



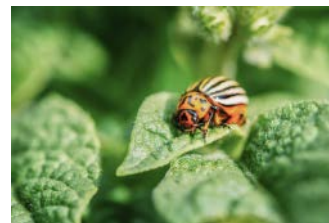
Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Bundesamt für Meteorologie und Klimatologie MeteoSchweiz
Bundesamt für Umwelt BAFU
Bundesamt für Landwirtschaft BLW
Bundesamt für Bevölkerungsschutz BABS
ETH Zürich
Eidgenössische Forschungsanstalt für Wald, Schnee und Landschaft WSL

National Center for Climate Services in Switzerland

The network for climate services of the Swiss Federation

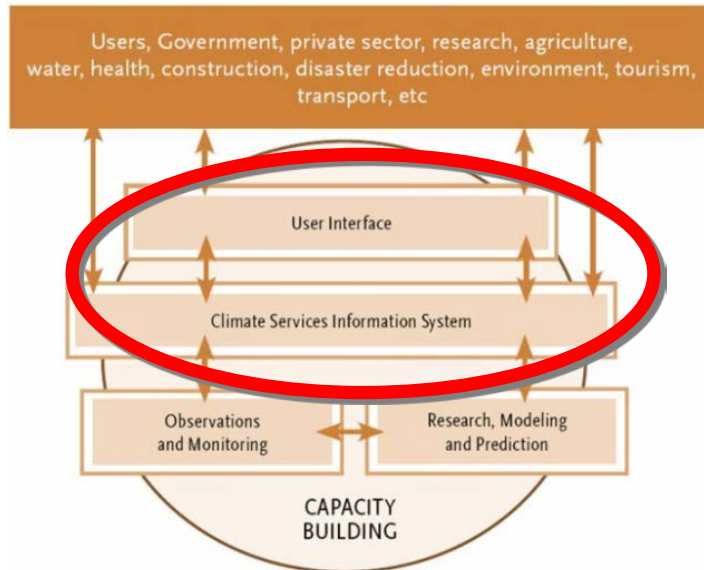
Jacqueline Flückiger Knutti, Cornelia Schwierz, Andreas Fischer,
Mischa Croci-Maspoli, Erika Kienast and **Christof Appenzeller**
Climate Division, MeteoSwiss





Two key elements

Global Framework for Climate Services (GFCS)

