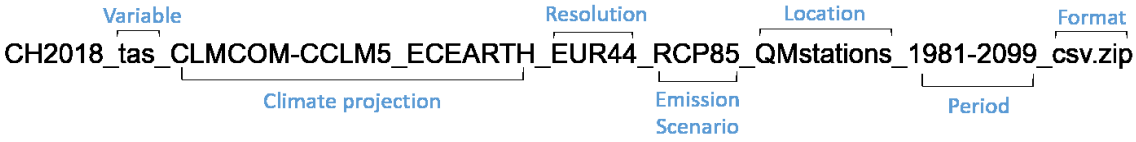
CH2018: Daily projections of climate data under different Swiss climate change scenarios.

Filename



Variable

Table 3 List of meteorological variables covered by the CH2018 datasets DAILY-LOCAL and DAILY-GRIDDED and their respective availability including the number of available stations for the DAILY-LOCAL product.

Variable name	Abbreviation	Unit	DAILY-LOCAL (No. of stations)	DAILY-GRIDDED
Daily mean 2m temperature	***tas***	°C	X (85)	X
Daily maximum 2m temperature	***tasmax***	°C	X (85)	X
Daily minimum 2m temperature	***tasmin***	°C	X (86)	X
Daily precipitation sum	***pr***	mm/day	X (399)	X
Daily mean global radiation	***rsds***	W/m^2	X (59)	-
Daily mean relative humidity	***hurs***	%	X (84)	-
Daily mean near-surface wind speed	***sfcWind***	m/s	X (84)	-

Climate projection

Abbreviated name of climate projection used to generate projections.

Resolution

EURO-CORDEX simulations horizontal resolutions. **EUR44**: 0.44°, ~50 km. **EUR11**: 0.11°, ~12.5 km.

Emission Scenario

RCP85	No mitigation (RCP8.5)	No climate mitigation measures are implemented. Greenhouse gas emissions continually increase. The radiative forcing in 2100 = 8.5 W/m^2 compared to 1850.
RCP45	Limited mitigation (RCP4.5)	Greenhouse gas emissions are somewhat curbed, the content in the atmosphere continues to increase for another 50 years. The 2°C target is not achieved. The radiative forcing in the year 2100 = 4.5 W/m^2 compared to 1850.
RCP26	Concerted mitigation efforts (RCP2.6)	Climate mitigation measures are taken with reductions in emissions being implemented immediately, increase in greenhouse gases in the atmosphere is halted within around 20 years. This allows the targets of the Paris Climate Agreement of 2016 to be reached. The radiative forcing in the year 2100 = 2.6 W/m^2 compared to 1850.

Location

QMStations: indicates that the file contains projections at individual Swiss stations
QMGrid: indicates that the file contains projections on a regular 2km grid covering the area of Switzerland

Format

QMStations data is in zip folders containing one file per station in the formats: netcdf, Rdata or csv. Individual station files follow the following naming convention:
CH2018_[VARIABLE]_[SIMULATION]_QMstations_1981-2099_[STATION].[FILEFORMAT]
QMGrid data files are in the .nc file format

Meta Data

QMStations station meta-information: stations_CH2018_meta.txt
QMGrid reference topography of the 2x2 km grid: topo.swiss02_ch02.lonlat_CH2018.nc

Useful links and documents

Web pages with user-friendly videos and visuals
Swiss Climate Change Scenarios (admin.ch)
CH2018 web atlas (admin.ch)

Technical descriptions of the CH2018 data
https://www.nccs.admin.ch/dam/nccs/en/dokumente/website/klima/uebersicht-ch2018-daten.pdf.download.pdf/CH2018_Produktebeschrieb_final_en.pdf
https://www.nccs.admin.ch/dam/nccs/de/dokumente/website/klima/CH2018_documentation_lo[…]1.2.pdf.download.pdf/CH2018_documentation_localized_v1.2.pdf

Technical description of the Euro Cordex Climate Projections
euro-cordex-guidelines-version1.0-2017.08.pdf