Guide for selecting an appropriate scenario

Difference to highest discharge measured between 1999 and 2018 [%]

- ▲ > +50
- ▲ +25 – +50
- ▲ +10 – +25
- ▲ -10 – +10
- ▲ -25 – -10
- ▲ -50 – -25
- ▲ < -50

Precipitation [mm]

- 400
- 300
- 250
- 210
- 180
- 150
- 120
- 100
- 80
- 60
- 40

Number of affected buildings by floodplain
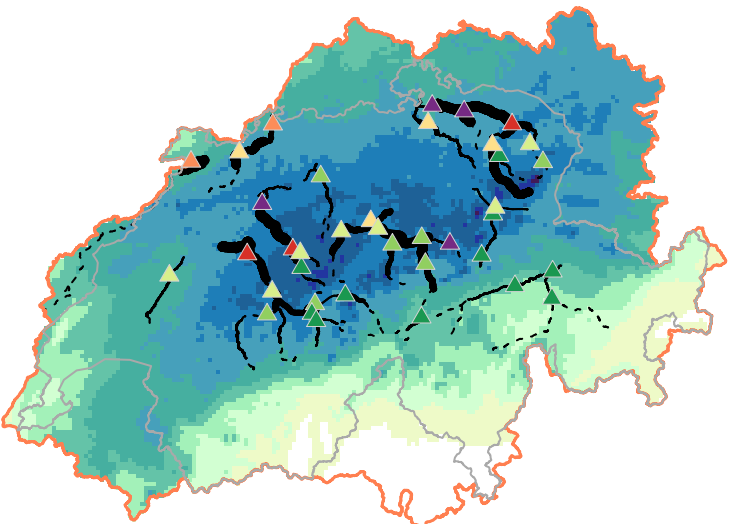
- —— > 200
- —— 51 – 200
- — 11 – 50
- — 3 – 10
- — < 3
- - - - not analysed
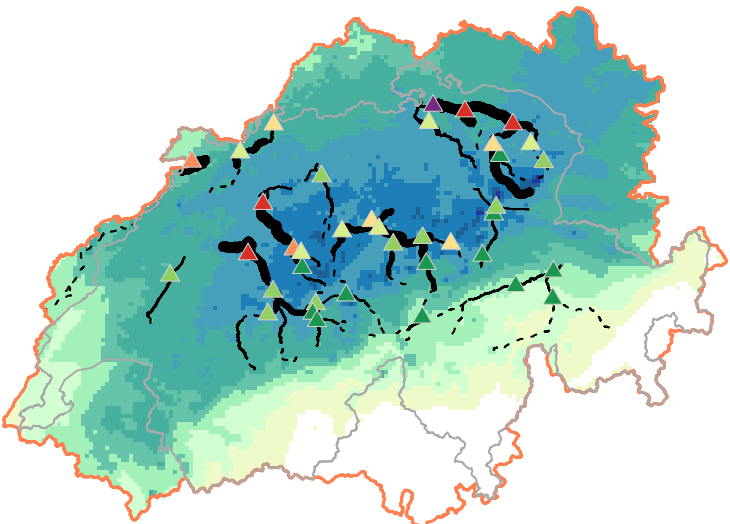
Reference scenario
100-year precipitation event
Reference scenario with heavy precipitation over Alpine foothills and Swiss plateau.

Wet preconditions
100-year precipitation event
Day 1 with ca. 20 mm precipitation on northern side of Alps. Day 2 dry. After that, same as Reference scenario.

