

# Joint WGCM-CORDEX Session

10/10/17 pan-WCRP modelling meeting

Possible discussion topics:

- Modelling groups commitment to producing driving data for CORDEX
  - RCP8.5?
  - RCP2.6?
- How can we better join up on the modelling of regional climate now that global models are running at traditional resolutions of regional models?
  - Joint interest in analysis of HighResMIP simulations?
  - What should we prioritize?
  - Can CORDEX members access data?
- How can we jointly feed into regional climate information in WGI and WGII?
  - Regional atlas
- Added value of RCMs/downscaling?

# Modelling the Regional Climate – Regional and high-resolution global models

Possible discussion topics:

- When, where and how does added value occur? How does added value vary with simulation method? (What is the reference for comparison?)
- How well does each approach handle teleconnections?
- What are the strengths and shortcomings of having two-way connections (or lack thereof) with the rest of the planet?
- What are joint opportunities for HighResMIP and CORDEX for cross comparisons?
- Are there ways of combining results from the two to produce “optimum” climate information for user communities?
- Is there a role for variable-resolution models?
- Is there a role for statistical models? (Hybrid dynamical-statistical models, statistical downscaling)
- What are the observational limitations for validating these simulations?
- What is the impact (role, future?) of physical parameterizations, e.g., deep convection, orographic drag, in high resolution and regional climate simulations?
  - Are there pathways to improvement?