



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

National Centre for Climate Services NCCS

Federal Office of Meteorology and Climatology MeteoSwiss

Federal Office for the Environment FOEN

Federal Office for Agriculture FOAG

Federal Office for Civil Protection FOPC

Federal Office of Public Health FOPH

Federal Food Safety and Veterinary Office FSVO

ETH Zurich

Swiss Federal Institute for Forest, Snow and Landscape Research WSL

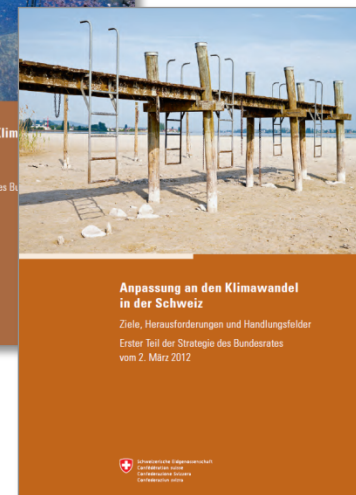
Swiss National Centre for Climate Services NCCS

Bertrand Calpini & Michiko Hama, MeteoSwiss

14 December 2017, ERA-CLIM2 - Climate Reanalyses and Services for Society, Bern



Motivation & Framing





Wide Scope of Climate Services

From Scenarios via Risk Analyses to Options for Action



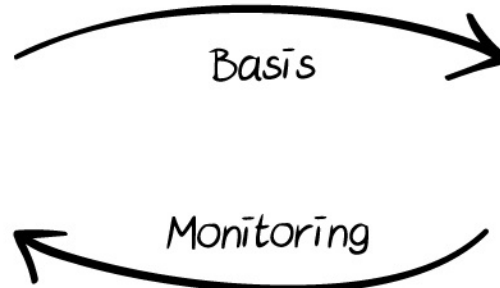


Climate Services for Climate-Informed Decisions

Prerequisite for Setting Tailored Measures



Climate Services

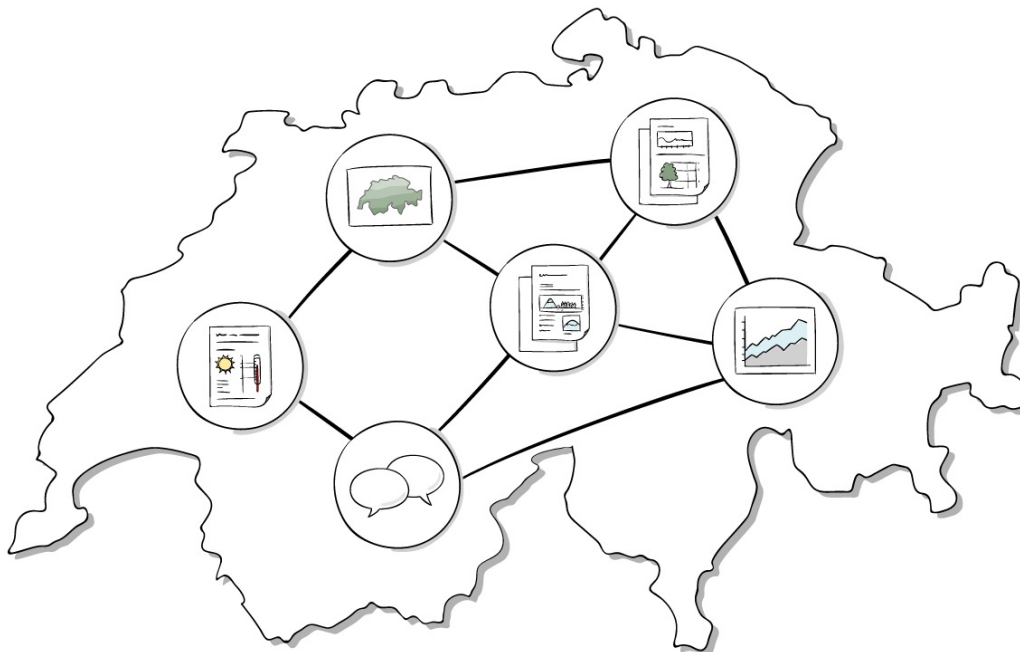


Mitigation and Adaptation



Inception of NCCS – November 2015

The Network for Climate Services of the Swiss Confederation





Members & Partners



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

National Centre for Climate Services NCCS

Federal Office for Meteorology and Climatology (MeteoSwiss)
Federal Office for the Environment (FOEN)
Federal Office for Agriculture (FOAG)
Swiss Federal Office for Civil Protection (FOCP)
Federal Office of Public Health (FOPH)
Federal Food Safety and Veterinary Office (FSVO)

