



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
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Swiss Confederation

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

from weather to climate services

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Hochwasser der Lonza bei Gampel



Weather and Climate Services

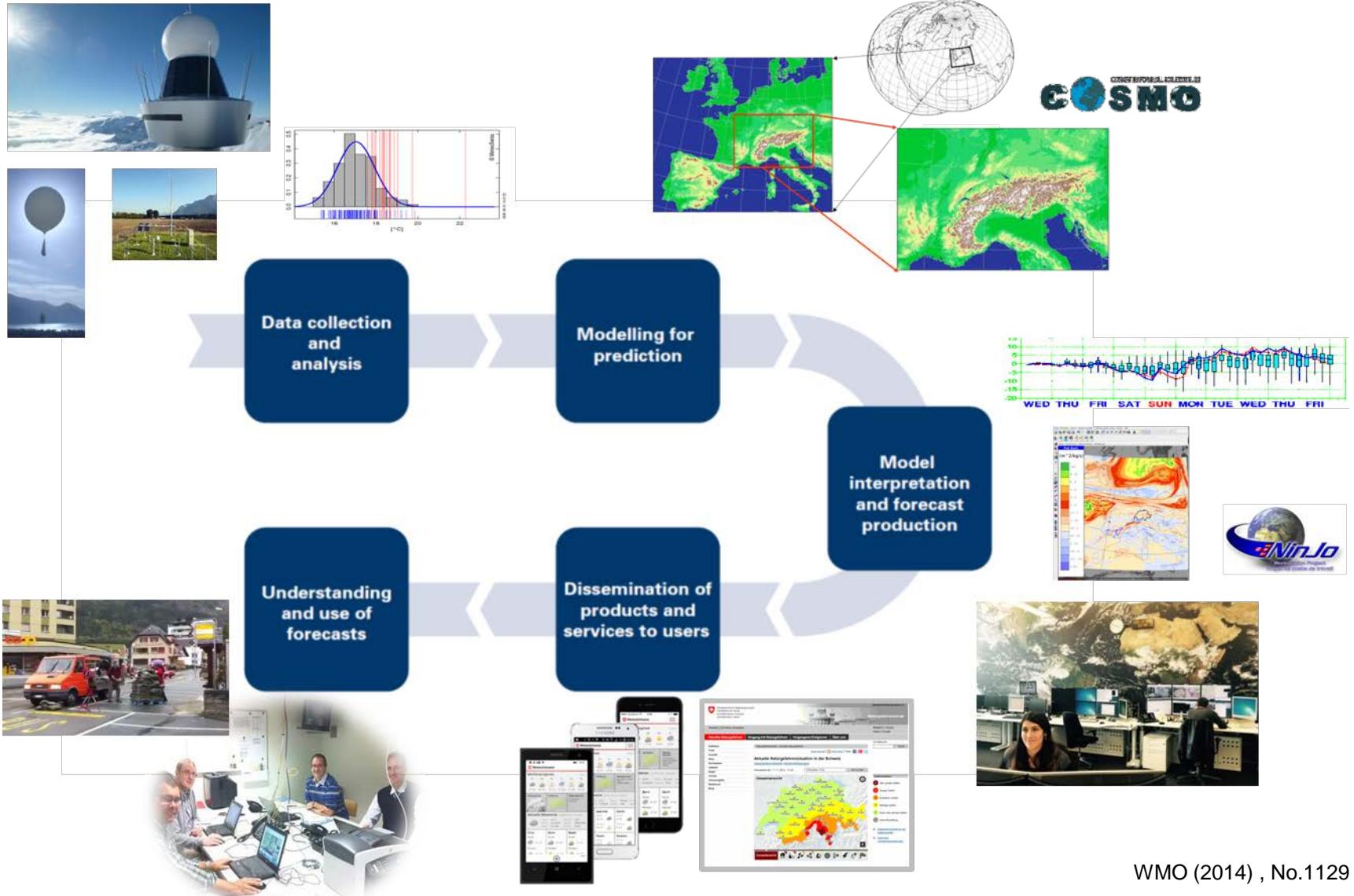
Weather Services

- Warnings
- Forecasts



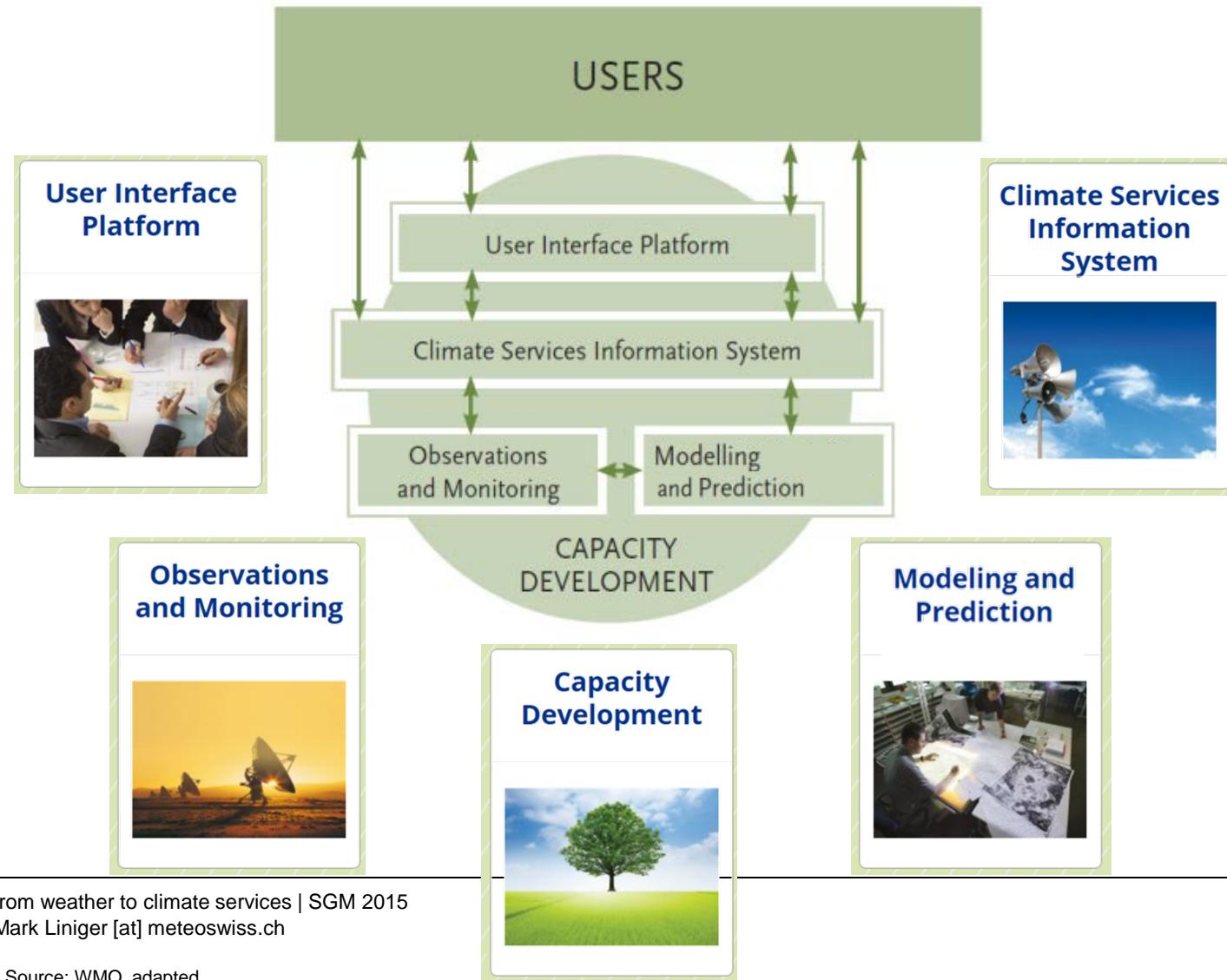
Climate Services

- Past climate
