Homework #11
Geology 4113 (Remote Sensing)
Assigned April 13, 2018
Due Friday April 20, 2018

1. Vegetation Indices (15 points)

Calculate SR (Simple Ratio), NDVI, and NDMI (Normalized Difference Moisture Indices) from the following observations by Everitt & Nixon. Note that they used a ground-based system so the wavelengths are slightly different than those quoted for Landsat TM. Use the closest ones available to those specified for the indices

TABLE 2. MEAN CANOPY PERCENT REFLECTANCE OF STRESSED AND NONSTRESSED TEXAS PERSIMMON AND LIME PRICKLYASH PLANTS FOR FIVE WAVELENGTHS.

Wavelength (μm)	Texas Persimmon		Lime Pricklyash	
	Stressed	Nonstressed	Stressed	Nonstressed
0.55	6.5*	4.8	6.0*	4.0
0.65	4.6*	2.9	4.6*	1.9
0.85	24.1*	31.2	19.8*	31.3
1.65	21.6*	18.8	17.6*	14.7
2.20	14.4*	9.7	11.9*	6.6

*Significantly different from nonstressed at the 0.05 per-cent probability level.