

Homework #10  
Geology 4113 (Remote Sensing)  
Assigned April 6, 2018  
Due Friday April 13, 2018

**1. Hewson et al. 2005 Atmospheric Transmission Effects (10 points)** In the paper by Hewson et al. (2005) Remote Sensing of Environment 99: 159-172, they discuss which ASTER bands are most affected by atmospheric transmission effects due to variable water vapor and aerosol scattering.

- a) Which two ASTER bands are most affected by water vapor?
- b) They show image mosaics produced by two different band RATIOS, using data obtained on a variety of dates. Which two band ratios are these?
- c) Based on the fact that the mosaics from one band ratio show “seams” between the different images but the other does not, they come to two conclusions related to how badly their data is affected by variable water vapor and by aerosols. Summarize those conclusions in a few sentences.