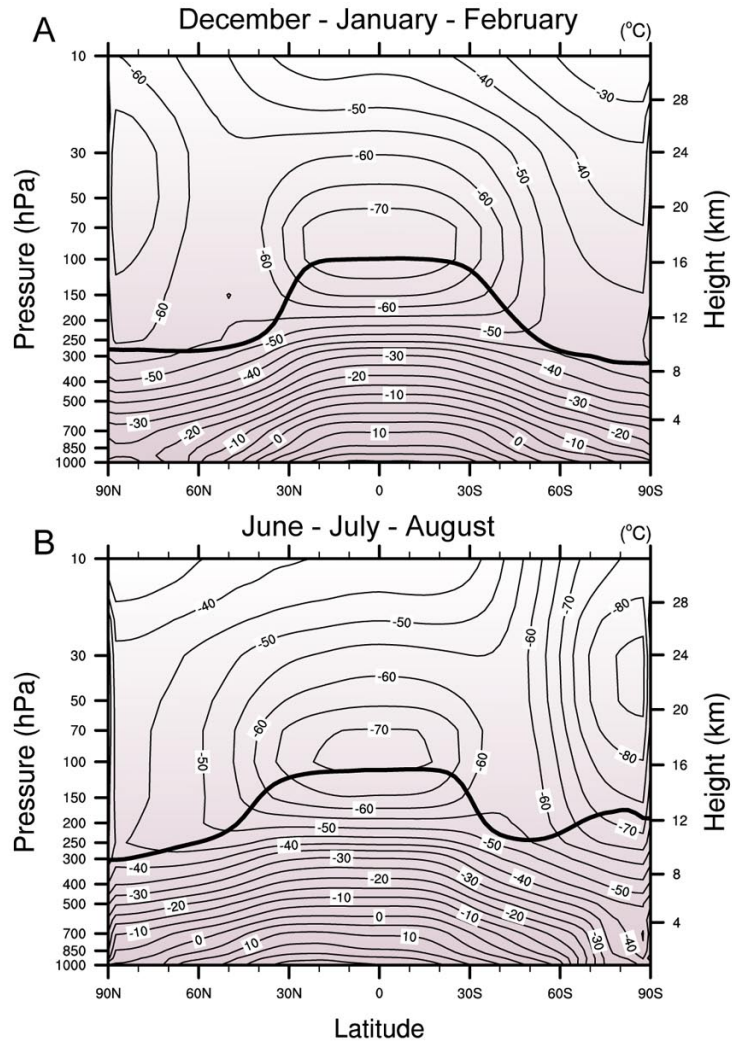
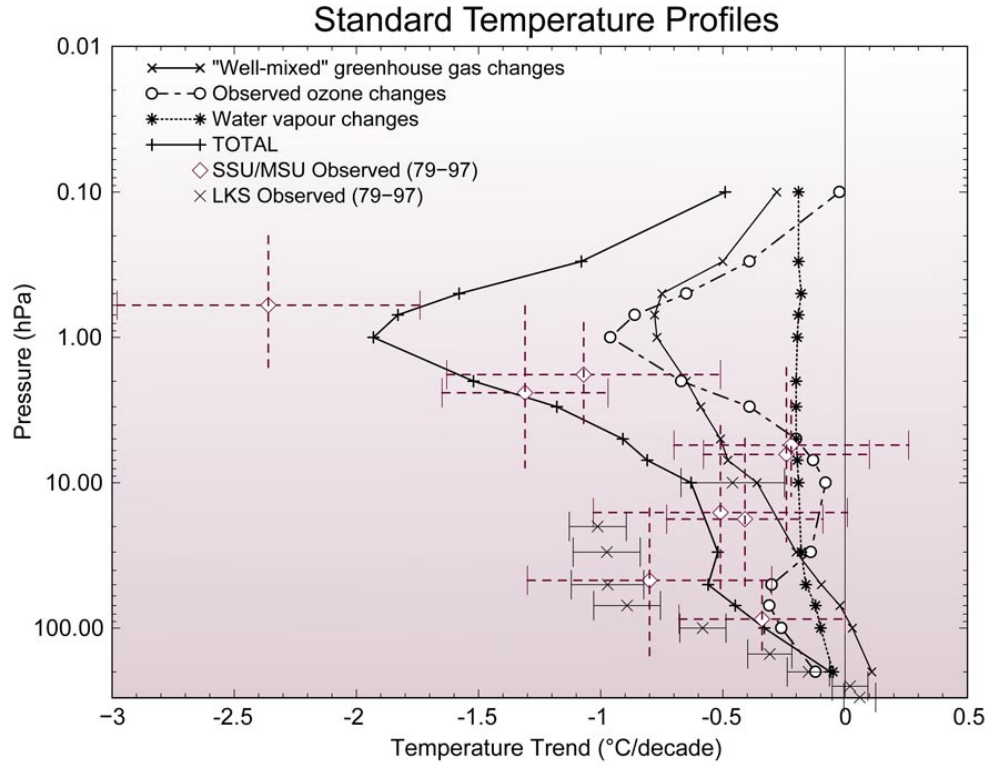