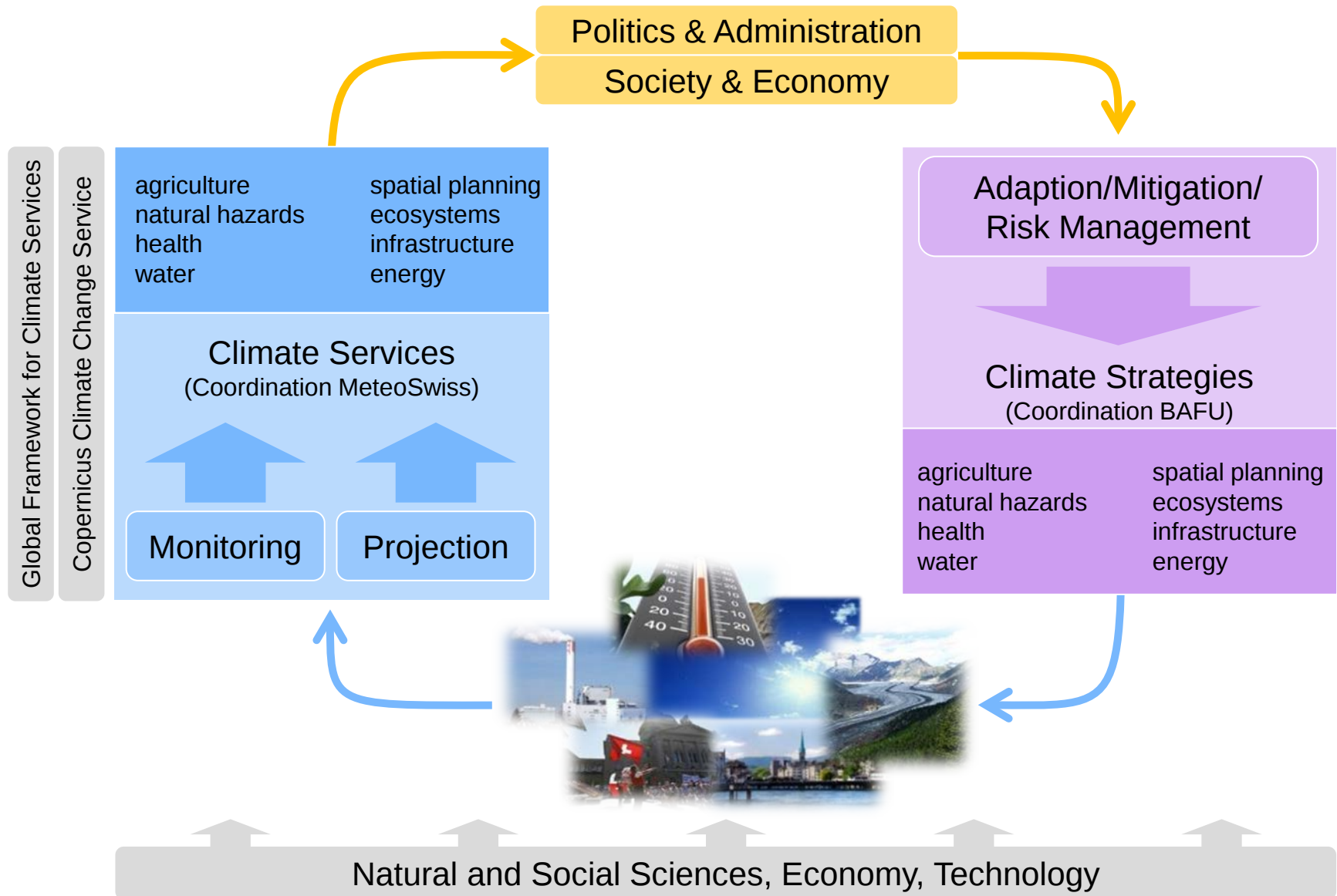


Swiss Plan of Action – Adaptation to Climate Change





Climate-informed decisions



National Centre for Climate Services should ...

... **coordinates** and **strengthens** the
member activities in respect to
climate services

executive office

... **fosters** and maintains the **dialog**
and information exchange between
climate service producers and
providers in Switzerland

events, symposia

... establishes a national **platform** for
climate services

NCCS Webportal



National Centre for Climate Services Launch 16. November 2015



4 Federal Offices

Federal Office for Meteorology and Climatology MeteoSwiss
Federal Office for the Environment FOEN
Federal Office for Civil Protection FOCP
Federal Office for Agriculture FOAG

2 National research institutes

ETH Zurich
Institute for Forest, Snow and Landscape Research WSL

and more to come..

National Centre for Climate Services (NCCS)

Das Netzwerk für Klimadienleistungen des Bundes
Medienkonferenz, Bern, 16. November 2015



