

No warming in Zurich over the next 30 years?

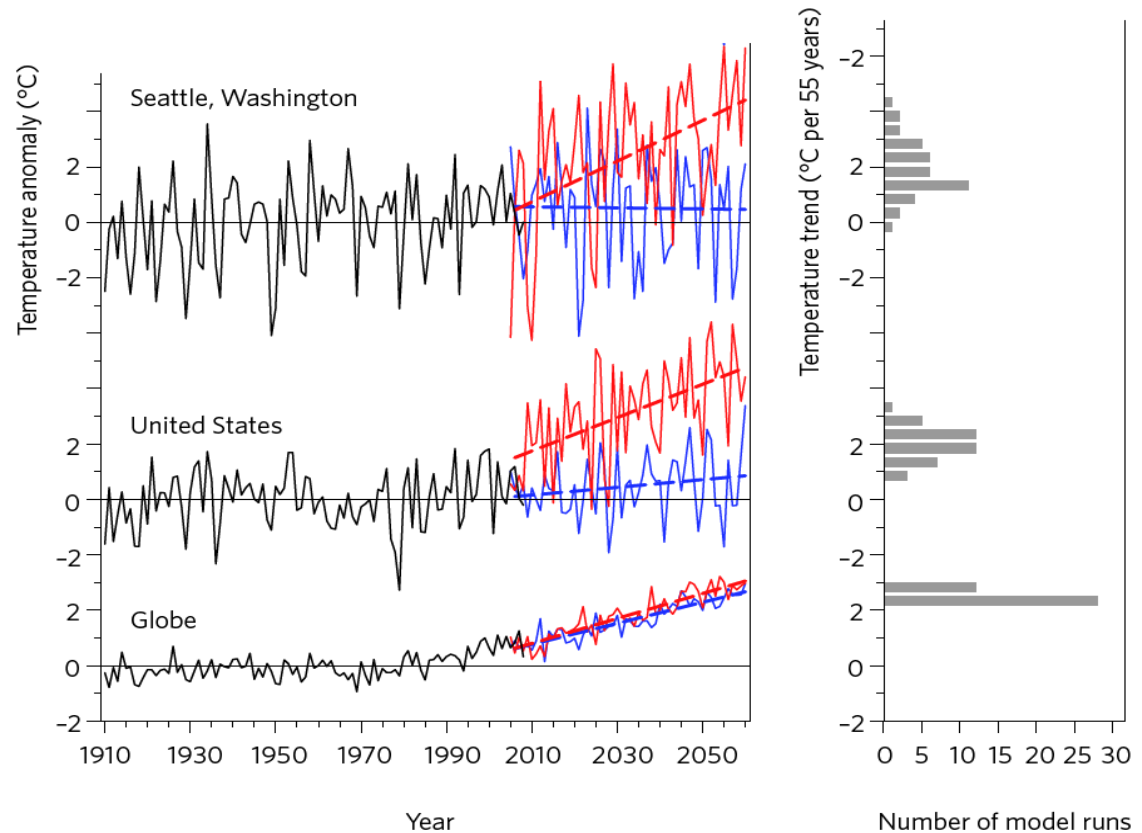
Multi-member climate change simulation with COSMO-CLM

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Motivation

- global warming is evident
- regional ?



40-member ensemble, Deser et al. (2012) Nature Climate Change

Setup

- 11-member ensemble of climate change simulation
- from 1950 - 2100
- small atmospheric perturbation at 1950, after 2006 RCP 8.5
- regional model driven by global model

- GCM: **CESM 1.04**, fully coupled, 2° resolution (200 km)
- RCM: **COSMO_4.8_CLM17**, CORDEX-EU setup, 0.44° (50 km)

- simulations done on ETH cluster Brutus
- COSMO performance using 121 cores: 6 hour / model year
- 11 x 150 years COSMO simulation took us 2 months