



An Online Library of Stratospheric Sudden Warming Events.

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Major stratospheric sudden warming events are key process in the coupled stratosphere-troposphere system because they provide an excellent opportunity to examine the coupling process in detail. Although sudden warmings have been studied for almost 50 years, due to their low frequency of occurrence, systematic comparison of events has only recently become possible.

In order to facilitate this task, we have constructed an online library of major stratospheric sudden warmings. Using a definition of major stratospheric warmings consistent with the widely used WMO definition we have identified major warmings in both the NCEP and ERA-40 reanalysis datasets. Our website allows users to examine each major warming using a variety of dynamical diagnostics, including 2D and 3D animations of the events, zonal mean and heat and momentum flux diagnostics. The aim of this presentation is to publicise this resource to the community and to demonstrate how to use it.

The website can be found at <http://www.appmath.columbia.edu/stratwarm/website/>