Konrad Saffert

Detlef Günther

Bruno Oberle
Direktor BAFU

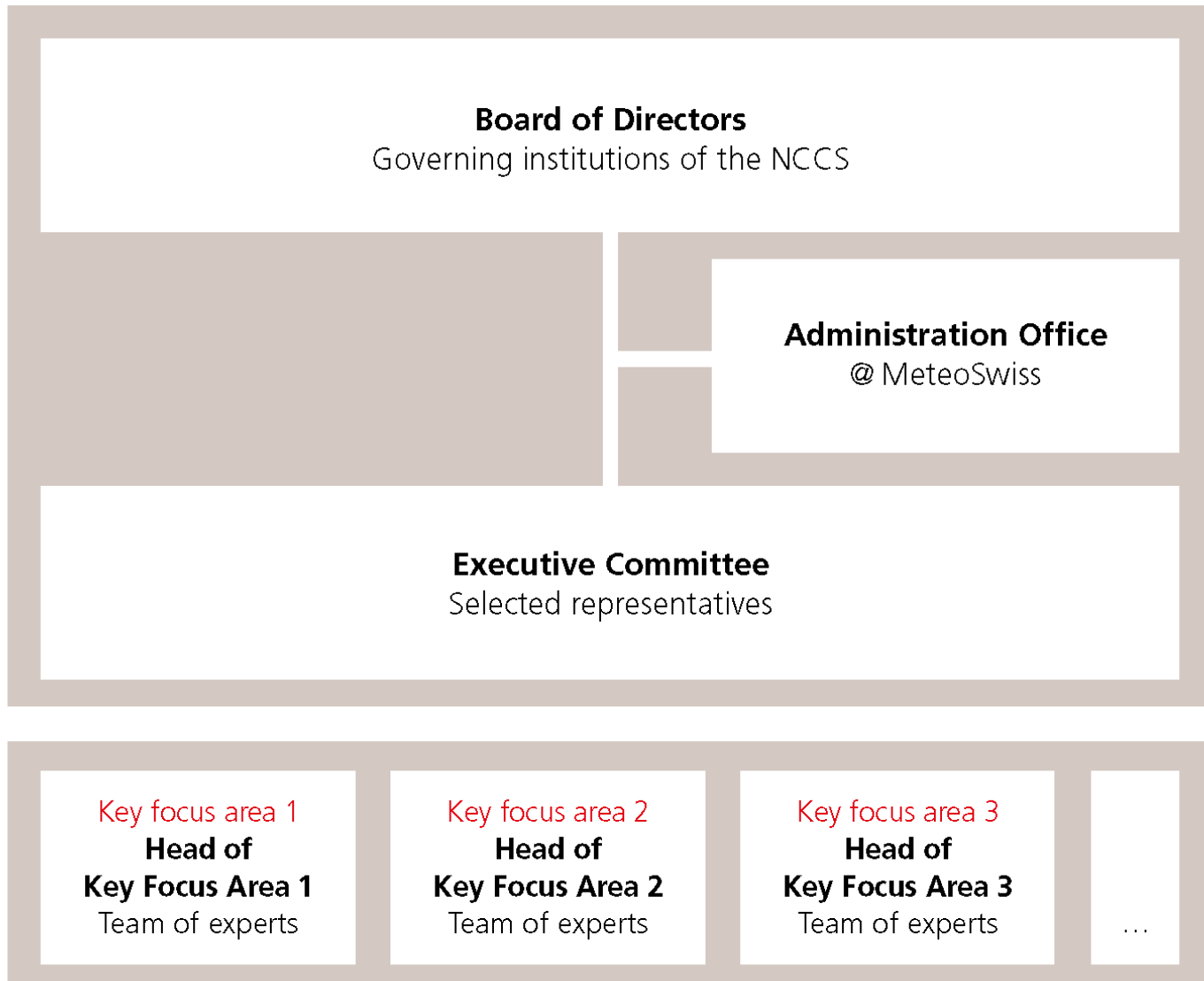
Peter Binder
Direktor MeteoSchweiz

Bernard Lehmann
Direktor BLW

Benno Bühlmann
Direktor BABS



Organisation of NCCS





Currently 5 focus areas NCCS

(financed mostly by in kind contributions)

Climate Scenarios



Water Cycle



Forest functions



Agriculture
(pest management)



Natural hazards





Focus area: natural hazards

Natural Hazards

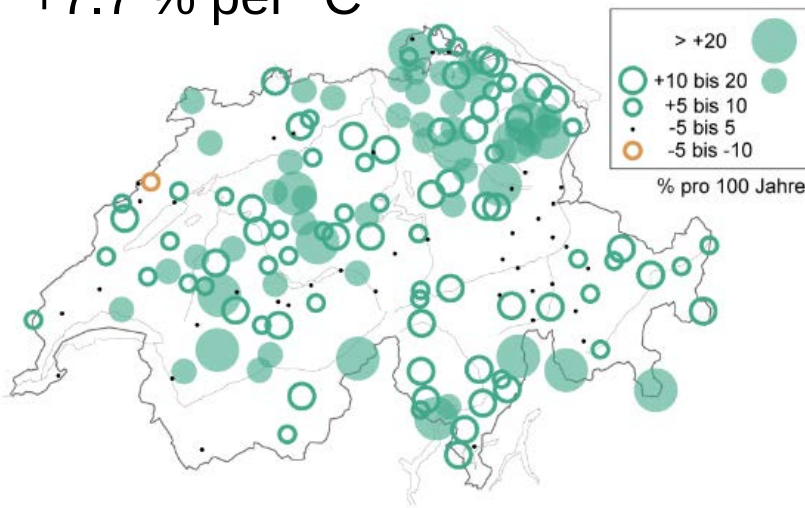
- Will heavy precipitation increase and lead to more severe floodings?
- What is the impact on the local scale (communal level) ?



