THE CHARACTERIZATION OF THE CLIMATE SYSTEM FROM PAST TO THE FUTURE FOR RISK ASSESSMENT AND CLIMATE ACTION

Authors: Maxx Dilley, Amir Delju, Ilaria Gallo

PAST/PRESENT

Climpact

Climpact helps policymakers to generate sector-specific climate information relevant for climate-sensitive sectors from **daily observed historical temperature** and **precipitation data**.

Climpact indices identify also high-impact events, or **climate extremes**, including heatwaves, cold spells, meteorological droughts, and precipitation extremes.

These indices describe the local frequency, duration, and intensity of various climate extremes at **monthly** and **annual resolution**.

PROJECTED FUTURE

Coupled Model Intercomparison Project - CMIP

CMIP projects future **trends, variability**, and **change** of climate indicators. CMIP deploys both Regional and Global Climate Models of atmosphere-ocean general circulation processes.

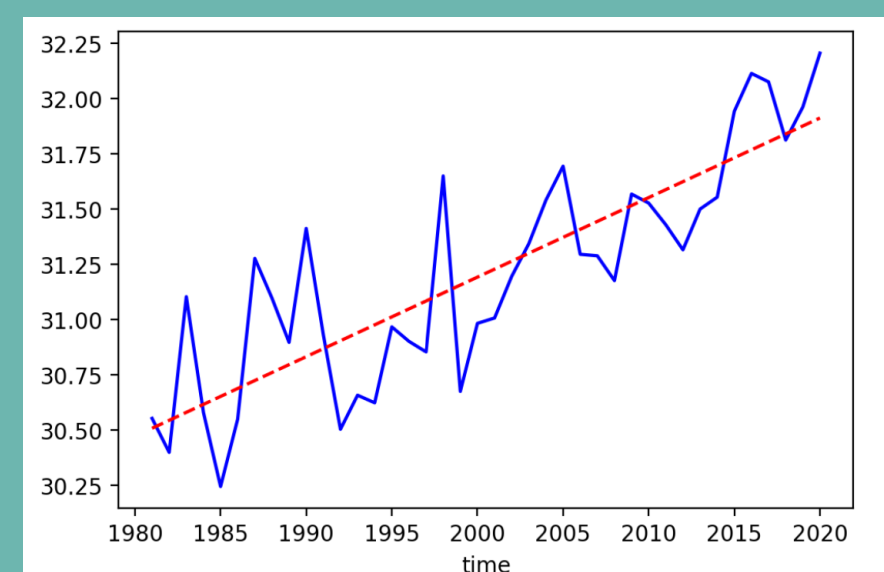## Coordinated Regional Downscaling Experiment - CORDEX

CORDEX produces **regional climate projections** down-scaling global climate models on much smaller scales (200-50 KM).
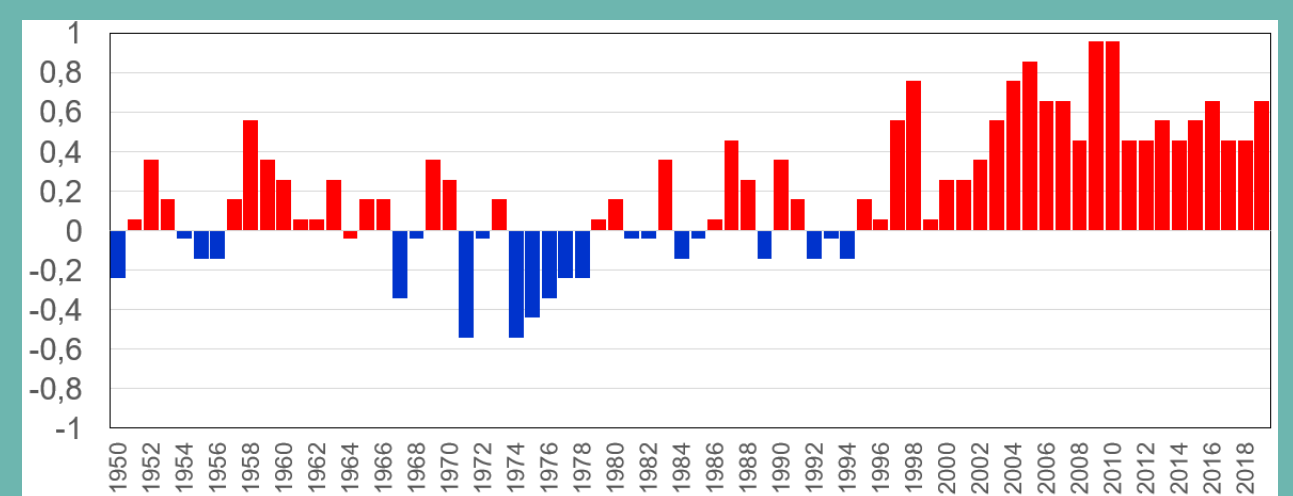
NATIONAL/LOCAL USE

