

**ATM S 558**

**Problem Set #3**

**Due: Wednesday May 4, 2011**

**1. Problem 10.5 in text**

(Hint: for part 5, calculate the  $[\text{Cl}]/[\text{ClO}]$  ratio assuming steady-state for Cl using its principle source and sink reactions.)

**2. Problem 11.4 in text**

Add the following question to part 2.3 for problem 11.4:

What else would explain lower OH concentrations in glacial times?

**3. Problem 11.2 in text**