- Analysis of event
- Future





Climate Services





Extreme precipitation in Switzerland

Motivation

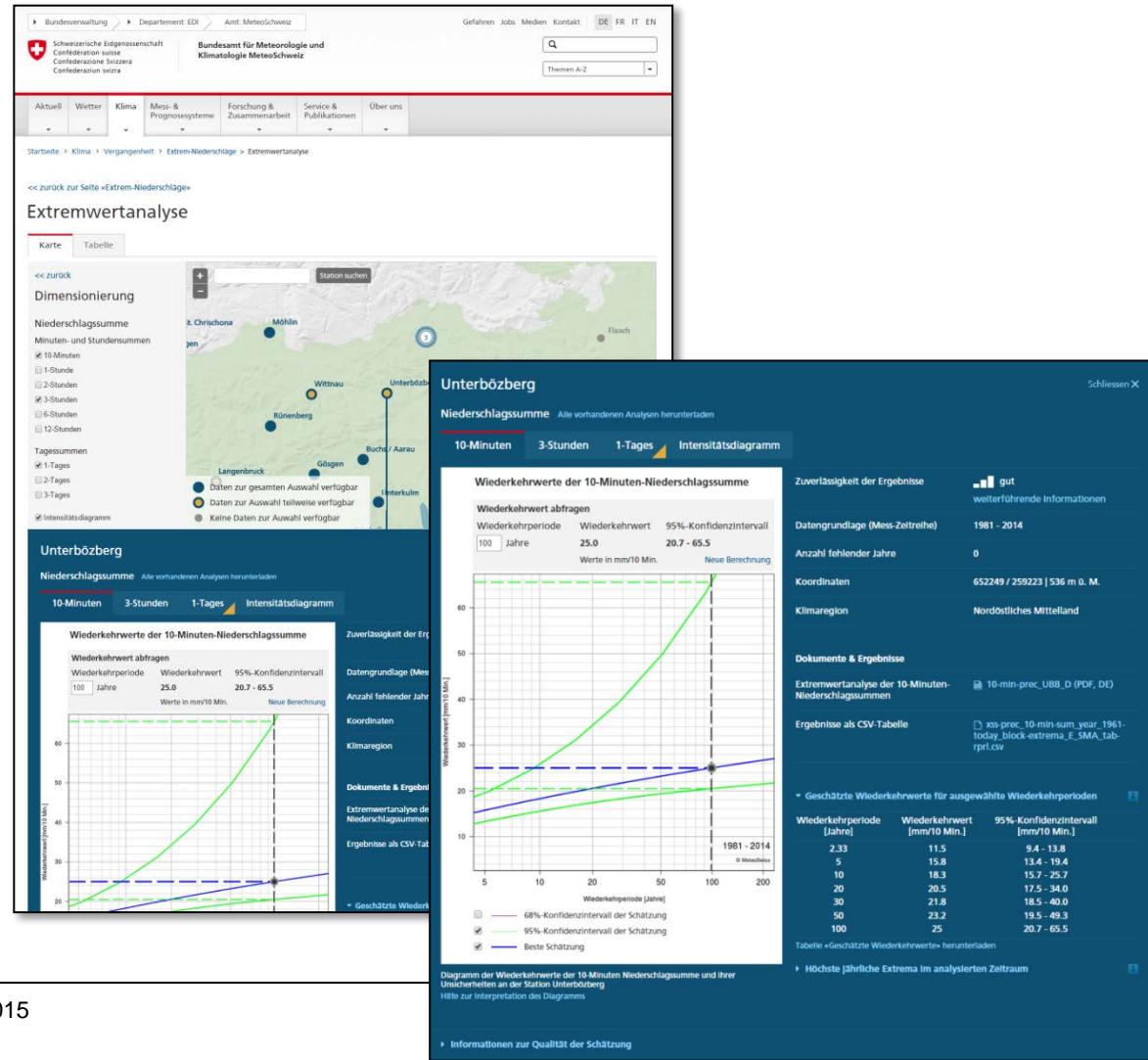
- Updating earlier reports (Geiger, Zeller & Röthlisberger, 1991)
- Data basis for Gefahrenkarten (BAFU)
- Warnings

