



Going Beyond Sudden Stratospheric Warmings

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It is well established that stratospheric circulation variability during Northern Hemisphere winter is closely connected to anomalies in tropospheric weather and climate. Past studies were almost exclusively focused on the impact of sudden stratospheric warming events (SSWs), characterized by an abrupt and complete break-down of the Arctic polar vortex. Here, we argue that the dynamical impact of the stratosphere on the troposphere is not just limited to SSWs and that there is a range of weak vortex events that are as important as SSWs. By narrowly focusing on SSWs, one misses the impact of such events on the troposphere. In our work, we propose a definition for such events and use reanalysis and climate model data to document their influence.