ETH zürich



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Agroscope



Science and Policy
Platform of the Swiss Academy of Sciences
ProClim
Forum for Climate and Global Change



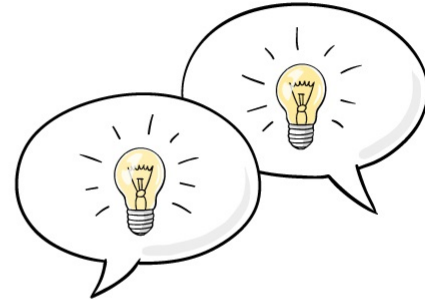
Goals



Bundling



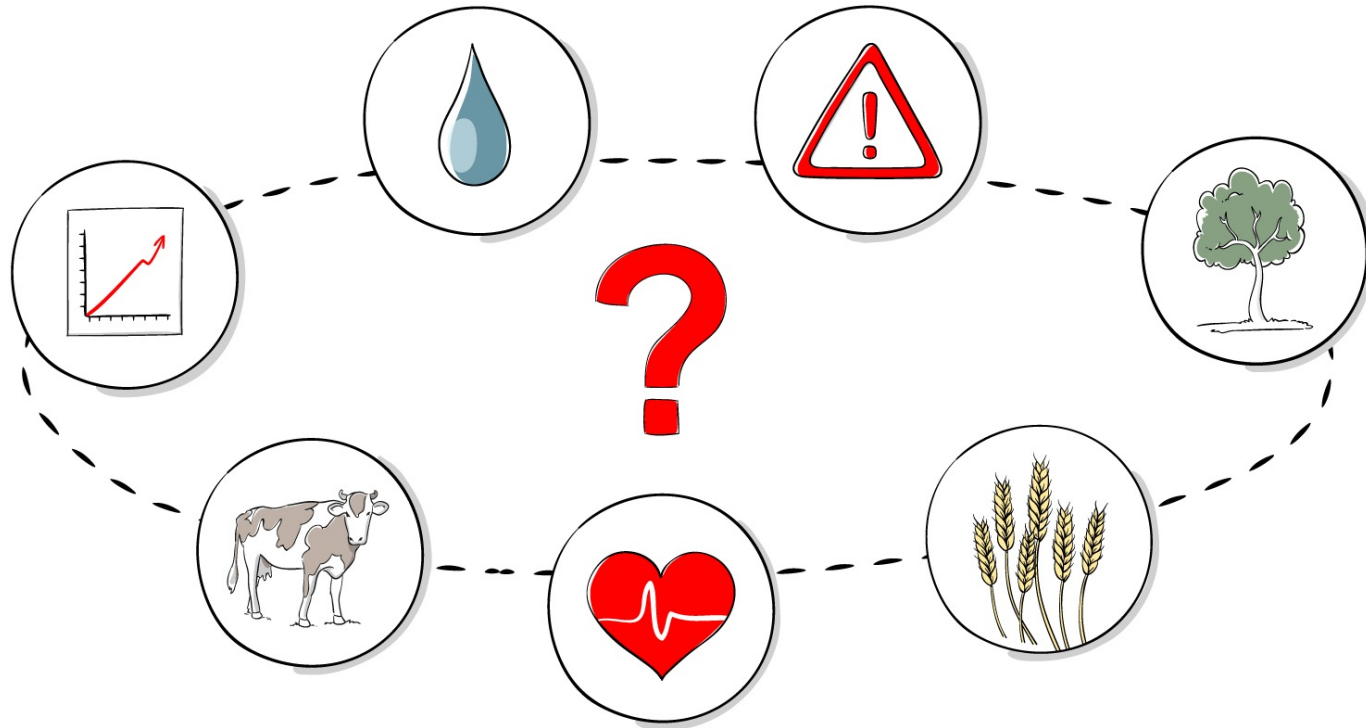
Identifying needs



Fostering dialogue



Thematic Priorities

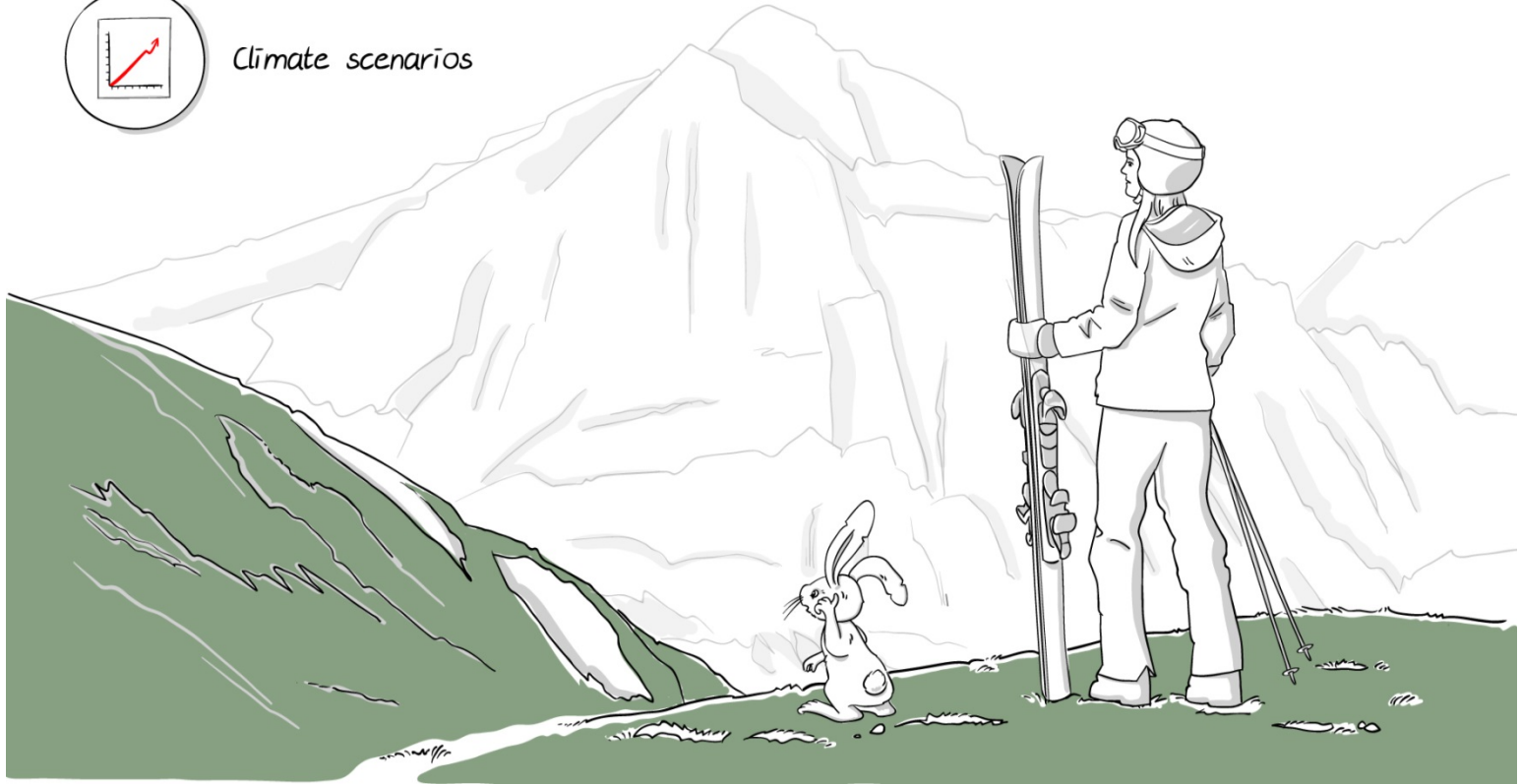




