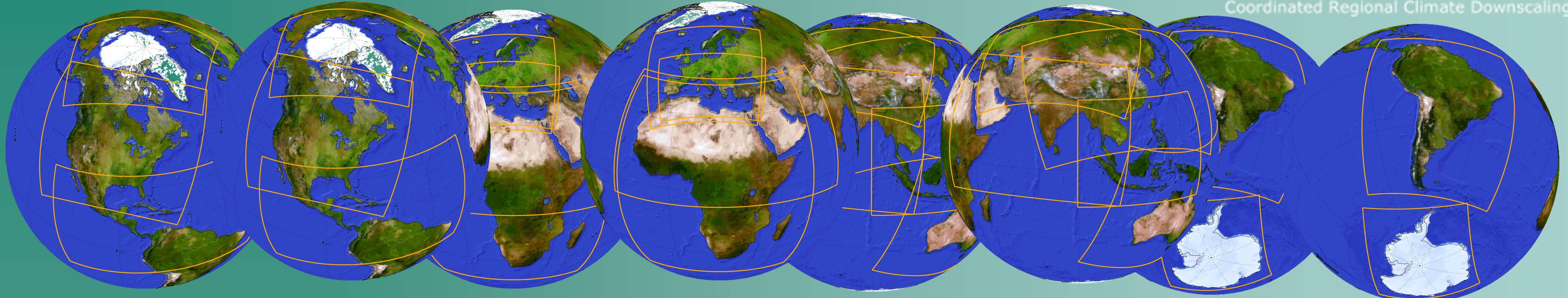


The CORDEX vision is to advance and coordinate the science and application of regional climate downscaling through global partnerships.