Focus area: natural hazards

Heavy precipitation
climate monitoring

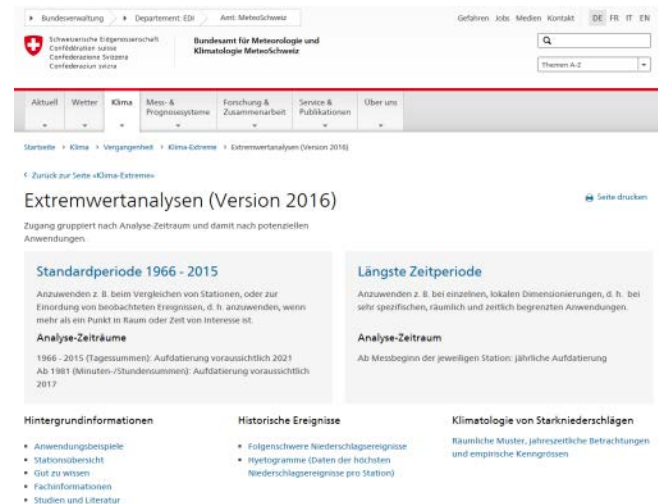
+7.7 % per °C



<http://www.meteoschweiz.admin.ch/home/aktuell/meteoschweiz-blog.subpage.html/de/data/blogs/2016/6/nehmen-starkniederschlaege-zu.html>

Scherrer et al. (2016)

New user platform on
extreme precipitation



<http://www.klima-extreme.ch/>

Friday 12:30–12:45: EMS2016-551
Emerging trends in heavy precipitation and hot
temperature extremes in Switzerland
Simon C. Scherrer et al.

15:00–15:15, [EMS2016-588](#) (this session)
*Quantitative Information on Extreme Precipitation
– a new Climate Service for Switzerland*
Cornelia Schwierz et al.



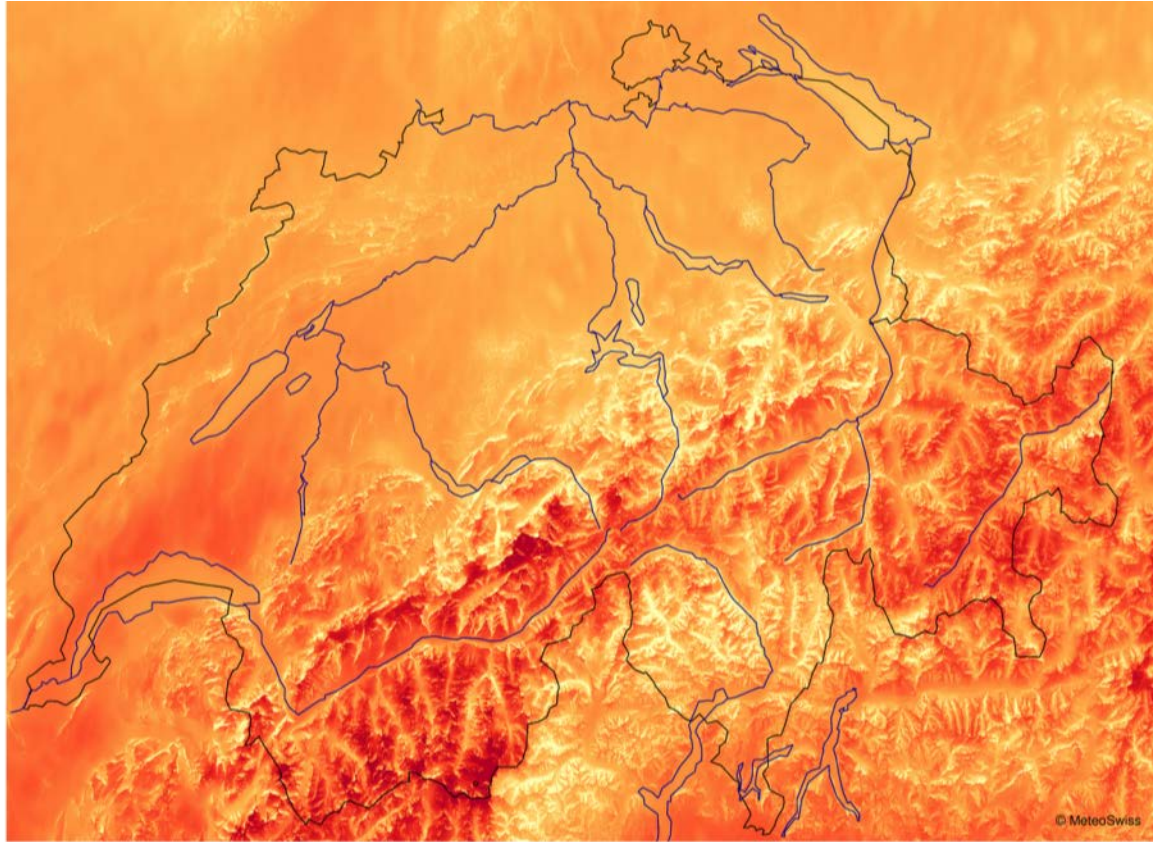
Example Renewable Energy

Energy

- Is my roof suited for solar collectors?