Precipitation+
300-year precipitation event
Similar spatial concentration of precipitation as in Reference scenario, but with 10–15 % more precipitation on northern side of Alps.
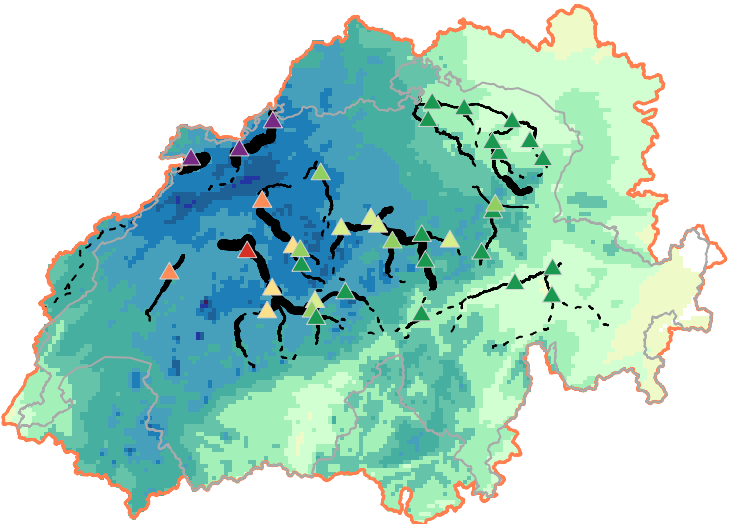
Precipitation+, 5 days
100-year precipitation event
Slightly more precipitation than in scenario Precipitation+, with similar hotspots. However, precipitation spreads across 5 days, making intensity lower than in Precipitation+.
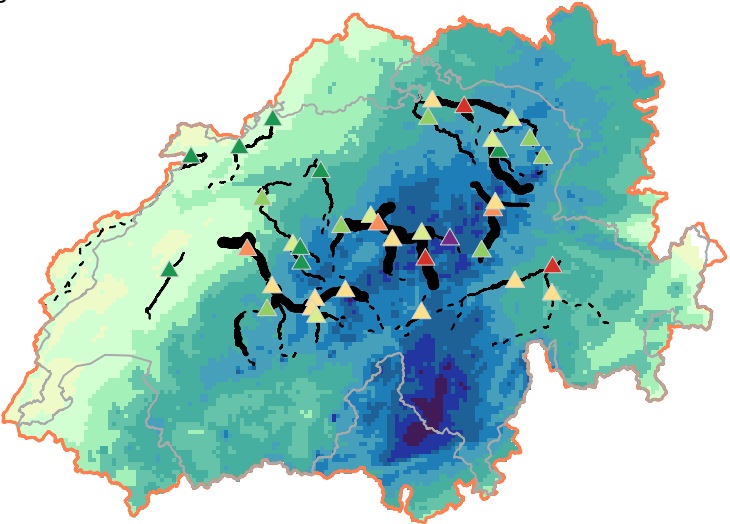
Reference scenario, West
100-year precipitation event
Precipitation hotspot further west than in Reference scenario. Little precipitation in eastern Switzerland, northern and central Grisons, and Engadine.

West+
300-year precipitation event
Widespread heavy precipitation in western Switzerland, along Jura mountains, and in canton of Bern. Less, but intense precipitation in Birs catchment.