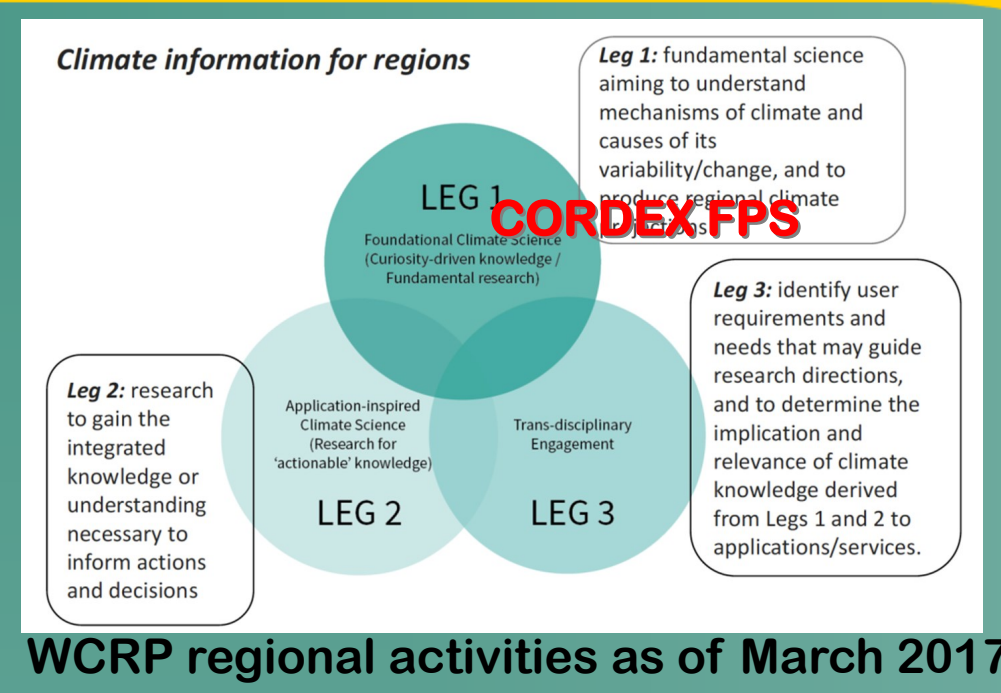


14 CORDEX Domains covering all land areas + the Arctic

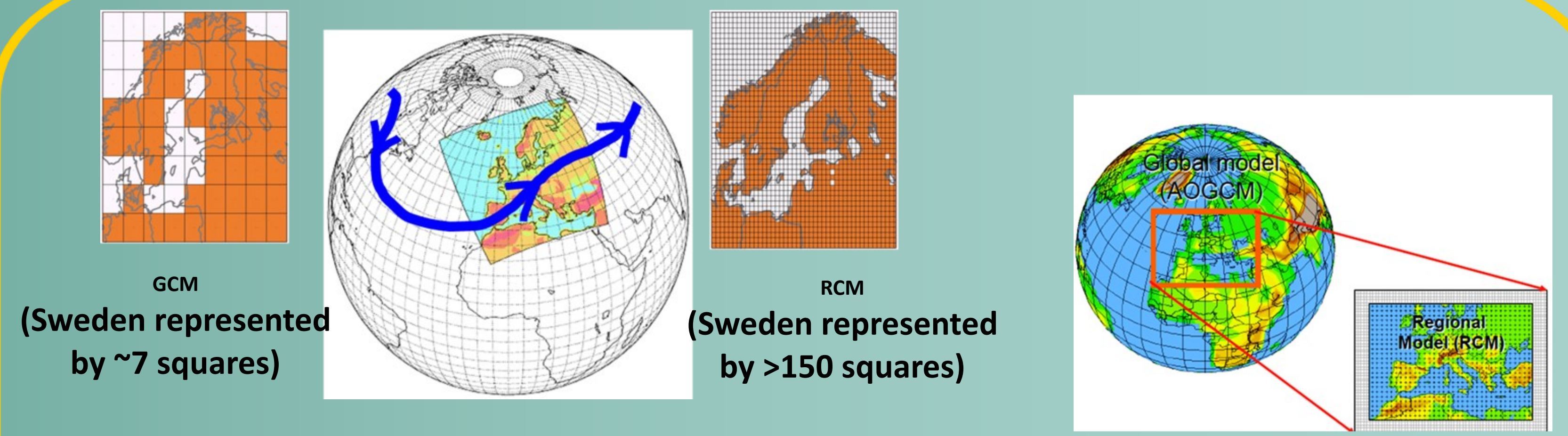


Organization

- WCRP Programme with the Joint Scientific Committee (JSC) and Joint Planning Staff (JPS)
- CORDEX Science Advisory Team (SAT) with two co-chairs
- International Project Office for CORDEX (IPOC) - coordination, communication cooperation all domains
- 14 domains with Points of Contact (POCs) - coordination, communication, cooperation within the domain and with SAT/IPOC