Global radiation in Alpine region



1000 1100 1200 1300 1400 1500 1600



Global radiation for solar energy
applications (yearly mean, kWh/m²)

CM-SAF
Reto Stöckli et al.



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Bundesamt für Energie BFE
Bundesamt für Meteorologie und Klimatologie MeteoSchweiz
Bundesamt für Landestopografie swisstopo



Wie viel **Strom** oder **Wärme** kann mein **Dach** produzieren?

Suchen Sie Ihre Adresse...

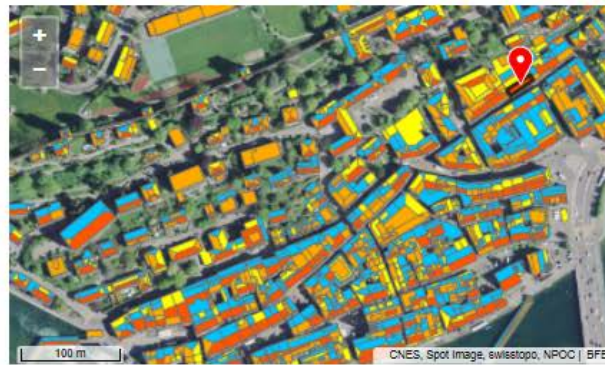
...ODER LOKALISIEREN SIE SICH ↗

Hertensteinstrasse 44
6004 Luzern

Eignung: Sehr gut

Entweder Solarstrom im Wert von 3'600 Franken...

...oder Solarwärme für 9 % weniger Heizkosten.





