sufficient variety, we are able to produce very widely varying samples of weather from a future climate scenario rapidly. Like morphing and any other synthetic weather generator, it should be noted that our synthetic weather files are not explicitly accounting for geographical variability. That is to say, if a source TMY file is not representative of the building site (e.g., due to urbanisation), then our method will not correct for it. This is an important limitation, and one we will address only in upcoming work, since the 'change' in weather conditions due to urbanisation has nothing to do with the techniques we use here. It is possible to coincidentally reproduce urban conditions, but that is not guaranteed.

The method shown here, and in Rastogi (2016) and Rastogi and Andersen (2015), is also applicable when a long record of weather data is available. We have focussed on working with typical year files to expand applicability to practice. Longer, high-quality, records, where available, could be a better basis for calculating the various periodic and aperiodic components we use in our method. The influence of the quality of typical files is not formally addressed in our work, but the use of an ensemble of random files could ameliorate somewhat the impact of unrepresentative data on decision-making.

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