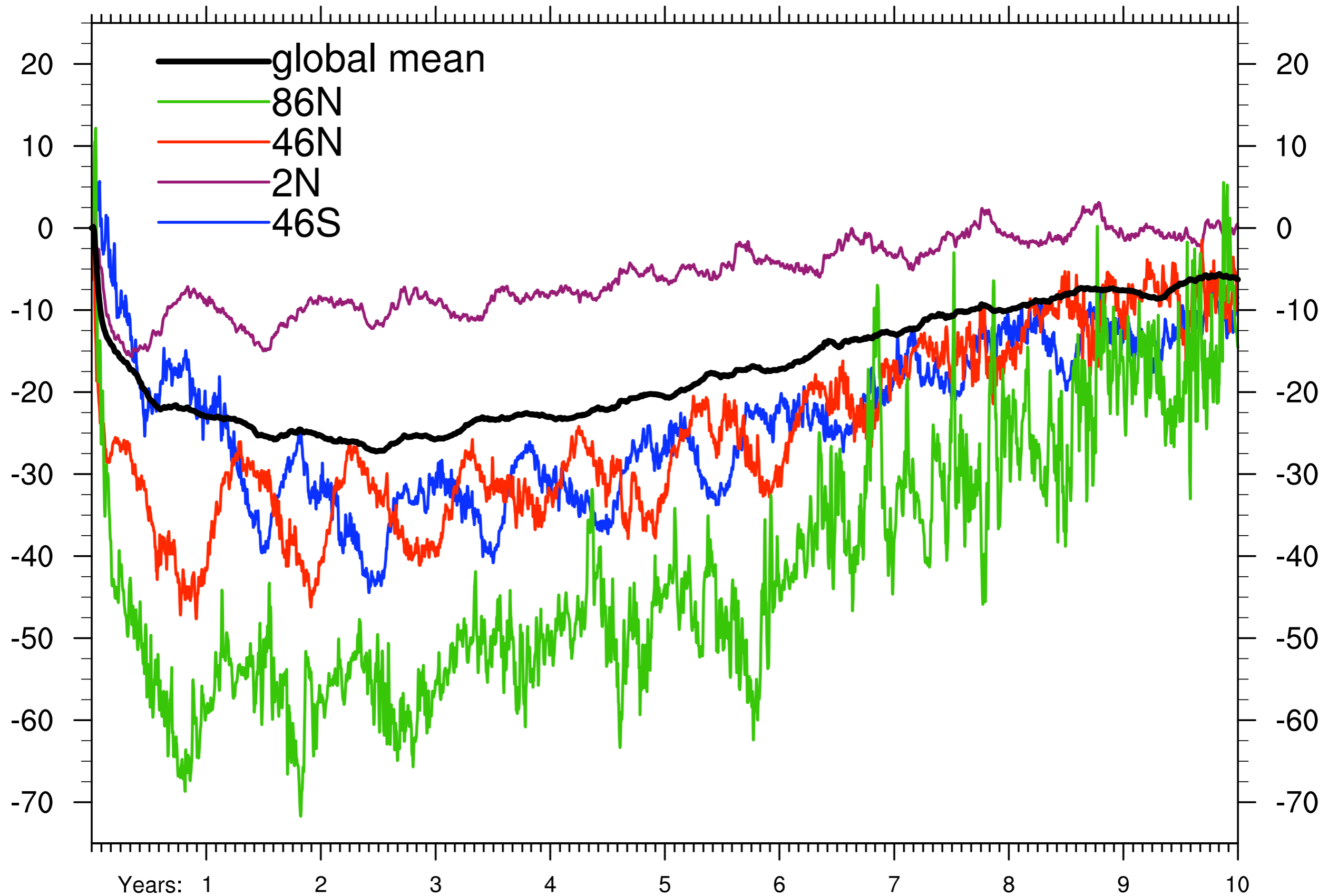
