Mars for Earthlings

**LESSON 15: Ice Ages**

**Homework 1**

Ice Ages_MFE

*Ice on Mars*

**Objective:** Find and understand terrains on Mars that contain or harbor ice.

**Activity/Assignment:**

1. Research regions on Mars that have been identified to have fretted terrain.
   
   Hint: Fretted terrain is most common in northern Arabia, between latitudes 30°N and 50°N and longitudes 270°W and 360°W. Two good examples of fretted terrain are Deuteronilus Mensae and Protonilus Mensae.

2. Using JMARS, search for and capture images of the following:
   a. Fretted terrain
   b. Softened terrain
   c. Lobate morphologies
   d. Make note of the following for each captured image:
      i. Lat/Long,
      ii. Zoom increment
      iii. Map used for each image captured (THEMIS, MOLA etc.)

**What you turn in:**

3. Compile your findings into a .ppt presentation (print out your slide presentation with speaker notes where you’ve indicated any important info)
   a. Label all features.
   b. For JMARS images, label the feature, Lat/Long, Zoom increment, and Map on each slide (with the image).
   c. Use the “speaker notes” to further elaborate on your findings.
   d. You should have at least 3 slides
      i. Slide 1: fretted terrain
      ii. Slide 2: softened terrain
      iii. Slide 3: lobate morphology