Method

- User survey
- Data quality
- Operational implementation of state-of-the-art and robust statistical methods

Dissemination

- Webportal on www.meteoswiss.admin.ch to be launched at end of 2015
- Technical report (Fukutome & Schindler, 2015)

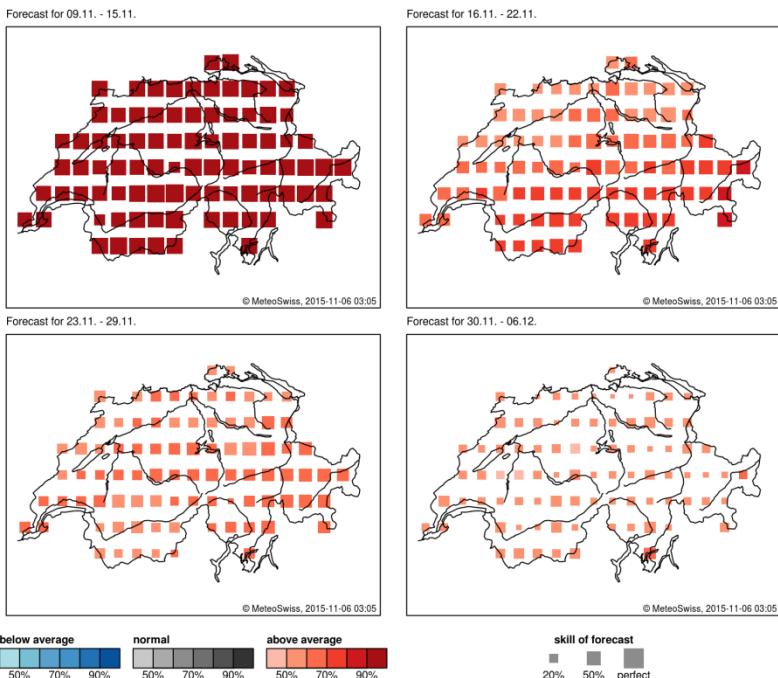




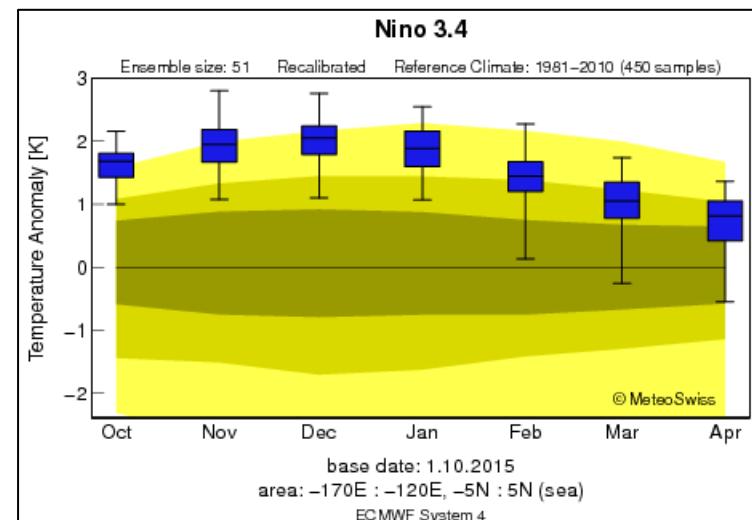
Climate tomorrow

What can be expected next month, next season, next year?

