



## Supplement of

## **Global warming increases the frequency of river floods in Europe**

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## **Supplementary figures**

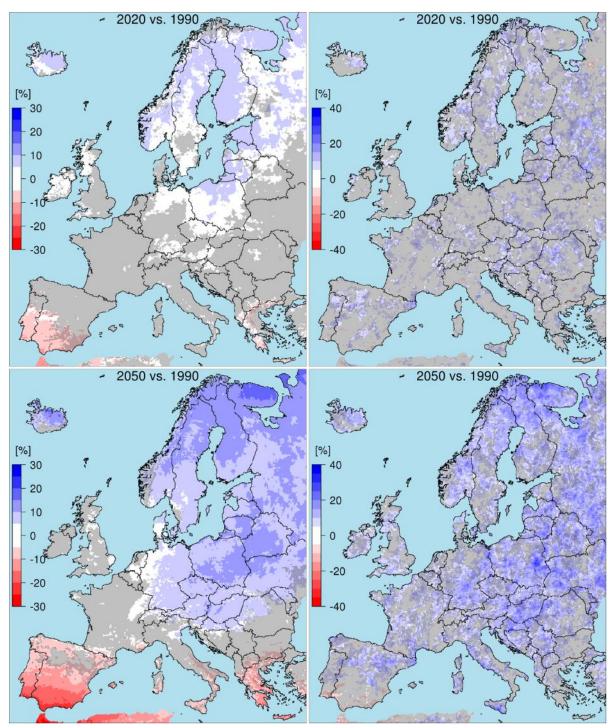


Figure S1: Relative change in annual precipitation ( $pr_{Year}$ , left) and annual maximum daily precipitation ( $pr_{MAX}$ , right) for the time slice 2006-2035 (top) and 2036-2065 (bottom). Data points with CV>1 are greyed out.

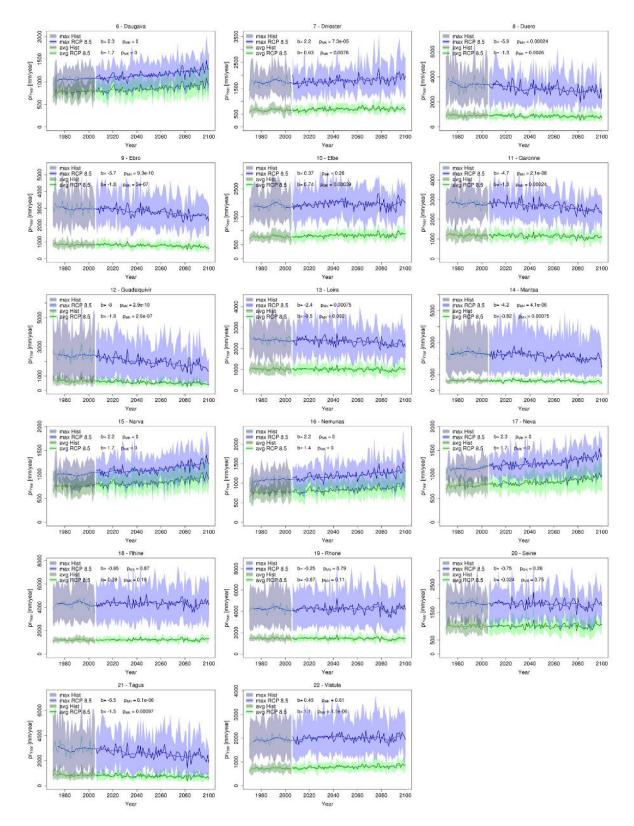


Figure S2: Annual precipitation total  $(pr_{Year})$  for selected European river basins over time. Basins location is shown in Figure 1 (in yellow). Basin average (green shades) and maximum point value (blue shades) of the ensemble are shown together with the ensemble mean (thick lines) and the 10-year average (thin lines).

