

**AOSC 433/633 & CHEM 433/633 Atmospheric Chemistry and Climate**

**Admission Ticket, Lecture 5: 12 points**

**Due: Thursday, 9 February 2013 (at start of class)**

**Your name:** \_\_\_\_\_

Carbon dioxide (CO<sub>2</sub>) is the most important anthropogenic greenhouse gas.

a) (3 points) How does the abundance of CO<sub>2</sub> in the Northern Hemisphere compared with the abundance of CO<sub>2</sub> in the Southern Hemisphere?

b) (3 points) What is the importance of the hemispheric gradient in the abundance of atmospheric CO<sub>2</sub>?

b) (6 points) How have scientists used measurements of carbon isotopes to infer the human influence on atmospheric composition?