

Project support



klimazwei topics and participating projects in the adaptation sector:

➤ **agriculture and forestry:**

KliO, Wheat Production, DSS WuK, BatroS, LandCaRe

➤ **water management:**

AnKliG, Water Sensitive Urban Design

➤ **finance:** Mainstreaming of Climate Risks and Opportunities in the financial sector

➤ **building services engineering:**

Simulation-Supported Automation for Sustainable Air Conditioning of Buildings

➤ **regional networks:**

KLARA-Net, Management of Climate Change Effects Metropolitan Region, Klimawerkstatt Chiemgau-Inn-Salzach-Berchtesgadener Land

➤ **extreme events and health:**

SAFE, RegioExAKT, KLIMES

➤ **communication:**

ErKlim, Climate Change Unterweser

➤ **tourism, urban management:**

KUNTIKUM, GIS-KliSchee

SGA is offering its service as well to the ongoing BMBF-funding priority **KLIMZUG**: “**climate change in regions**”.

<http://sga.wdc-climate.de>

sga@dkrz.de

SGA Hamburg (M&D/MPI-M):
Dr. B. Hennemuth
Dr. E. Keup-Thiel
Dr. C. Wunram
SGA Offenbach (DWD):
Dr. H. Mächel



SGA

Service Group Adaptation

supports

research projects

*dealing with
adaptation strategies to*

**regional
climate change**



The Service Group Adaptation (SGA) was initiated within the funding priority „**klimazwei: Research for Climate Protection and Protection from Climate Impacts**“, by the Federal Ministry of Education and Research. SGA is a project of the national climate research group „Model and Data“ at the Max Planck Institute for Meteorology in Hamburg.

SGA promotes interdisciplinary projects having various thematic backgrounds from klimazwei and KLIMZUG. The projects investigate how to deal with local impacts of climate change in different regions and develop possible strategies and techniques how to adapt to imminent regional climate change.

SGA provides climate knowledge and regional climate simulation data and - in cooperation with German Meteorological Service (DWD) - long-term nationwide observation data of different climate parameters.

Data of DWD observation network*

- **temperature, precipitation, wind, etc.**
- **daily, monthly, extreme values**
- **phenological observations**
- **variables of agricultural meteorology**

The data is available as station based time series and/or as gridded data with 1 km grid spacing.

* contact sga@dkrz.de

- **The possible future regional climate has been simulated according to the IPCC-scenarios.**

IPCC: Intergovernmental Panel on Climate Change

- **The scenarios (A1B, B1, A2) are based on assumptions concerning the global development of greenhouse gases:**

A1B:

- world population increasing to the middle of the century
- rapid economic development and use of efficient technologies
- use of fossile and non-fossile energy sources

B1:

- population increases up to the middle of the century
- rapid change in economic structures towards a service and information economy
- implementation of clean and resource-efficient technology

A2:

- population increases continuously
- economic development with regional focus
- slow technological development with regional differences

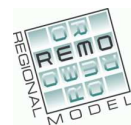


Climate Local Model
Model area:
Europe
Grid spacing:
0.165° ~20 km

CLM simulations*	Model year
Climate of 20th century (3 runs)*	1960 - 2000
Climate of 21st century according to future scenarios A1B and B1 (2 runs each)*	2001 - 2100

CLM: contact sga@dkrz.de

+ The simulation runs have different sets of initial conditions.



Model area:
D, A, CH
Grid spacing:
0.088° ~10 km

REMO simulations	Model year
Climate of 20th century (1 run)	1950 - 2000
Climate of 21st century according to future scenarios A1B, B1, A2 (1 run each)	2001 - 2100

REMO: contact remo-daten@dkrz.de

We advise on how to use climate data and climate knowledge for your specific application.

We supply climate data:

in cooperation with DWD:*

- long time series of meteorological observation data

*in cooperation with M&D**:*

- regional climate simulations: user-friendly and ready for use
- climate indices and extreme values such as:
 - precipitation days, snow days
 - frost days, ice days, summer days, tropical nights, days with strong wind
 - growing season length, heat days, wet days

*in cooperation with M&D** and DKRZ***:*

- diagrams und animations of simulated data

We provide assistance in

- analysing and interpretation of climate simulations and observations
- accessing data base and transferring of data

We offer to

- bring together climate experts and application-oriented users
- moderate discussions.

* *DWD: German Meteorological Service*

** *M&D: Model & Data Group / Max Planck Institute for Meteorology*

*** *DKRZ: German Computing Centre for Climate and Earth System Research*