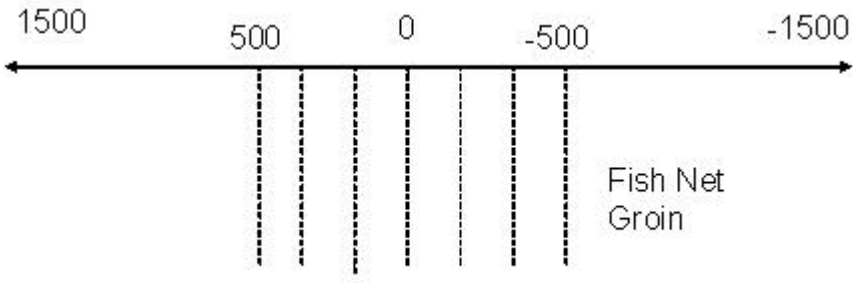
CIEG 680 Homework 4 Due TUESDAY, MARCH 25

1. Write a Matlab code that will take as input a vector of alongshore positions, corresponding beach width or volume (it should not care which) and a central location to perform even and odd analysis of shoreline change.

2. DD 6.2 (turn in your code with your results)

3. An innovative method of erosion control is being tested in Florida. The approach uses a series of cross-shore-directed fish nets that are supposed to cause deposition within. The claim is that the nets will trap sediment from offshore and will not affect the adjacent beaches. Based on the data given, what is your analysis? Did the survey extend to the undisturbed shoreline? What does the even function pattern suggest? What does the odd function pattern suggest? Do you think the nets only trap sediment moving in the cross-shore direction? *Go to my webpage to download a matlab-readable text file so you do not have to re-type these numbers.*



The measured longshore distribution of volumetric change is given as

Alongshore Location	Volume Change ft^3/ft
1500	0
1400	-3
1300	-6
1200	-8
1100	-10
1000	-10.5
900	-11
800	-10
700	-8
600	-2
500	5
400	7.5
300	10
200	11
100	15
0	20
-100	20.5
-200	21
-300	21.5
-400	21

-500	21
-600	20.5
-700	20
-800	15
-900	12
-1000	10.5
-1100	10
-1200	7
-1300	5
-1400	2
-1500	0