Example CH2018



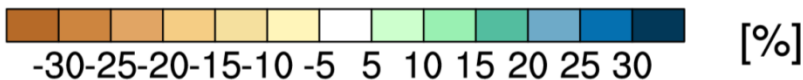
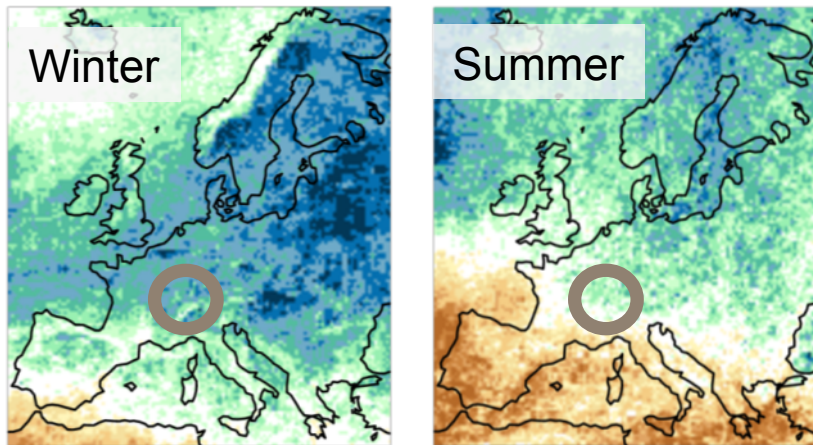
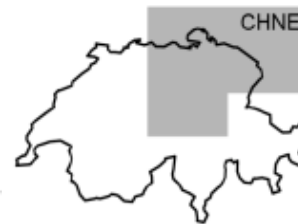
Climate scenarios



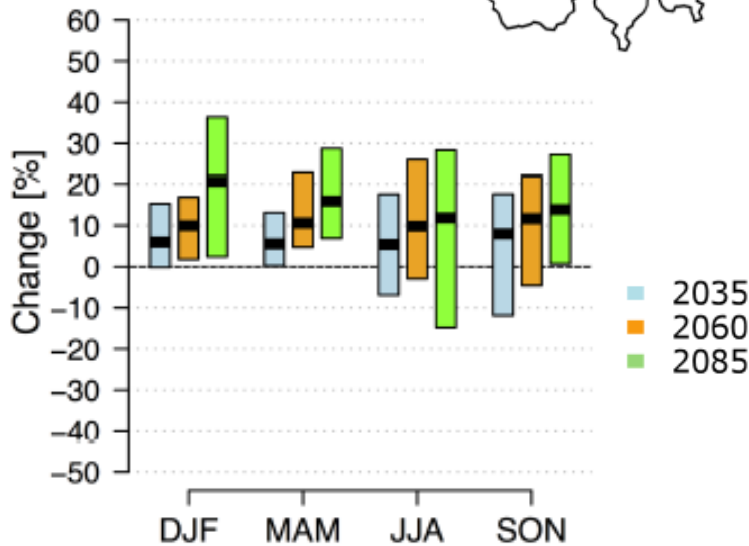


Example CH2018 – Preliminary Results

Changes Extreme Precipitation (RCP8.5)



Multi-Model Median Changes of the Annual Maximum Daily Precipitation Event (rx1d) 2070-2099 wrt. 1981-2010



(J. Rajczak, C. Schär, ETH Zurich)



Further Examples (I): Extreme Value Statistics (1-day precipitation extremes)

Payerne: 490m, 46.81N, 6.94E

Extreme Value Analysis

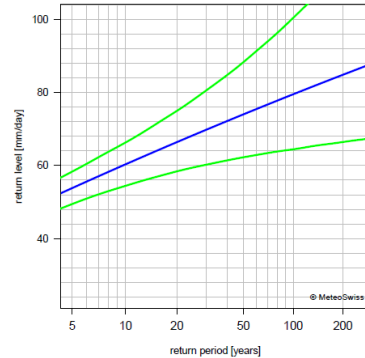
1-day precipitation, 5:40-5:40 UTC

1965 - 2015 (number of missing years: 0)

Block Maxima (GEV). Reliability of results: good.