Monthly forecasts for Temperature

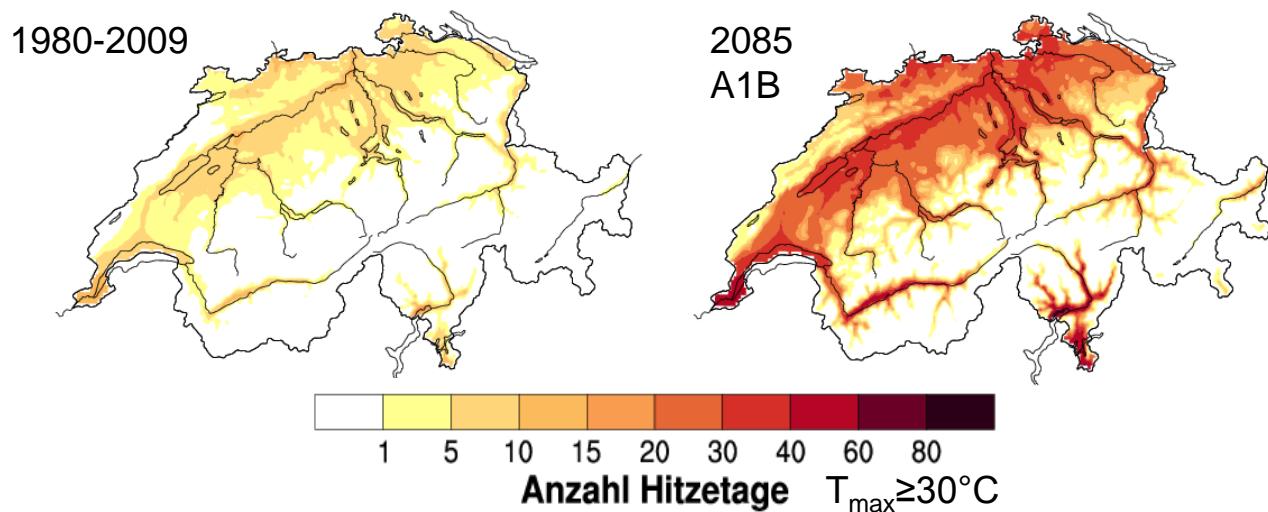
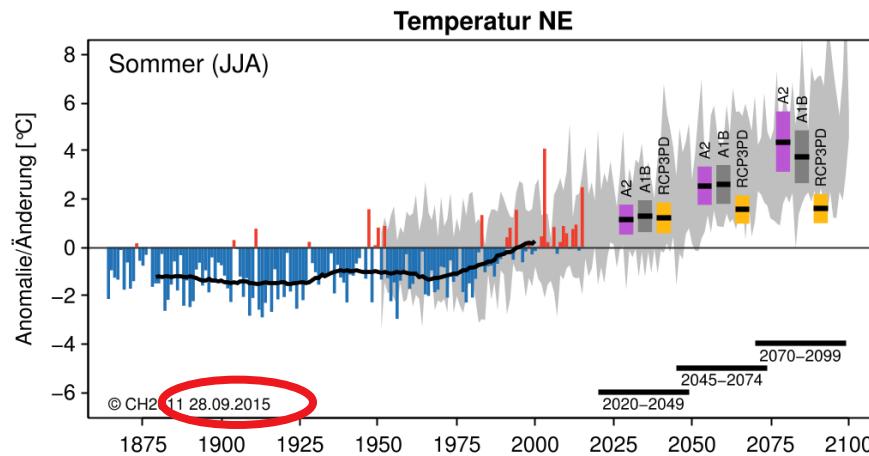


