

**Ozone Change and Its Influence on Climate**

***Summary of Chapter 5: “Stratospheric Ozone Changes and Climate” from the Scientific Assessment of Ozone Depletion [2018]***

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Ozone is important in the climate system and its changes can influence both the troposphere and the stratosphere. Past increases in ozone depleting substances and associated decreases in stratospheric ozone have been an important driver of past stratospheric cooling trends and increases in the strength of the Brewer Dobson circulation in the lower stratosphere. At the surface, the largest climate impacts identified to date are in the Southern hemisphere in summer. The climate impacts of ozone depletion both in the troposphere and stratosphere are expected to reverse over coming decades as atmospheric abundances of ozone depleting substances decline due to the Montreal Protocol and stratospheric ozone recovers. The relative importance of ozone recovery for future Southern hemisphere climate will depend on the evolution of atmospheric greenhouse gas concentrations. This presentation will discuss these and other key findings regarding ozone changes and climate reported in Scientific Assessment of Ozone Depletion: 2018.