



## **Simple criteria to define stratospheric sudden warmings**

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Research on future change of stratospheric sudden warmings (SSWs) shows somewhat mixed results in terms of the sign and magnitude of future SSW change. However, a significant number of studies has been based off of the absolute WMO SSW criterion, and there is some concern that potential change in future SSW frequency could be the byproduct of the criterion itself and not a real change in SSW frequency. In the present study we propose two alternative and relatively simple methods for identifying SSWs. We test the two methods and compare their outcomes against more conventional criteria using data from reanalysis and a climate model.