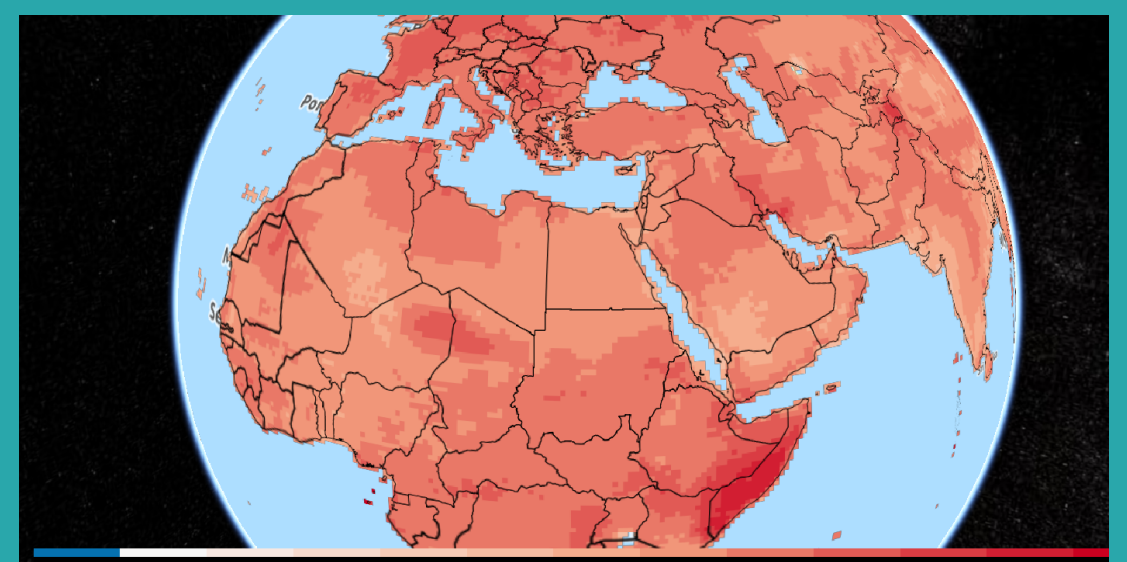### CONTEXT-SPECIFIC INDICATORS

Annual mean daily temperature

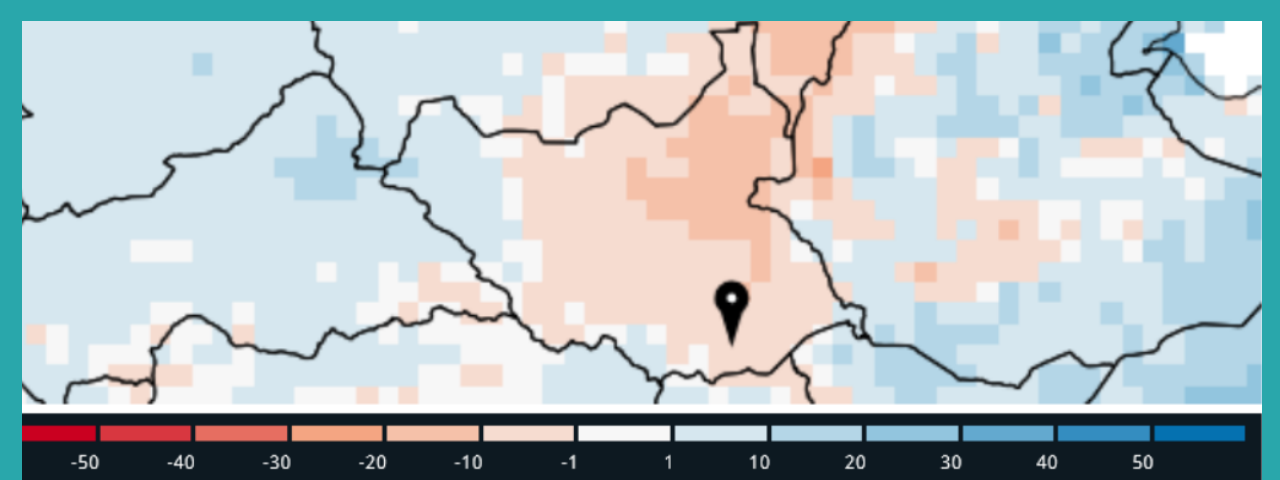### HIGH-IMPACT EVENT INDICATORS

Temperature anomalies

STATE OF THE CLIMATE INDICATORS

Maximum temperature - 2071-2100

Precipitation annual mean - 2041-2070