

Actively Scoring 11/7: Quiz 6: Pattern Analysis and Spatial Statistics, Interpolation and Prediction

Due Oct 13 at 4:15pm	Points 15	Questions 5
Available Oct 12 at 4:15pm - Oct 13 at 8:30pm	Time Limit 60 Minutes	

Instructions

Scoring begins 11/7. I am bringing over all attachments submitted in the Alternative Submission assignment.

Your submission there will be attached here. I will pull which ever responses are more correct - eg you started here, then switched to other - I will pull response from other. Thank you for your patience!

Please see announcements post to take Quiz 6 via a word doc.

I am unable to "unpublish," as it contains submissions already.

This quiz was locked Oct 13 at 8:30pm.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	2 minutes	12 out of 15

Score for this quiz: **12** out of 15

Submitted Oct 13 at 2:46pm

This attempt took 2 minutes.

Question 1

2 / 2 pts

Which index would be best for classifying golf courses greens in remotely sensed imagery?

Correct!☐ NBR☒ NDVI☐ PLNT**Question 2****4 / 4 pts**

In your own words, define the following terms and provide an example of when you would use them. Use complete sentences.

- Spatial Interpolation
- Spatial Prediction

Your Answer:

Spatial Interpolation is a method for estimating values at unknown points or locations that uses geocoded sample values, while spatial prediction is an estimation of unmeasured data using samples of a collection of variables that have already been measured, it uses a statistical fitting process as opposed to spatial interpolation that uses an established algorithm. I would use spatial interpolation in the creation of a rainfall map, as spatial interpolation has a lot of uses in the hydrology field, and as it turns out, to make this rainfall map, there usually isn't enough data on rainfall in a region based on the fact that sometimes weather stations don't encompass all the areas we would like to measure, so we turn to spatial interpolation to estimate the values of the rainfall data the weather stations were lacking. I would use spatial prediction when I would like to predict changes in most environmental features like soil attributes or variation in weather.

Question 3**0 / 3 pts**

Based on the provided Error Matrix, how many Forest sample sites total were *misclassified* as a different land cover type?

		Reference Data			
		Water	Forest	Urban	Total
Classified Data	Water	21	6	0	27
	Forest	5	31	1	37
	Urban	7	2	22	31
	Total	33	39	23	95

Correct Answer

☐ 8

You Answered

☒ 31

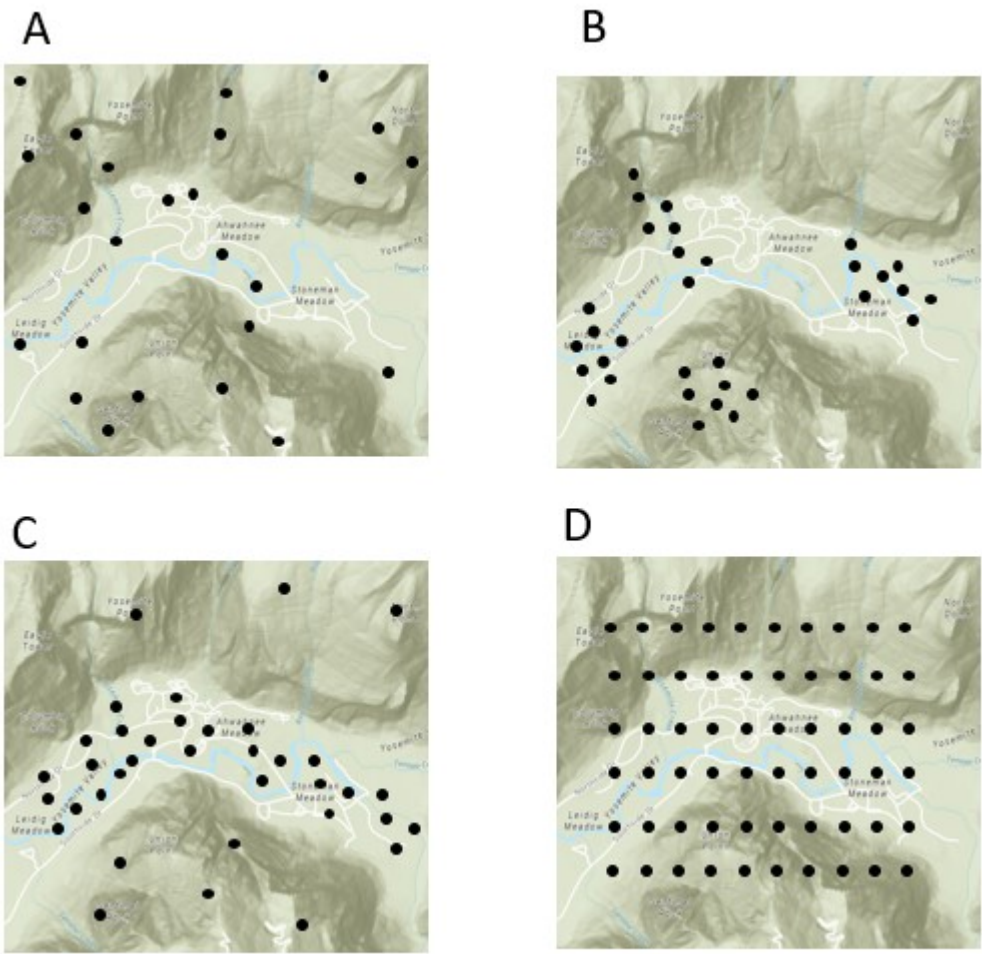
☐ 37

☐ 39

Question 4

3 / 3 pts

Identify the Sampling Patterns shown in images A -D



Correct!

A

Random

▼

Correct!

B

Cluster

▼

Correct!

C

Adaptive

▼

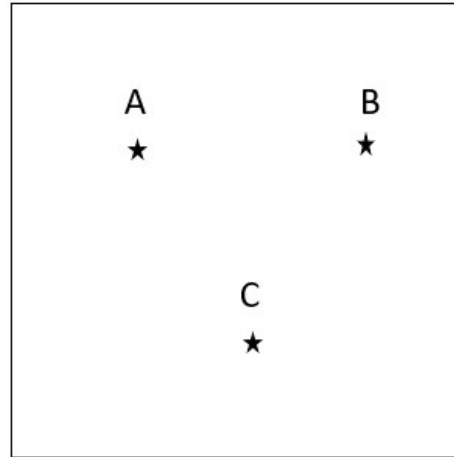
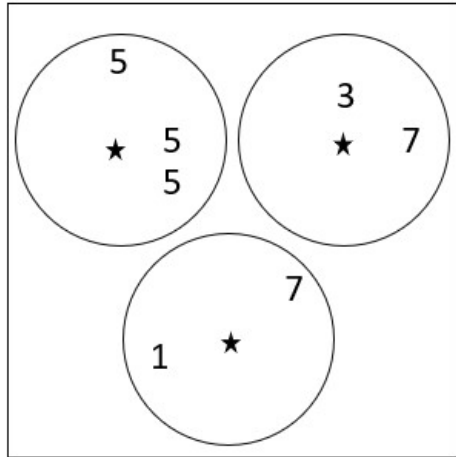
Correct!

D

Systematic

▼

Using the interpolation method Local Averaging, identify the values for points A, B, and C.



A 5

B 5

C 4

Answer 1:

5

Answer 2:

5

Answer 3:

4

Correct!

Correct!

Correct!

Quiz Score: **12** out of 15