

The CODEX experience

(Future? What future?)

What? A WCRP *global* activity that addresses the grand challenge “Provision of skillful regional climate information”, to deliver *regional multi-model multi-method projections* for all terrestrial regions

Why? Responding to climate change at regional scales is a “*wicked problem*” of a mix of climate and non-climate stressors against system sensitivities, needing climate information that is *defensible and scale relevant to IAV/ policy*.

When? Running for 4 years, results now appearing in the

The Africa story:

- Data generated, but mostly by groups external to the continent
- CORDEX has no inherent analysis capacity: a multi-agency funding was sourced to support three Africa teams for initial analyses, ~25 participants over 3 workshops, journal papers produced, capacity built.
- Projection data weakly assessed, poorly communicated, with limited links to IAV

The mix of (Africa) challenges:

- Data distribution (courier!)
- Model skill and contradictions
- Managing expectations
- Analysis from user-perspective
- Paucity of observational data
- Responsible communication
- Synthesis of GCM/RCM/SD
- Information versus data

CORDEX-Africa: seeking to complete the matrix with 10 RCMs (mostly complete) and up to 7 SD methods (in progress)

CMIP5 →	GCM 1 data	GCM 2 data	GCM 3 data	GCM 4 data	GCM 5 data	GCM-n data
RCM 1	data	data		data	data	
RCM 2				data		
RCM 3	data	data	data	data	data	data
RCM 4	data		data			data
RCM 5	data	data	data	data		
SD 1		data		data	data	data
SD 2	data	data	data		data	data
SD 3	data	data	data			data
SD 4	data		data		data	data

Arguably the greatest factor undermining defensible policy and adaptation to potential impacts from climate variability and change: **Moving from regional climate data to information (*user-informed, scale relevant, tailored to vulnerability, with qualified confidence*).**

The future:

- CORDEX is the greatest ongoing resource opportunity for Africa users to assess regional change
- Coordinated and user-guided analysis and communication is the greatest limitation
- Understanding the skill limits of the methods, scale limits of information, and integrating multi-model multi-method data is the central science question.

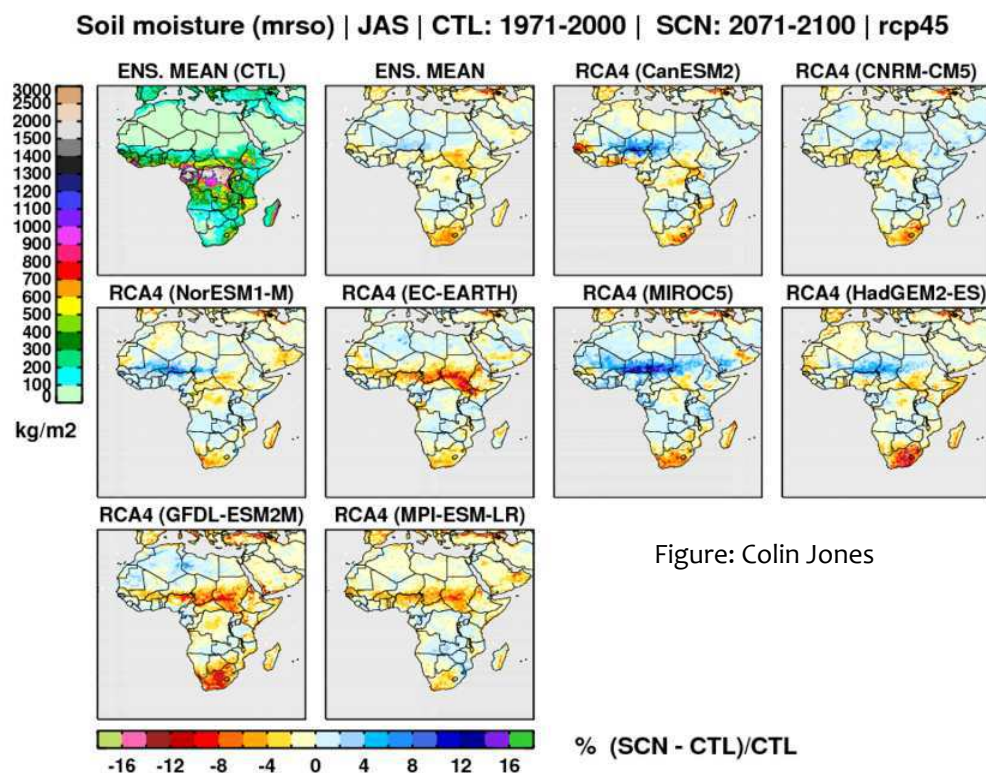


Figure: Colin Jones