Downscaling

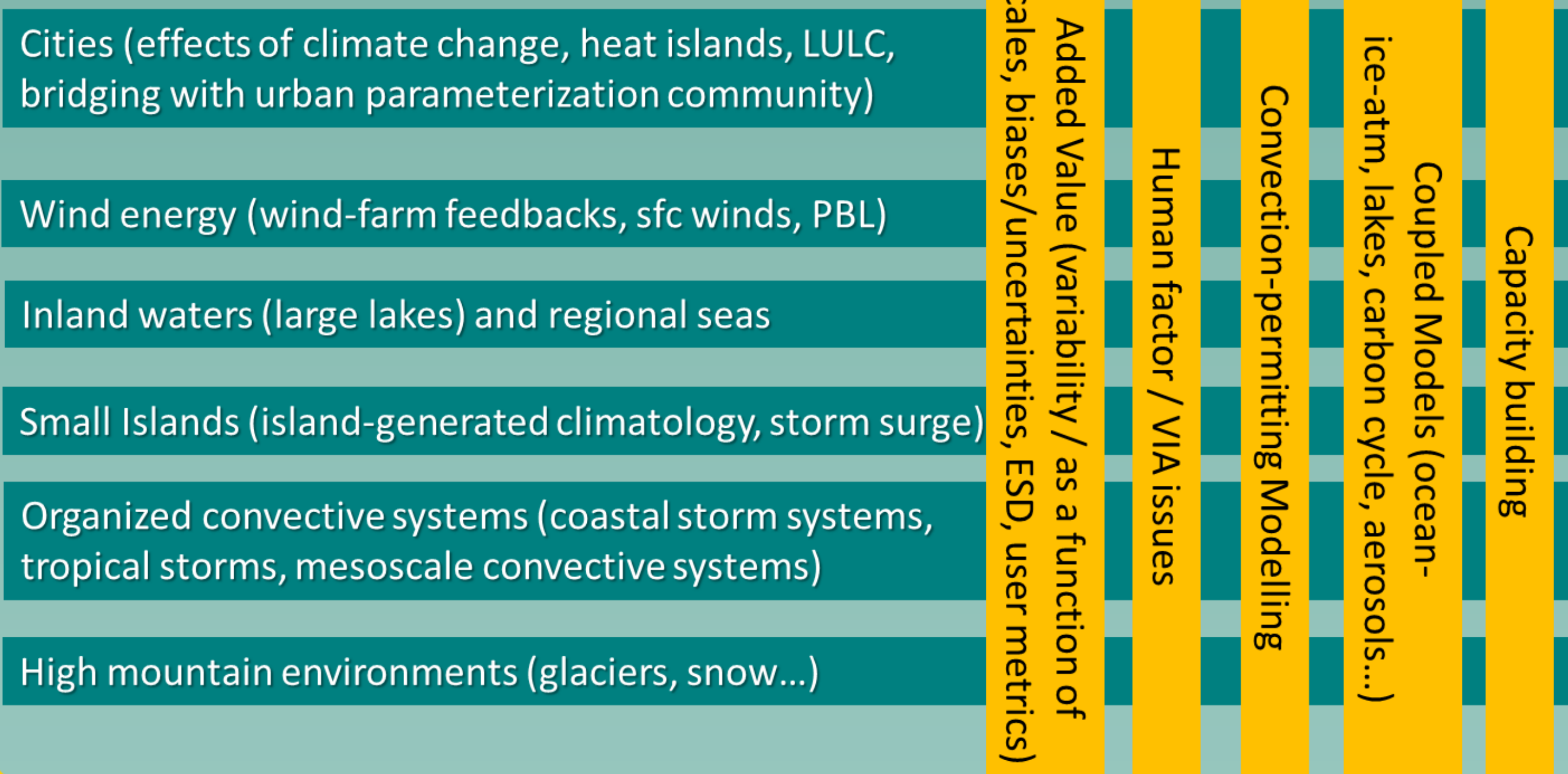


Regional climate models or empirical statistical downscaling; greater detail at local and regional scales. Vital to improved vulnerability, impact and adaptation planning - extreme events etc.

Courtesy: Justin Glisan

CORDEX Scientific Challenges

Six key challenges to help drive CORDEX forward, five cross cutting themes to focus activities across the CORDEX domains, promote cross domain interaction, and allow for close interaction with users.