Example: Heat and Health

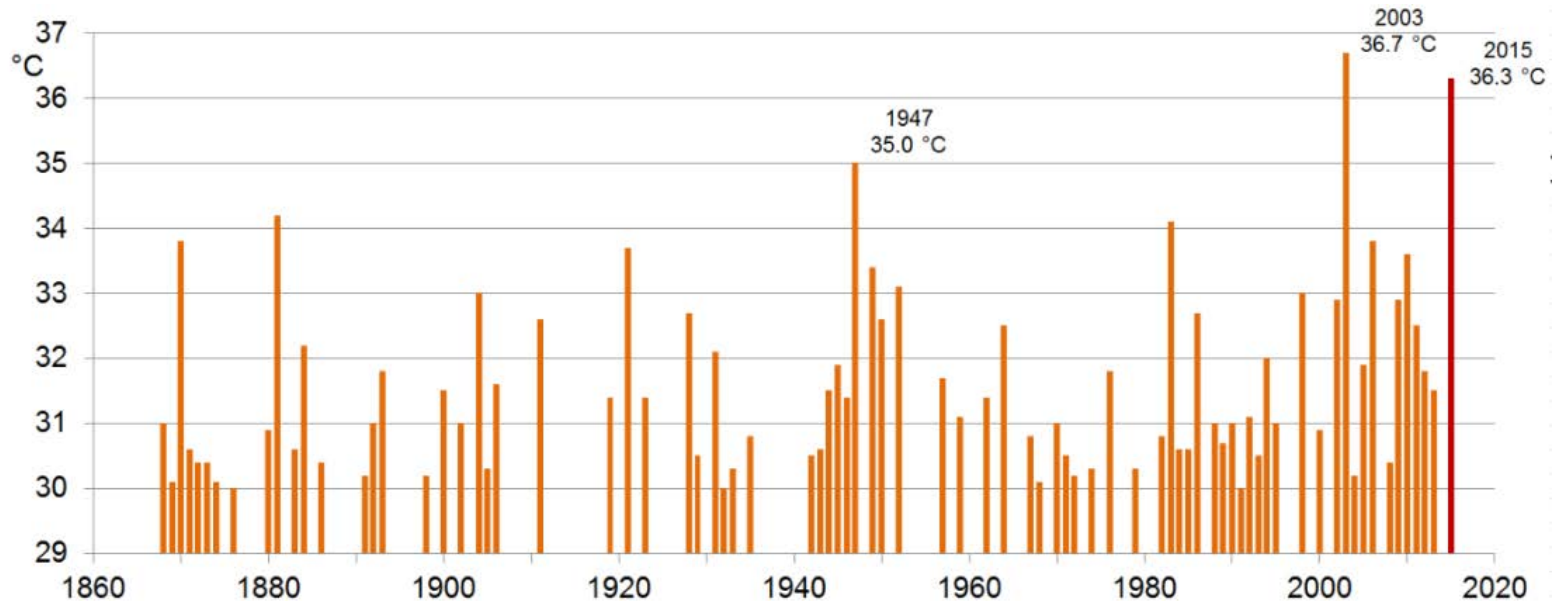
Health

- Will heat waves increase?
- Which effect on society will this cause?



“Heat” Summer 2015

7 day heat wave in Geneva



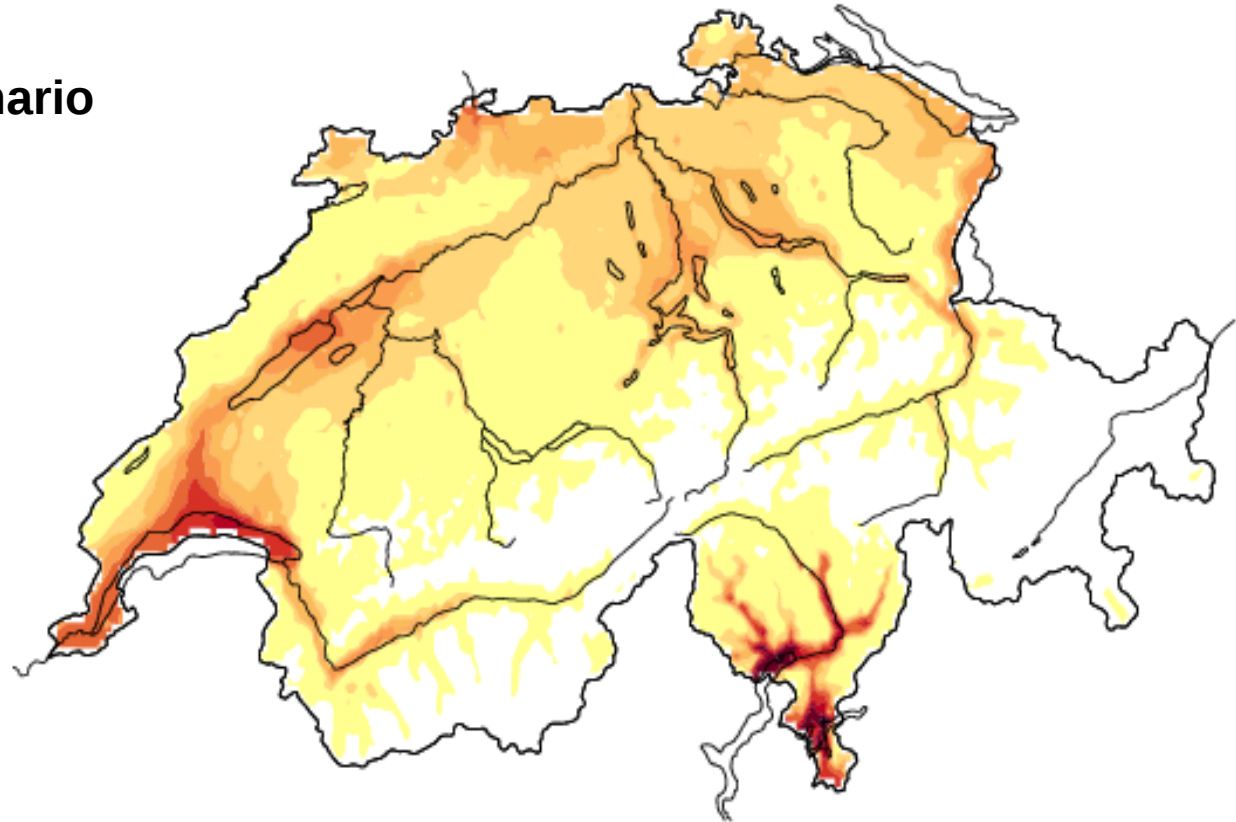
Temperature record: Highest temperature ever measured north of Alps
(7. July 2015 → 39.7°C)



