

Ozone hole photochemistry

- ✦ Ozone constantly increases because of the poleward and downward circulation
- ✦ Cl_2 builds up because of the heterogeneous reactions of HCl and ClONO_2 on polar stratospheric clouds (PSCs). HNO_3 is sequestered on PSCs. Cl_2 photolyzes in spring as the sun rises, forming ClO . PSCs settle out of stratosphere carrying HNO_3 .
- ✦ The reactions of ClO with both itself and BrO accounts for the observed polar ozone destruction.
- ✦ ClO , BrO , and ozone observations are all closely in agreement with the photochemistry.

