Montzka--As a result of the Montreal Protocol, human-derived chlorine and bromine concentrations in ‘controlled substances’ have been decreasing in the troposphere since the late 1990’s. Tropospheric changes have relevance for the stratosphere: Measured atmospheric changes in the concentration of brominated chemicals controlled by the Montreal Protocol appear to determine how stratospheric bromine concentrations change over time, although an additional, fairly constant amount of bromine appears to be added from other chemicals not controlled by this Protocol. The observed atmospheric decline in methyl bromide has accounted for 25% of the overall decline in ozone-depleting gases (by mid-2009) and stems primarily from reduced fumigation use. By mid-2010, methyl bromide production had declined approximately 73% in data reported to UNEP, with QPS production now accounting for approximately 50% of the total methyl bromide production and use. As a result of these overall reductions in the use of ozone-depleting halogens, stratospheric ozone depletion has stopped worsening over the past decade. However, ozone depletion continues to be substantial, and the Antarctic ozone hole still appears each spring. Moreover, our understanding of the methyl bromide budget is still incomplete: known sinks are 20% larger than known sources. The oceans continue to play an important role in this budget, with preliminary data from Texas A&M University demonstrating that the net uptake of methyl bromide by the ocean has decreased in parallel with atmospheric concentrations. These new results reinforce our understanding of methyl bromide cycling by the ocean.