Regional Climate Modeling

CORDEX

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Thanks to C. Jones and R. Vautard



The pre-CORDEX ERA

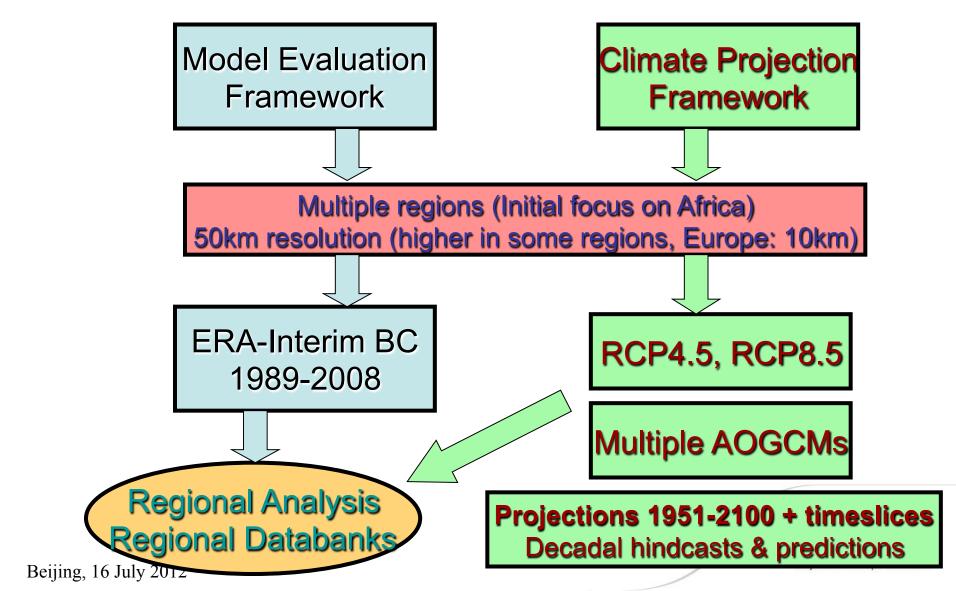
Europe:
PRUDENCE (EC funded)
ENSEMBLES (EC funded)

North America: PILPS NARCCAP

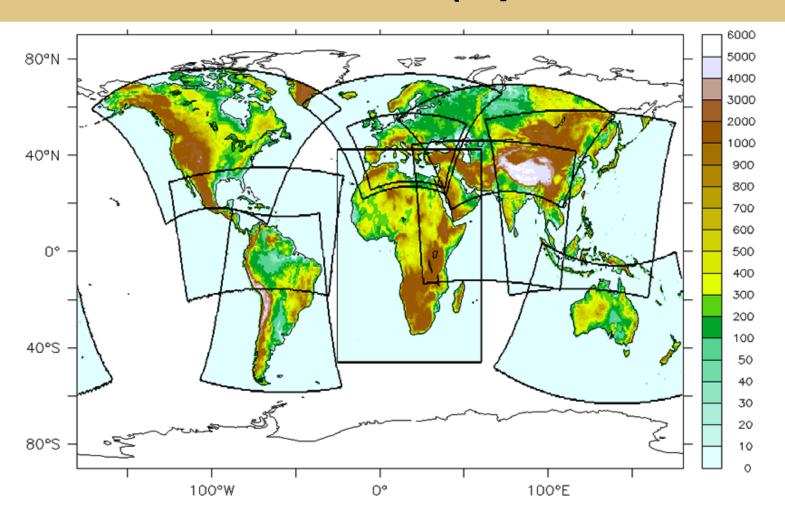
Globe: SGMIP (WGNE endorsed)



CORDEX experimental design



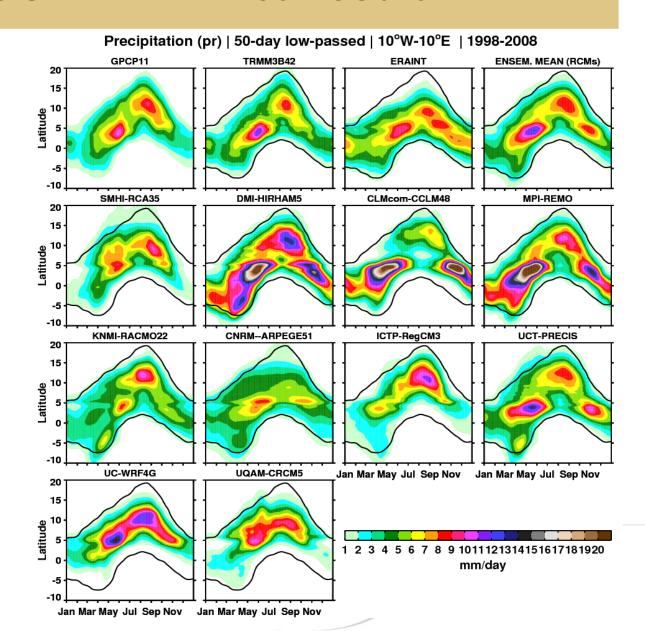
CORDEX domains (+ polar domains)



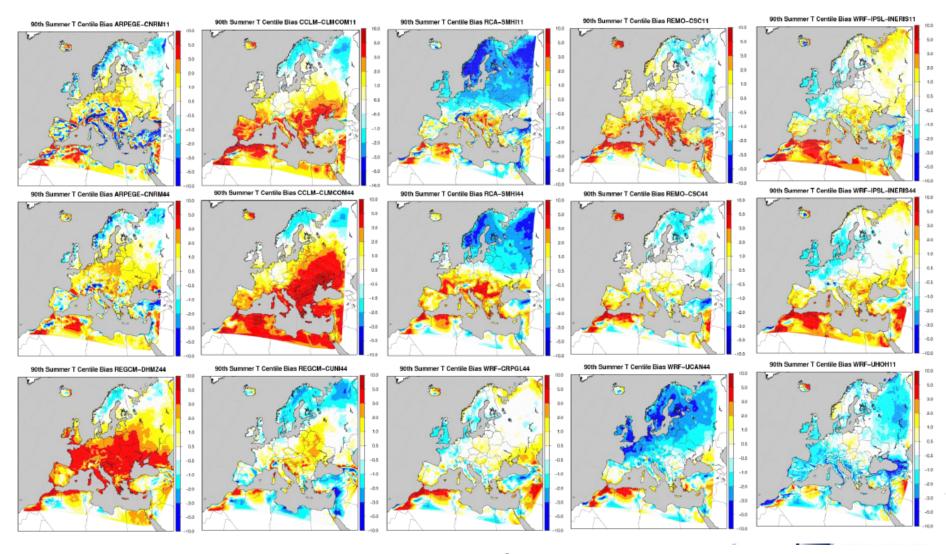
- 12 domains with a resolution of 0.44° (approx. 50x50km²)
- Focus on Africa
- High resolution ~0.11°x0.11° for Europe (by some institutions)

CORDEX Africa result

Western African monsoon: montly mean precipitation 10°W-10°E



CORDEX Europe result



 $_{\text{Beijing, 16 July 2012}}$ Heat waves :JJA 90th percentile of temperature