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Federal Office for the Environment  
Federal Office of Meteorology and Climatology MeteoSwiss  
Federal Office of Topography swisstopo

# A new drought monitoring and early-warning system for Switzerland

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## Why?

- The intensity and frequency of droughts in Switzerland have increased in recent years and this trend is likely to continue in the future
- Drought has been identified as one of the main risks for various economic sectors in Switzerland
- A national monitoring and early-warning system is to be established through the joint efforts of three different governmental agencies mandated by the federal council
- Aim: enhance preparedness for effective response and to increase drought resilience in the long term

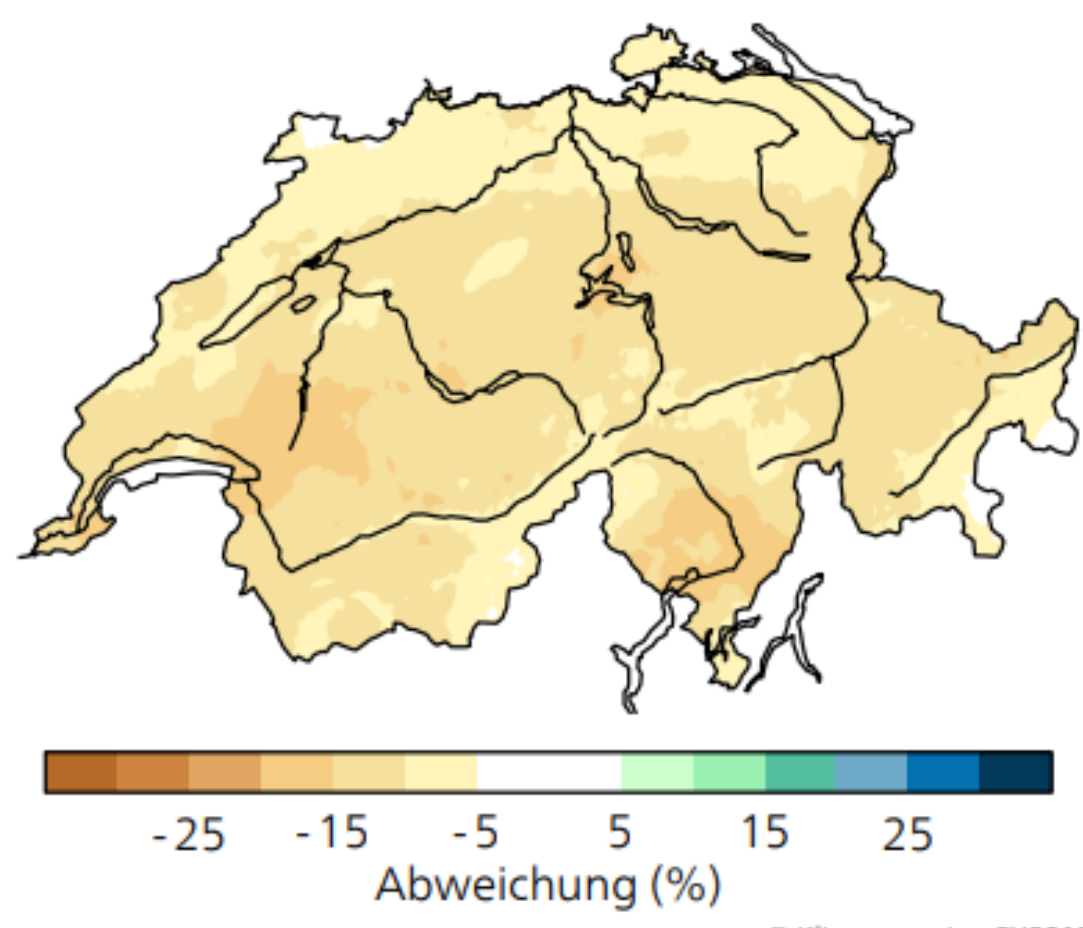


Figure 1: Projected percentage deviation in mean summer precipitation with limited climate change mitigation (RCP 4.5) for the year 2085 compared to the reference period 1981 - 2010. @CH2018

## What?

- An operational national early detection and warning system for drought integrating in situ, modelled and satellite-based monitoring and sub-seasonal forecasting
- Nationwide information on the current and future drought situation on a regional to local scale
- Daily updated maps and infographics accessible through a user-friendly web platform designed to facilitate informed decision-making in order to minimize damage and support adaptation
- Regular expert assessment of the situation and, in case of imminent drought, dissemination of early-warnings and bulletins.



Parched pastures on the Chasseral in August 2022 (Caroline Kan, FOEN)



Dried-out riverbed of the Emme near Aeffligen (BE) in June 2022 (Esther Scheidegger, FOEN)

## How?

### Building on existing products

Measurement networks  
(temperature, precipitation, streamflow,  
ground water table, etc.)

Station-based drought indicators

Short-term forecasts (5 days)

Experimental drought platform  
(drought.ch)

Cantonal data/information

### Components of the system

Monitoring

Forecasts

Warnings

Information

### Integrating new products

NEW

Operational satellite monitoring  
(vegetation)  
Soil moisture monitoring network  
Spatial drought indicators

Medium-term (4 weeks) forecasts for  
meteorology, hydrology, soil moisture

Regular expert briefings, official warnings  
and bulletins

Web-based drought information platform

Drought information platform  
[www.drought.admin.ch](http://www.drought.admin.ch)



Operational  
basis system:  
Go-Live per 2025

&

Drought warnings  
(via official federal warning channels)

