

**Planetary Geology 4460**  
**Homework #7**  
**Due Fri. Oct. 27, 2017**

**Problem 1 (10 points)** The following figure shows the number of craters as a function of diameter, for different terrains on Mars.

- a) List the relative ages of the various regions, from oldest to youngest. If for some regions you can't give relative ages, explain why.
- b) Give a reasonable explanation why the south polar sediments curve (and perhaps one other) start to rise less steeply (and almost turn horizontal) at small crater diameters.

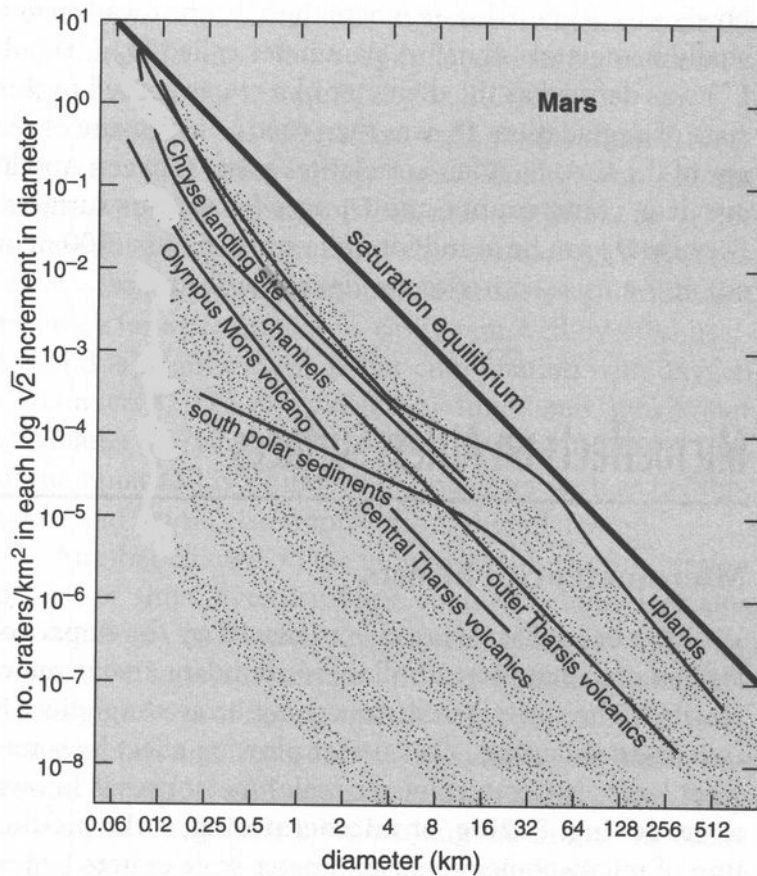


Figure 1. Crater count statistics for various regions on Mars