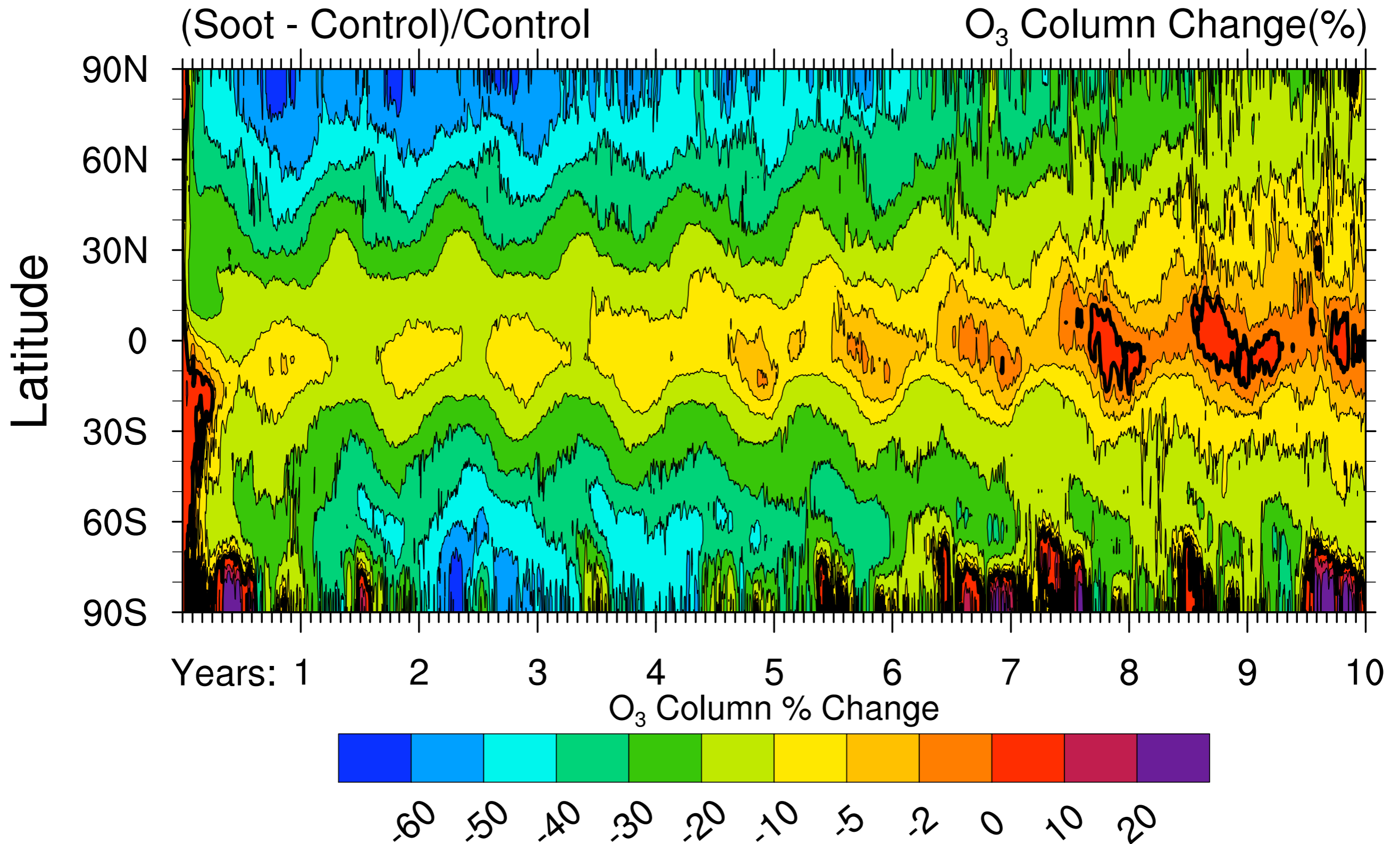


