

Homework #4
Geology 4113 (Remote Sensing)
Assigned Feb 16, 2018
Due February 23, 2018

1) Sabins #8.01: (10 points)

2) Sabins #8.02: (10 points) For #8.02 Sabin's doesn't actually tell you how many bytes AVIRIS uses per pixel. Assume it uses two bytes per pixel.

(The original pre-1994 version of the instrument actually used 10 bits (so $2^{10} = 1024$ gray levels) per pixel while a later version used 12 bits (so $2^{12} = 4096$) gray levels per pixel. Therefore if you allocate two 8-bit bytes = 16 bits per pixel total you will waste some storage space. However since most computers handle data in multiples of bytes it usually isn't worth the computational expense to repack the data into fractions of bytes.