Focus on lakes, 3 days
100-year precipitation event
Two precipitation peaks in the modelled lake catchments. Second peak with higher intensities. Large share of precipitation in Ticino.
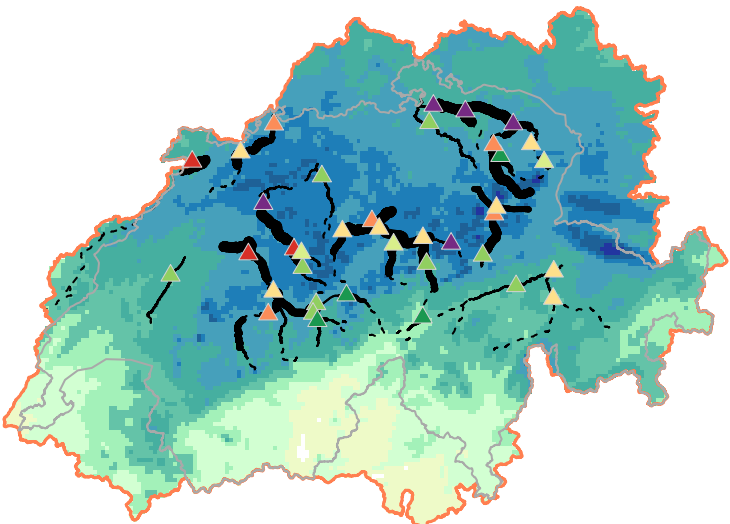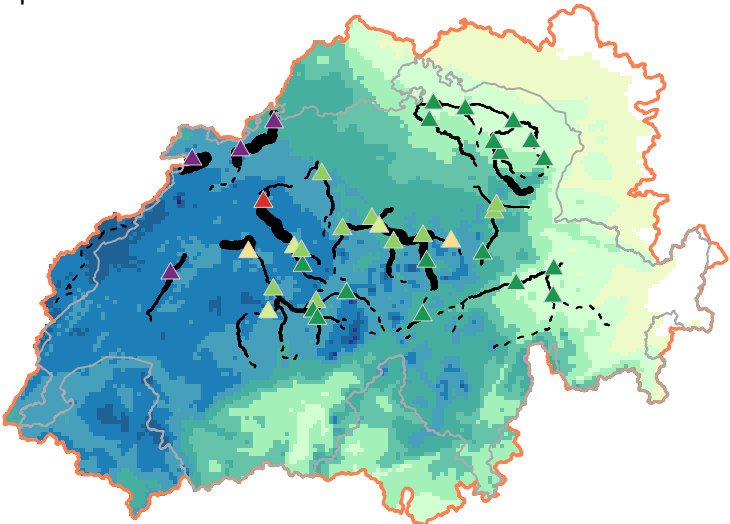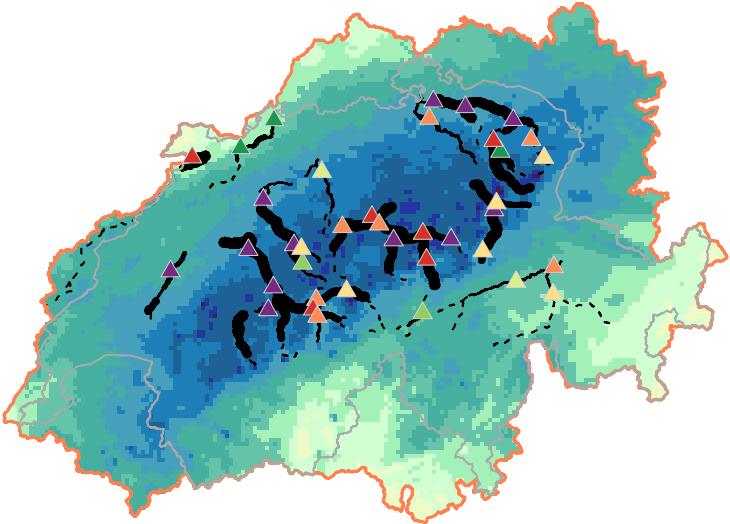
Focus on lakes, 5 days
100-year precipitation event
Similar spatial pattern as in Focus on Lakes, 3 days, but with slightly more precipitation. Unlike in Focus on Lakes, 3 days, there are two dry days.
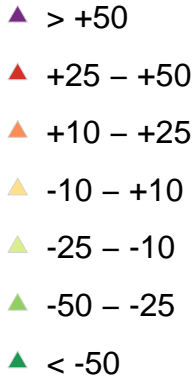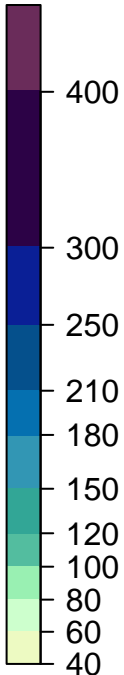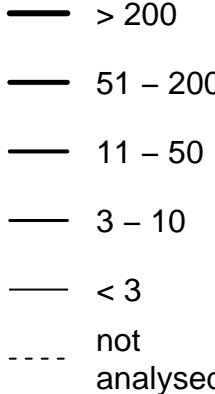
Worst case
1000-year precipitation event
Extreme precipitation across entire northern side of Alps.

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