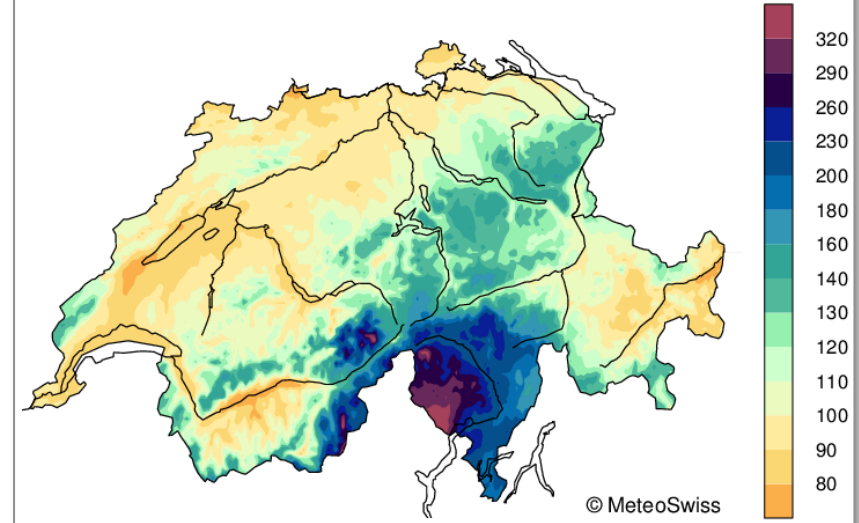
Plot of return levels and their uncertainty (ordinate) for a given return period (abscissa).

The best estimate of the return levels is colored blue. The return level 95% confidence intervals are given in green.



station

50-year return level (mm), year

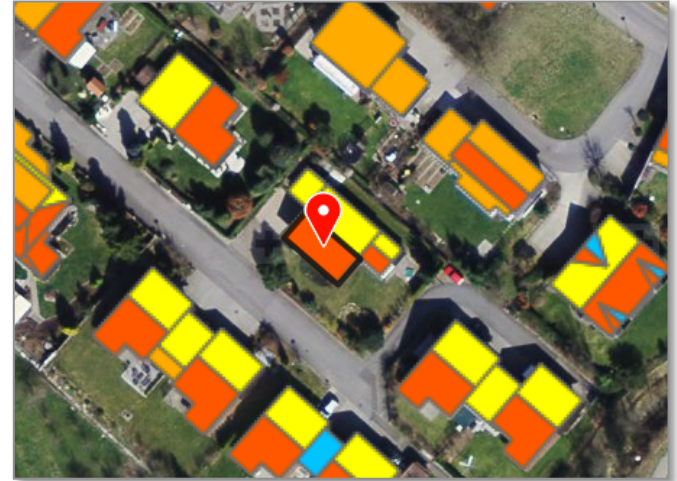
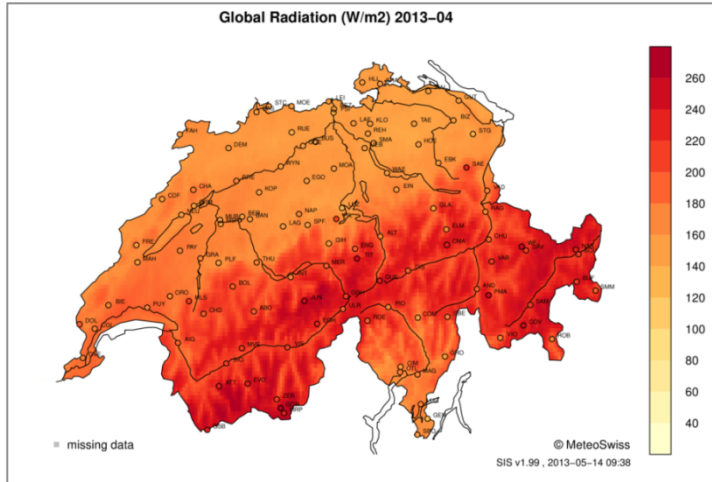


