Carbon dioxide ($\text{CO}_2$) is the most important anthropogenic greenhouse gas.

a) (3 points) How does the abundance of $\text{CO}_2$ in the Northern Hemisphere compared with the abundance of $\text{CO}_2$ in the Southern Hemisphere?

b) (3 points) What is the importance of the hemispheric gradient in the abundance of atmospheric $\text{CO}_2$?

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