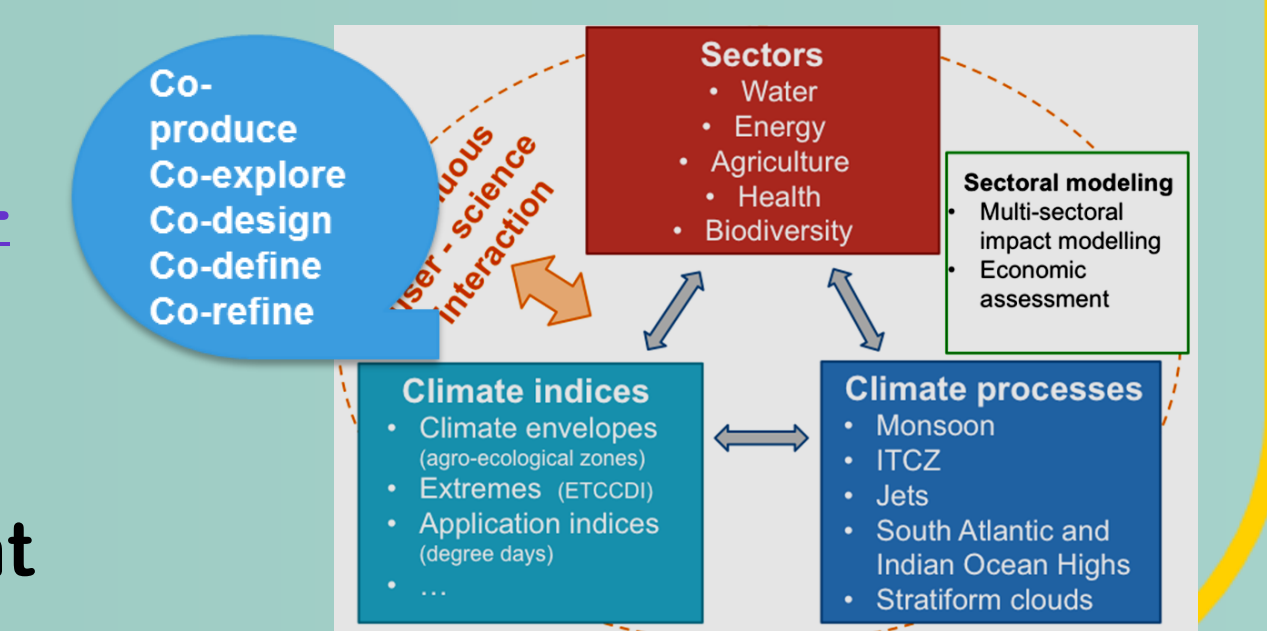


CORDEX Flagship Pilot Studies (FPS)

To implement the Scientific Challenges

- Regional/local focus, fine scale processes transferable to other regions
- High resolution, convection permitting, distillation, regional climate change processes
- Convey climate information/model results to users for implementation (Vulnerability-Impact-Adaptation)
- Observational basis for verification
- One call a year in February, seven endorsed so far
- <http://cordex.org/experiment-guidelines/flagship-pilot-studies/>
- One demonstrator—CORDEX Africa Impacts Atlas - systematic analysis of impacts in Africa under different Climate Change scenarios

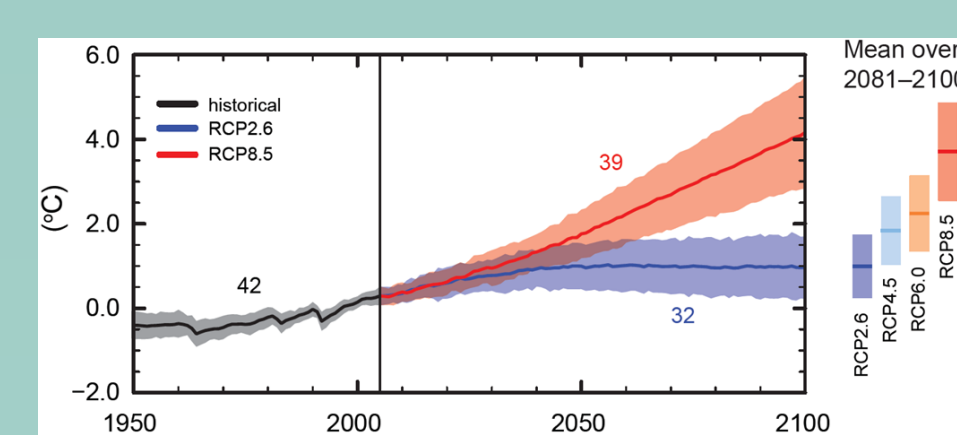
Region	Challenge	Lead	Contact
Africa	Coupled regional modelling of land-atmosphere-ocean interactions over western-southern Africa under climate change	Francis Engelbrecht	Francis.Engelbrecht@wcap.ac.za
Africa	ELVIC - Climate Extremes in the Lake Victoria Basin, Nile van Lipzig	Nicole van Lipzig	Nicole.vanlipzig@wur.nl
South America	Extrema precipitation events in Southeastern South America: a proposal for a better understanding and modeling	Maria Bettolini	bettolini@fzj.com.br
Europe/Mediterranean	Connective phenomena at high resolution over Europe and the Mediterranean	Erika Coppola	coppola@cmcc.it
Europe	Impact of land use changes on climate in Europe across spatial and temporal scales	Diana Reichid	Reichid@dlb.de
Mediterranean	Role of the natural and anthropogenic aerosols in the Mediterranean region: past climate variability and future climate sensitivity	Solomon Habte	Solomon.Habte@dlb.de
Mediterranean	Role of the air-sea coupling and small scale ocean processes on regional climate	Gabriel Jordà	Jorda@maia.csic.es