Tropical nights

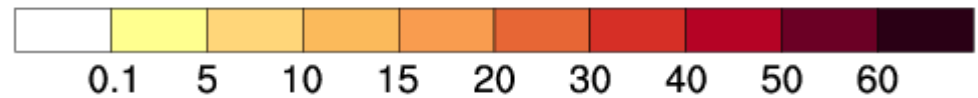
($T_{\min} \geq 20^{\circ}\text{C}$)

A1B-Szenario
~ 2085



See Zubler et al. 2014

Mean number tropical
nights per year





Focus area: Climate Change Scenarios for Switzerland CH2018

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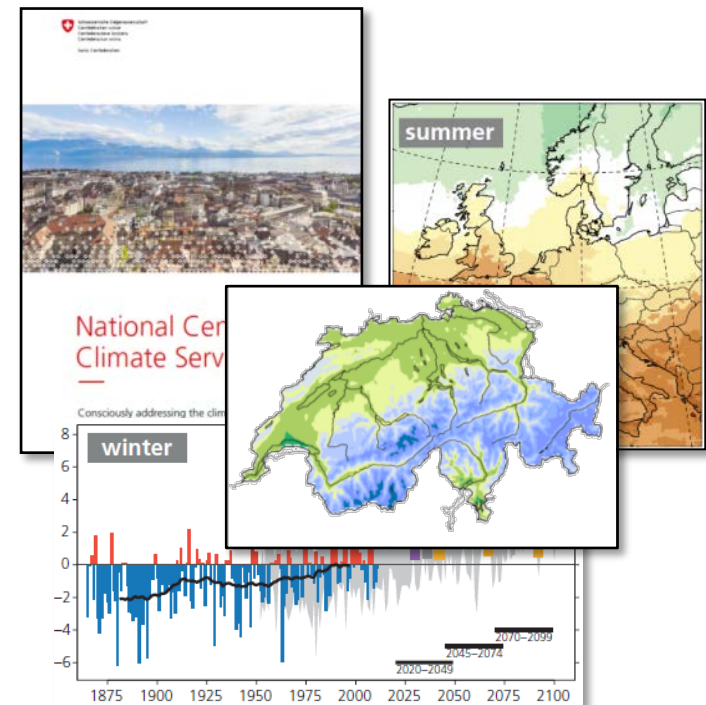
Swiss Confederation

Federal Department of Home Affairs FDHA
Federal Office of Meteorology and Climatology
MeteoSwiss

ETH zürich



- Regular provision of climate change scenarios for Switzerland.
- → Scenarios CH2018





Change of Paradigm

Scenario CH2011

research-driven

→ intensive user

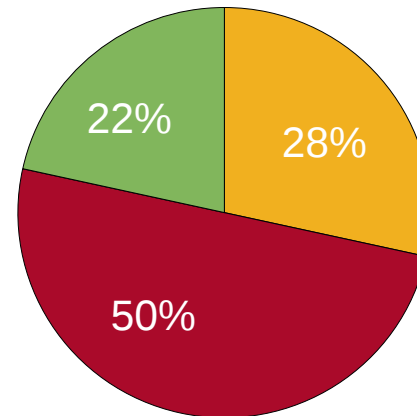
Senario CH2018

dialogue with stakeholders

→ advanced user

14:45–15:00 [EMS2016-298](#) (today this session)
*Assesment of user needs for climate change
scenarios in Switzerland*
Andreas Fischer et al.

Tomorrow, 10:00-10:15, UC2, [EMS2016-301](#)
*Towards the new CH2018 climate scenarios in
Switzerland*
Andreas Fischer et al.



- Intensive User
- Advanced User
- Intermediary

Stakeholder Survey





Know-How Transfer Climate Services Twinning

MeteoSwiss supports Peru in establishing Climate Services

→ Mutual benefits for both partners

CLIMANDES
*Servicios climáticos con énfasis en los
Andes en apoyo a las decisiones*

17:45-18:00, [EMS2016-301](#) (today, this session)
*Creating socio-economic benefit through climate
services in the Andes – tailored seasonal
forecasts for agriculture*
Stefanie Gubler, Christoph Spirig et al.



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Swiss Agency for Development and Cooperation SDC



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