Seasonal forecasts for El Niño



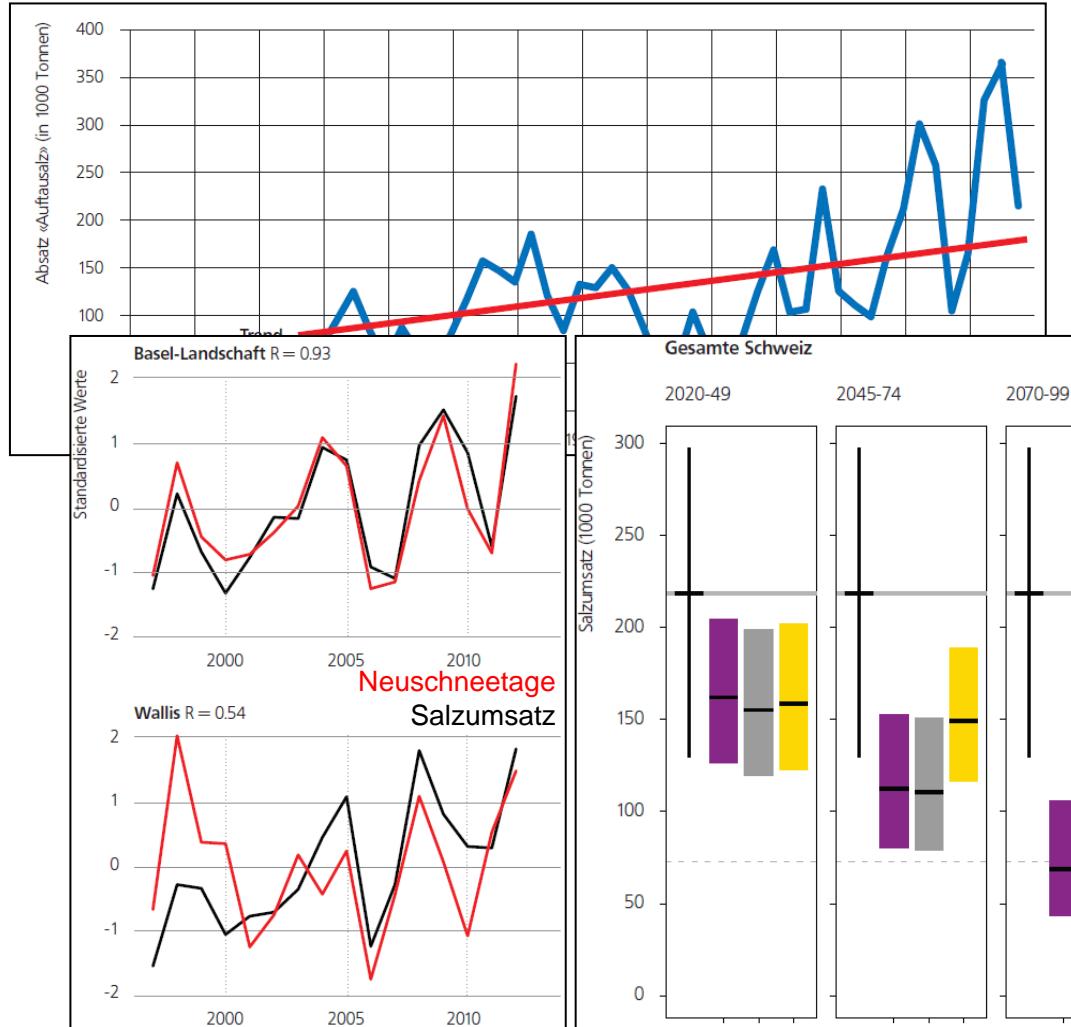


Climate change scenarios

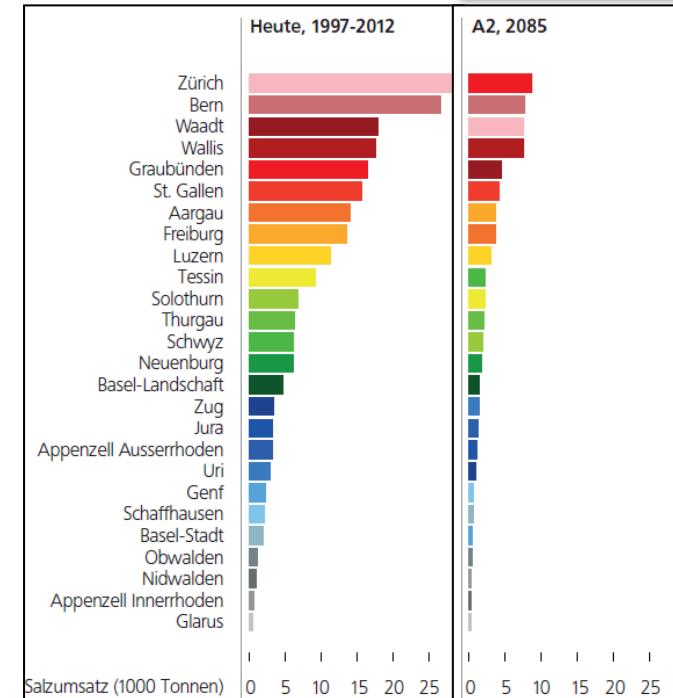




Future road salt use in Switzerland



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Political recognition of climate adaption needs

