Lecture 11 – Paleoclimate and Ice Ages I: Ice core science and climate reconstruction.
Due Monday, November 13 2017, at start of class

Jouzel, J., 2013. A brief history of ice core science over the past 50 years *Climate of the Past* Vol. 9, 2525–2547.

1. Where is Vostok, and what characteristics of the environment there make this a good site for a long paleoclimate record?
2. What geochemical signal is used as a proxy for air temperature in the past?
3. Estimate the temperature change implied by a change of 10 per mil in $d^{18}O$.
4. How has CO$_2$ in the atmosphere varied over the past 800,000 years?
5. Does CO$_2$ vary in phase with the temperature variations at the Vostok ice core?