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## Different approaches of finding European climate analogue regions for the Steigerwald forest (Germany) in the future

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Adapting the impacts of climate change is a great challenge. To facilitate forest adaptation long-term and forward-looking decisions must be made today since they have to be valid for several decades. Therefore, fundamental knowledge of the future climate and of tree species which are more resilient to the future climate than trees growing in the forests today is necessary.

To give local foresters a basis for their decisions, we use the so-called analogue region method. With this method we aim to find regions in Europe which currently have the same climate as it is projected in a specific reference region for different future scenarios. For the projections, the model runs of the regional climate model REMO are used. As an example of finding analogue regions, we selected the forest region Steigerwald in North Bavaria. We use different climatic and forest specific indices and data preparation methods to test the influence of varying indices and methods on the resulting regions. After identifying the respective analogue regions, we analyze which tree species are growing currently in these regions by using the EU-Forest data set.