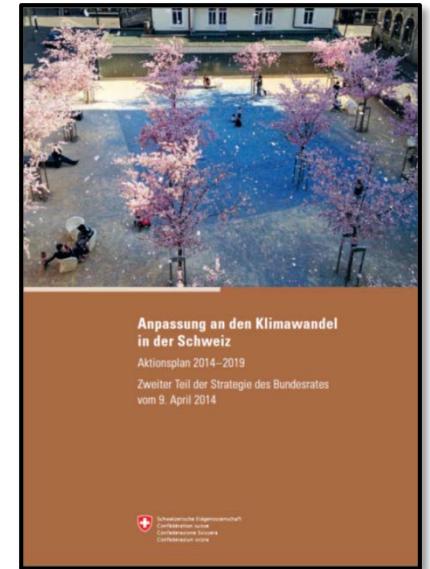
Adoption of “Aktionsplan Anpassung an den Klimawandel” by federal council in April 2014



New mandate for MeteoSwiss:

Regular update of regional climate scenarios for Switzerland

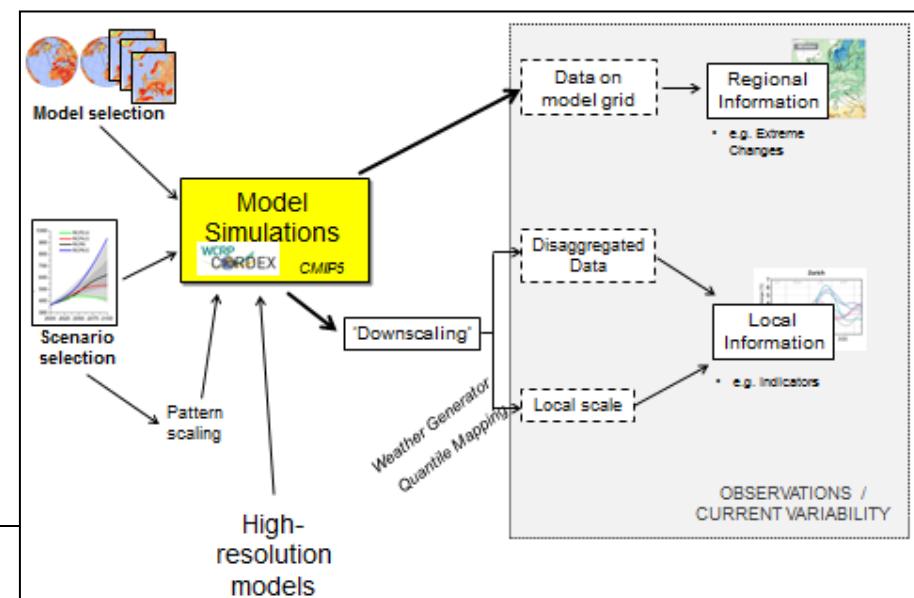
- **Coordination** in close collaboration with experts of academic sector.
- **Regionalization** for specific locations and sectoral needs.
- Communication and **dissemination** of scenarios and corresponding infrastructure.
- Limited funding for MeteoSwiss to fulfill new mandate and secure collaboration with academic sector.