spatial



Further Examples (II): Energy Meteorology

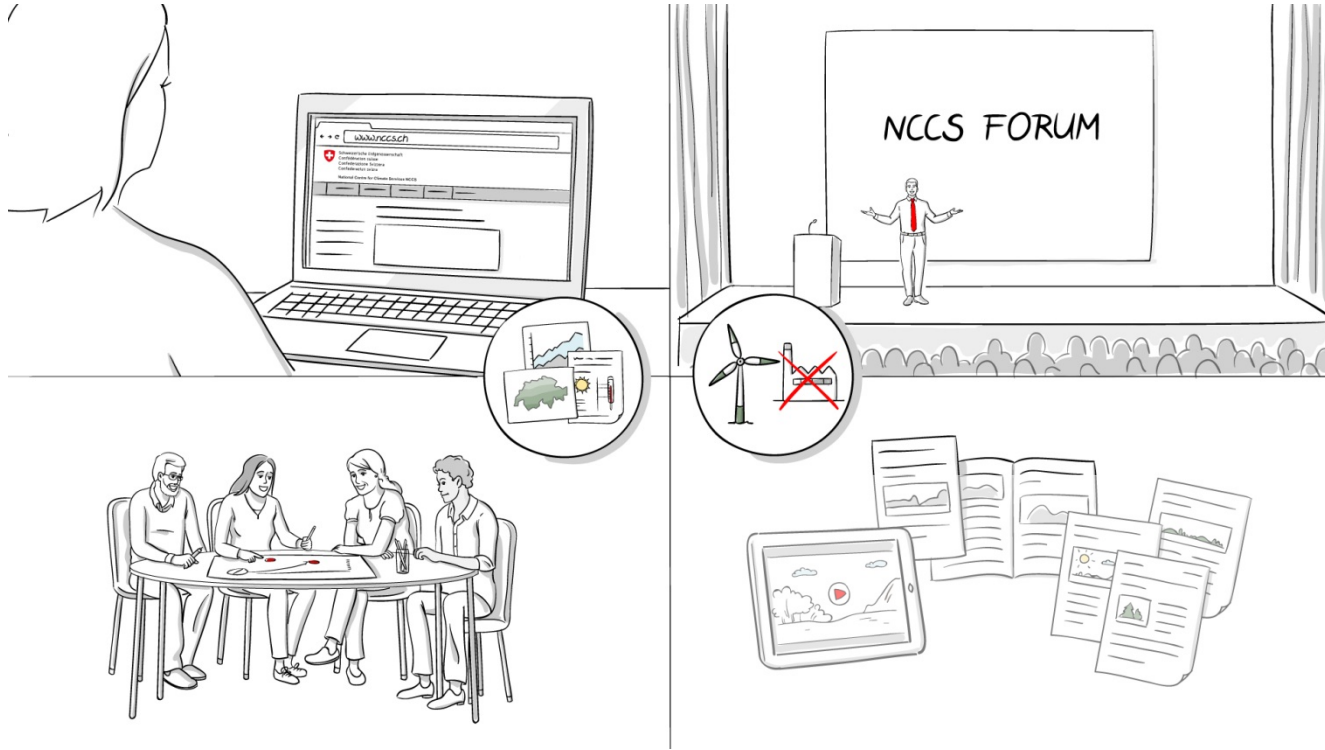
www.sonnendach.ch



- Direct application from CM SAF research, period 2007-2012
- Combination of satellite and station data (MeteoSwiss) with building data (swisstopo)
- Project lead: Swiss Federal Office of Energy SFOE, implementation: Meteotest



Network Agent & Knowledge Broker





First Accomplishments

- Garnering the interest of numerous partners in founding the national framework
- Priority themes populated with projects
- Finalized multi-tiered network and communications strategy
- First NCCS Forum held on 5 December 2017
- National and international visibility via presentations at various conferences (e.g. EGU, EMS)
- Co-organization of K3 Conference on Climate Communication, Salzburg
- NCCS web portal in conceptual phase





Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

National Centre for Climate Services NCCS

Federal Office of Meteorology and Climatology MeteoSwiss

Federal Office for the Environment FOEN

Federal Office for Agriculture FOAG

Federal Office for Civil Protection FOPC

Federal Office of Public Health FOPH

Federal Food Safety and Veterinary Office FSVO

ETH Zurich

Swiss Federal Institute for Forest, Snow and Landscape Research WSL

Thank you.