# Chapter 1 Figures for Public Review

# CHAPTER 1

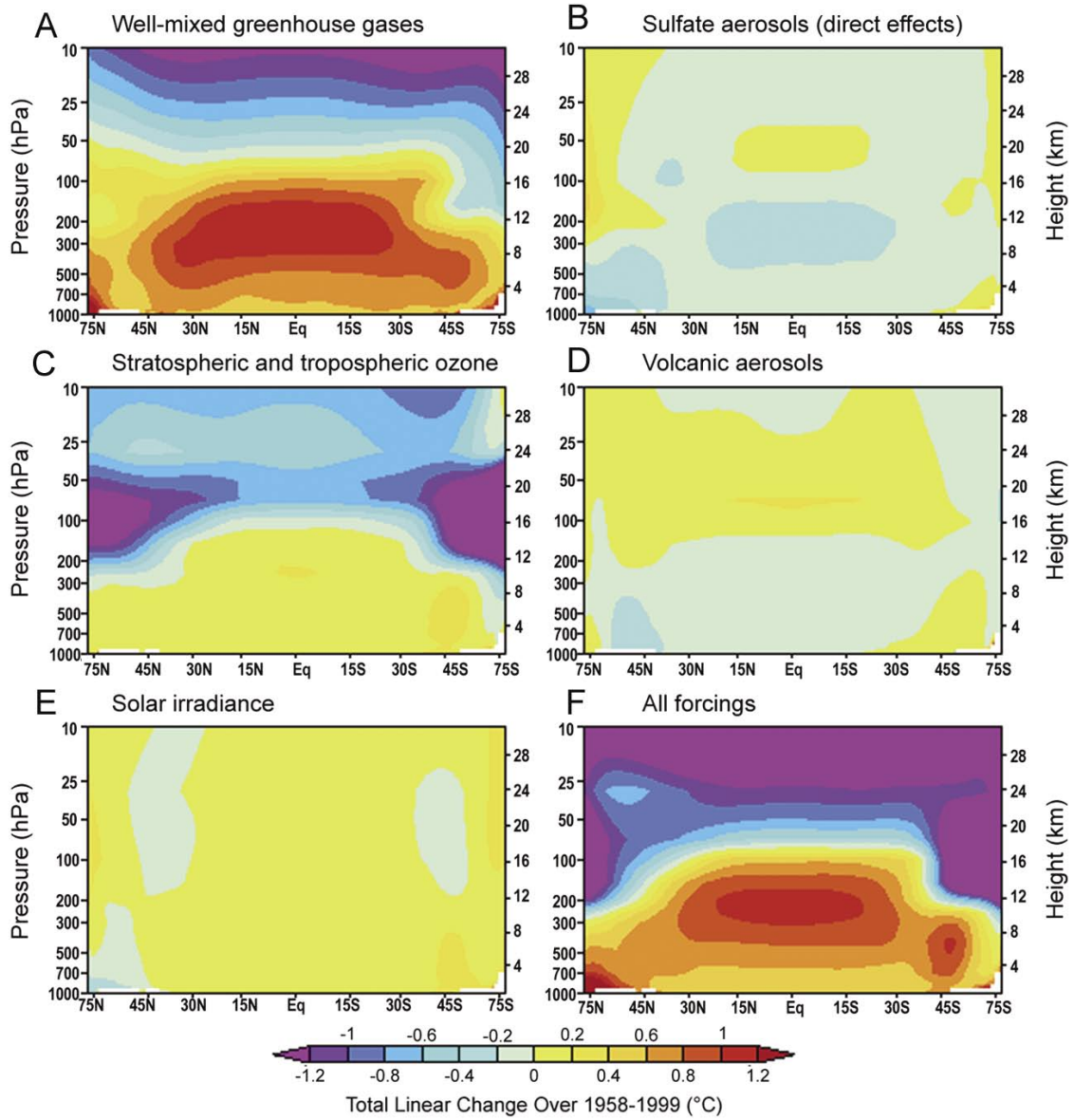


**Figure 1.1.** Global climatological vertical temperature profiles from surface to troposphere and extending into the stratosphere for December-January-February and June-July-August mean conditions, as obtained from the National Centers for Environmental Prediction reanalyses (Kalnay et al., 1996; updated). The solid line denotes the tropopause which separates the stratosphere from the surface-troposphere system.

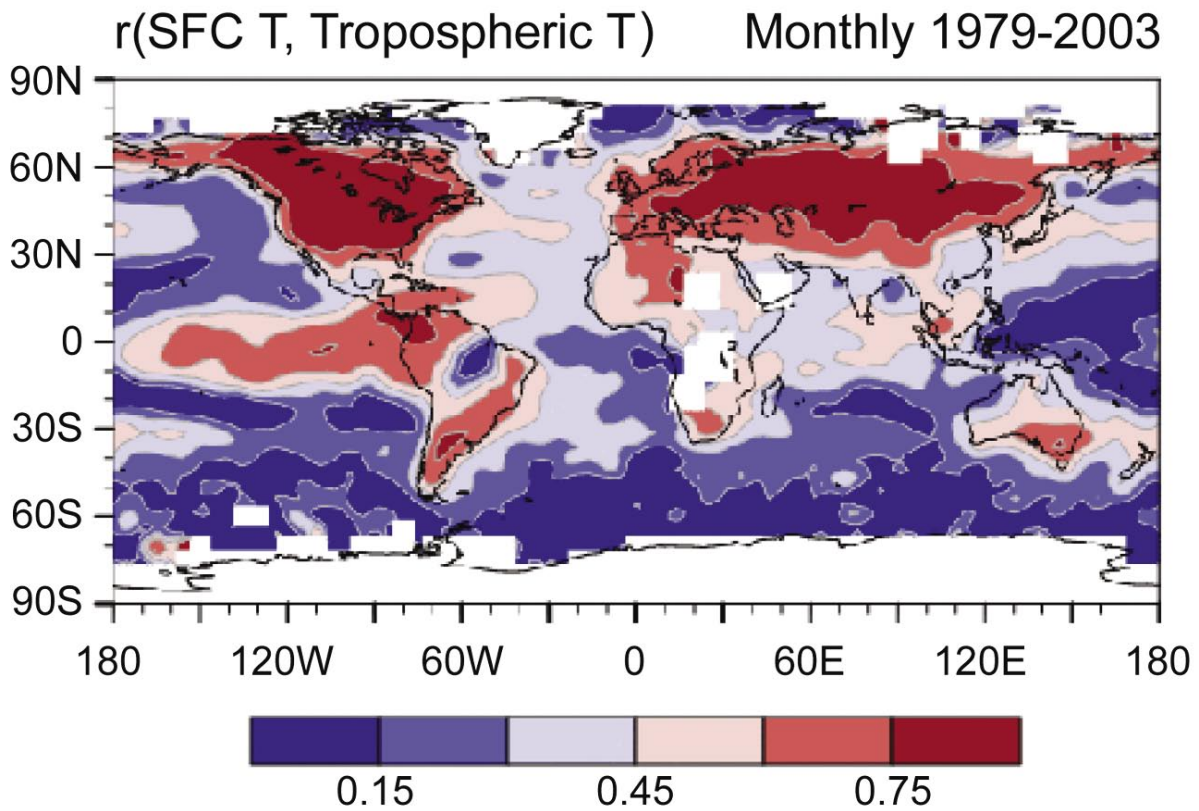


**Figure 1.2.** Global- and annual-mean temperature change over the 1979-1997 period in the stratosphere. Observations: LKS (radiosonde), SSU and MSU (satellite) data. Vertical bars on satellite data indicate the approximate span in altitude from where the signals originate, while the horizontal bars are a measure of the uncertainty in the trend. Computed: effects due to increases in well-mixed gases, water vapor, and ozone depletion, and the total effect (Shine et al., 2003).