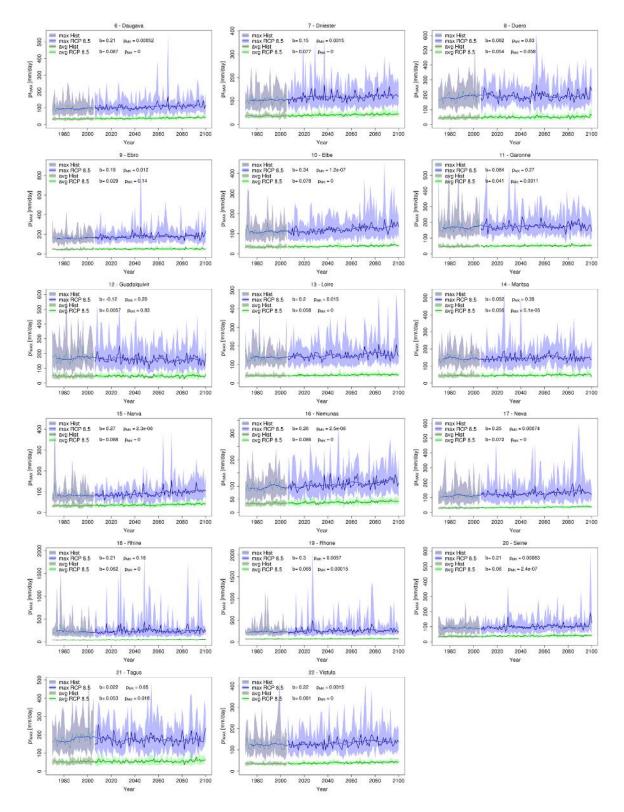


Figure S3: Annual maximum daily precipitation  $(pr_{MAX})$  for selected European river basins over time. Basins location is shown in Figure 1 (in yellow). Basin average (green shades) and maximum point value (blue shades) of the ensemble are shown together with the ensemble mean (thick lines) and the 10-year average (thin lines).

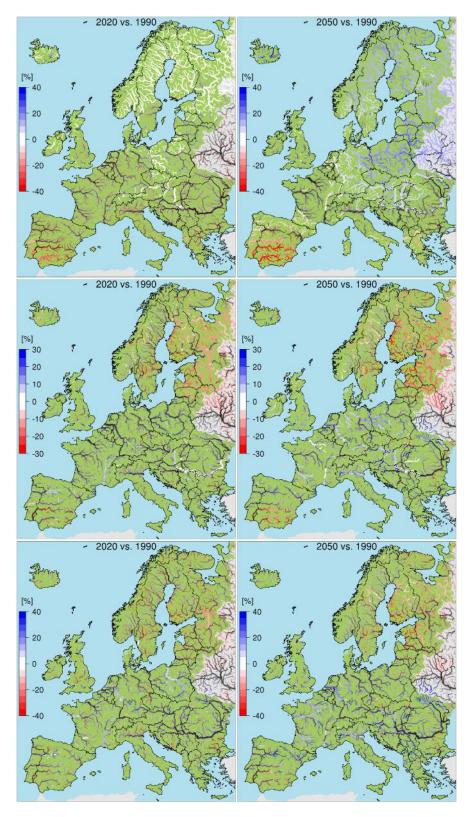


Figure S4: Relative change in average streamflow  $\overline{Q}$  (top), mean annual daily peak flow  $\overline{Q_{MAX}}$  (center) and 100-year daily peak flow  $Q_{100}$  (bottom) for the time slice 2006-2035 (left) and 2036-2065 (right). Data points with CV>1 are greyed out.

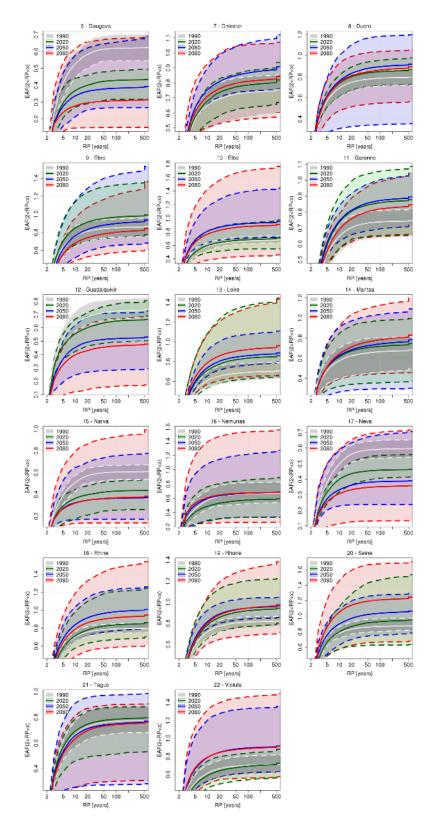


Figure S5: Expected annual frequency of peak flows with return period larger than 2 years for selected European river basins (see location in Figure 1) for the baseline simulation and the three future time slices.