Ozone column % change

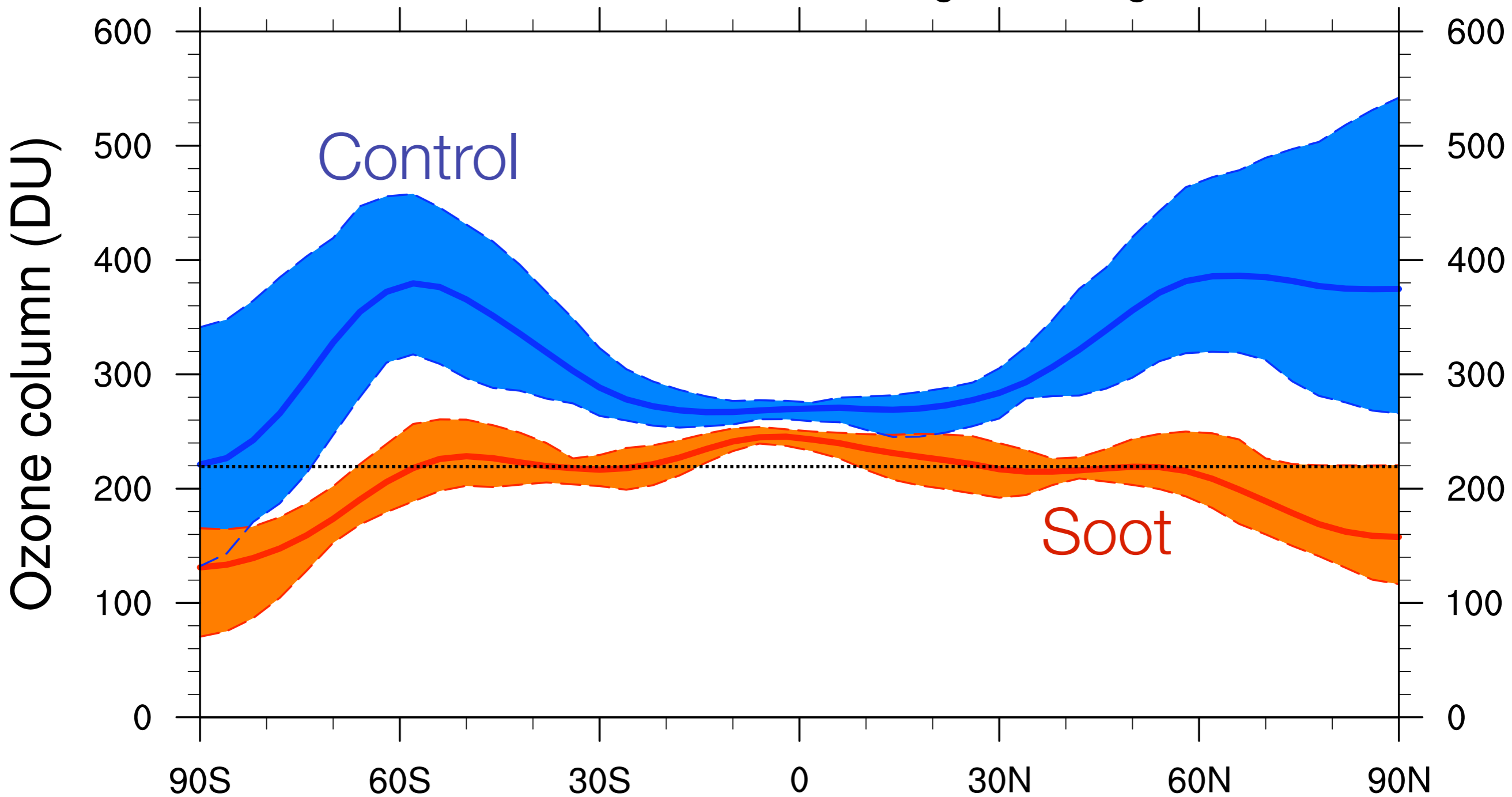


Time evolution of the total ozone column following a 5-Tg soot injection in the upper troposphere at 30°N latitude. Changes in ozone are given as a percent deviation of the integrated column from the control run, or baseline value, as a function of time since soot injection. The global-mean total ozone variation is shown along with zonal-average changes at four specific latitudes (as labeled). Note that the seasonal signal is amplified during periods of strong smoke perturbation, especially at mid-latitudes.



Zonally-averaged total ozone deviations from the baseline (in Dobson units) versus latitude as a function of time, for the same conditions as in Figure 1. Note that the most rapid recovery of the ozone layer occurs at tropical latitudes.

Ozone column annual average and range



Annual mean values (solid lines) of the zonally-averaged total ozone column amount (Dobson units, DU) are shown as a function of latitude for the control and 5-Tg soot cases during the second year of simulation. The shaded regions indicate the overall range of variation in the zonal average ozone column over the year. The dotted line at 220 DU marks the definition used to identify the current Antarctic ozone hole.