



Sudden Stratospheric Warming (SSW) in News

Environment & Climate Science

Sudden Stratospheric Warming (SSW) refers to a rapid increase in stratospheric temperatures—sometimes by as much as 50°C —occurring at altitudes between 10 and 50 km above Earth's surface.

This abrupt warming disrupts the polar vortex, a band of strong westerly winds that circulates around the Arctic. When the vortex weakens or breaks down, it can trigger major weather anomalies at the surface, including extreme cold waves, altered jet streams, and unusual storm patterns.

APSC relevance: Important for atmospheric dynamics, extreme weather events, and climate-weather linkages.