressed here by comparing the ranking of models for their 'home continent' with their global rank.

*N. B. : Compte tenu du petit nombre de places, les spectateurs doivent faire une pré-réservation par e-mail auprès de [michel.deque@meteo.fr](mailto:michel.deque@meteo.fr).*