CORDEX CORE

CORDEX Coordinated Output for Regional Evaluations (CORE) Motivated by IPCC workshop on regional climate Sept 2015 Central framework for CORDEX

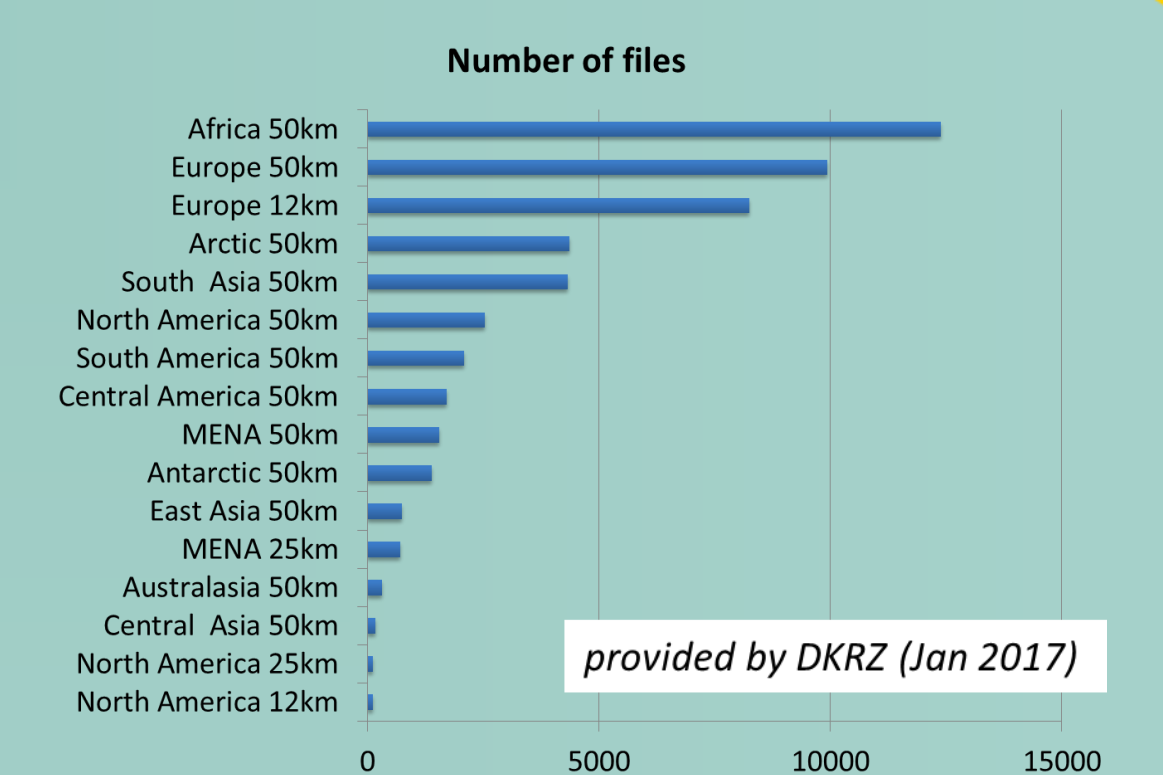
- Standardized set of simulations for most CORDEX domains to serve as a basis for further downscaling
- CMIP5/6 downscaled for RCPs 2.6 and 8.5, CMIP5/6 1970-2100
- Minimum 3 GCMs; high-, low- and midrange
- Some institutions/RCMs run globally, others regionally, ESD contribution
- CORE Atlas based on 25 km resolution



CORDEX Data Access and web

CORDEX simulations can be accessed on:

- ESGF
- Regional Data Portals
- Impact Portals
- Servers at individual Model Groups



New web <http://www.cordex.org>

Contact ipoc@cordex.org



Coming up in October next year:

ICRC-CORDEX 2019 conference in Beijing, China

CORDEX next phase—improve interaction modellers/users (policy, VIA) > analysis of user needs:

- Water managers in Sub-Saharan Africa
- City planners in Manila
- Forest owners in Sweden
- Farmers in India