CH2018

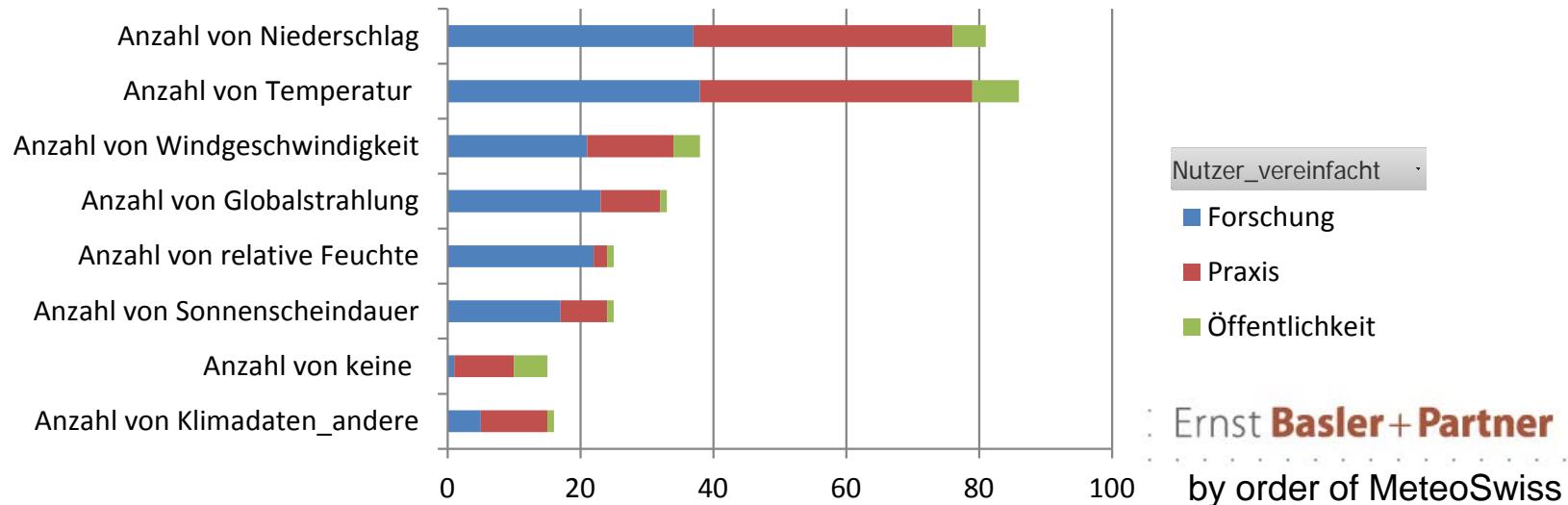
- Next generation of Climate Change Scenarios for Switzerland
- Publication: 2018
- Consortium of MeteoSwiss, ETH Zurich, University of Bern
- To be integrated into the NCCS
- Currently:
 - Finalization of underlying scientific basis
 - Establishing an organizational structure
 - User need assessment





User needs for climate change scenarios

Broad survey and dedicated workshops



- Precipitation and temperature most needed.
 - Research community shows wider spectrum, practitioners mostly need precipitation and temperature
- Discussion and consolidation at the Symposium «Anpassung an den Klimawandel» at the 20.11.2015 in Bern



International context

Global:

Globales Rahmenwerk für Klimadienste der WMO



Regional:

Copernicus Climate Change Services



National:

National Centre for Climate Services (NCCS)



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

National Centre for Climate Services (NCCS)

**Dem Klima von heute und morgen bewusst begegnen:
Den Dialog fördern, die Lösungen koordinieren und
gemeinsam entwickeln**

Medienkonferenz, Bern, 16. November 2015





Mitglieder des NCCS



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Bundesamt für Meteorologie und Klimatologie MeteoSchweiz

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Bundesamt für Landwirtschaft BLW

Bundesamt für Bevölkerungsschutz BABS

ETH zürich



Partner in der Entwicklung von Klimadienstleistungen



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Agroscope



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UNIVERSITÄT
BERN

OESCHGER CENTRE
CLIMATE CHANGE RESEARCH

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Conclusions

- Strong collaboration with users
 - Understanding of decision process
 - Requirements can be very sector and user specific
- Other means of communications
 - Not apps but reports, web-portals, workshops, ??
- There is no «solution for everything»
 - But a common understanding how to approach the problem on a global, regional and national level
- User needs can trigger new research questions
 - Climate services are not one-way
- Understanding the exposure to current climate variability often of more relevance than to long term climate change

