

## User-tailored representation of climate predictions – the DWD climate prediction website

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In 2016, the DWD started to publish operational seasonal climate predictions. In 2020, the range was expanded to include operational decadal climate predictions. In 2022, a further step towards a seamless climate prediction will follow in adding post-processed ECMWF subseasonal prediction products. All these predictions are presented on the DWD climate prediction website ([www.dwd.de/climatepredictions](http://www.dwd.de/climatepredictions)).

The website offers maps, time series and tables of 1- and 5-year mean (decadal) and 3-month mean (seasonal) ensemble mean and probabilistic predictions of temperature and precipitation on a global scale, for Europe and for Germany. The user-oriented design offers multiple layers of information and has been developed and evaluated in close cooperation with users from different sectors, predominantly so at user workshops, surveys and individual user meetings on climate predictions. The layout, plots and evaluation methods are consistent across all time scales considered.

The information on DWD's website is retrieved from post-processed model output of the German seasonal and decadal prediction systems based on MPI-ESM. To improve the skill of multi-year climate predictions, we correct bias, drift and ensemble spread by a statistical recalibration approach. To fit the users' needs of a high spatial resolution in Germany (~20 km), the empirical-statistical downscaling EPISODES is applied. All predictions are displayed in combination with their skill.

We work on several extensions of the website: climate predictions for German cities using statistical downscaling at ~5 km resolution, multi-year seasonal predictions (e.g. 5-year summer means) and the prediction of extreme indices (e.g. drought indices).