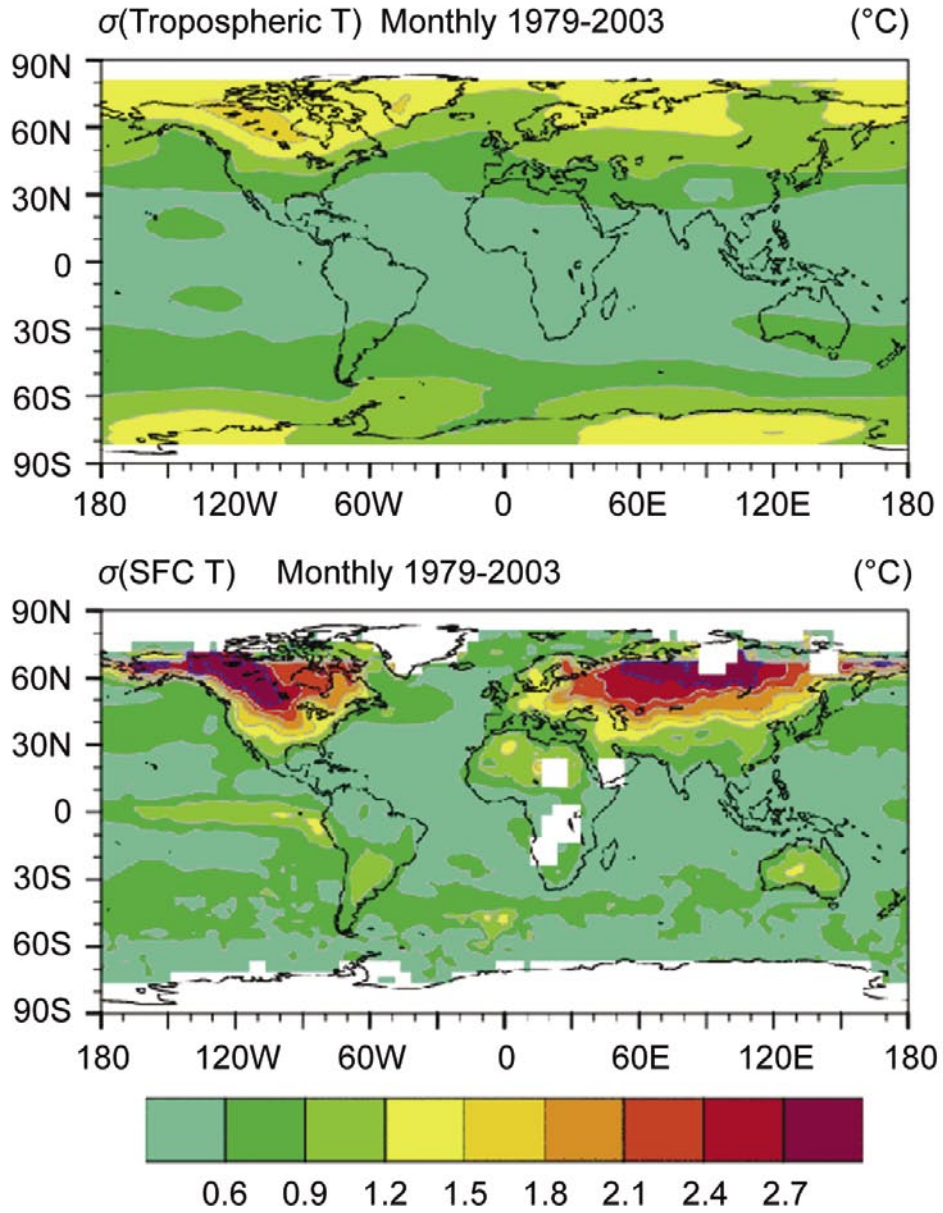
PCM Simulations of Zonal-Mean Atmospheric Temperature Charge  
 Total linear change computed over January 1958 to December 1999



**Figure 1.3.** PCM simulations of the vertical profile of temperature change due to various forcings, and the effect due to all forcings taken together (after Santer et al., 2000).



**Figure 1.4.** Gridpoint correlation coefficients between monthly surface and tropospheric temperature anomalies over 1979-2003. The tropospheric temperatures are derived from MSU satellite data (Christy et al., 2003).



**Figure 1.5.** Standard deviations of monthly mean temperature anomalies from the surface and tropospheric temperature records over 1979-2003. The tropospheric temperatures are derived from MSU satellite data (Christy et al., 2003).