

Stratospheric Photochemistry: II. Halogens

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We will review comparisons between calculated and measured abundances of a variety of stratospheric gases. These analyses distinguish areas where current theoretical understanding of stratospheric photochemistry is strong from areas that are lacking. This presentation will focus on measurements of halogen (e.g., chlorine, bromine, and iodine) species obtained during polar winter, where seasonal ozone depletion is dominated by halogens, as well as mid-latitude and tropical regions, where the build-up of halogens during the past 20 years has contributed significantly to the observed erosion of the ozone layer. We will suggest specific future laboratory investigations that could improve our understanding of the effect of human activity on stratospheric composition.