Royal Geographical Society with IBG

Advancing geography and geographical learning

Data Analysis

Every scientific and geographical investigation involves Analysis, it is something that you will or have been examined on in both your controlled assessment task and exams. The good thing is there is a clear process that you can follow every time you analyse. Below is a set of instructions to follow each time you do.

How to analyse

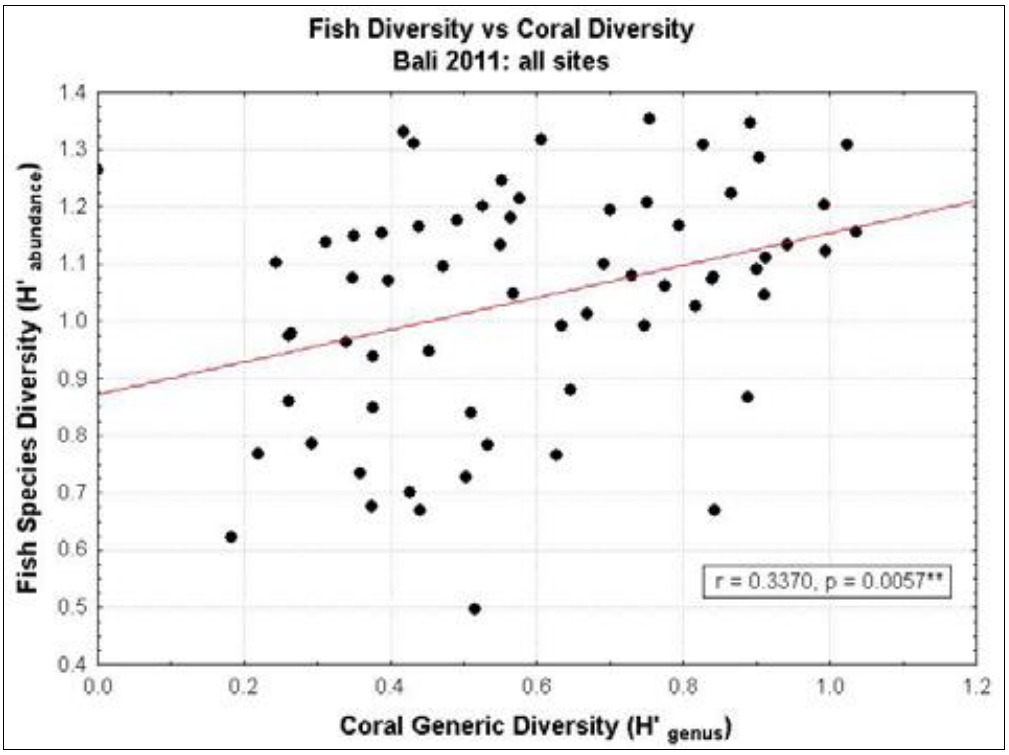
1. Describe the overall pattern shown (if there is one), making use of graph data as you do this. What is the general trend? Is there a positive or negative correlation.
2. Identify any important or significant data. This might be the highest and lowest value, the most common or average.
3. Try to explain the results you see. Why might this correlation exist?
4. Identify any anomalous results and explain why you think they may be present on the graph. Was it to do with the method of data collection or perhaps a physical factor which influenced that piece of data?
5. Finally compare this graph to the others you have produced. Is there any relationship between the datasets? If so, what might this suggest?

Your task

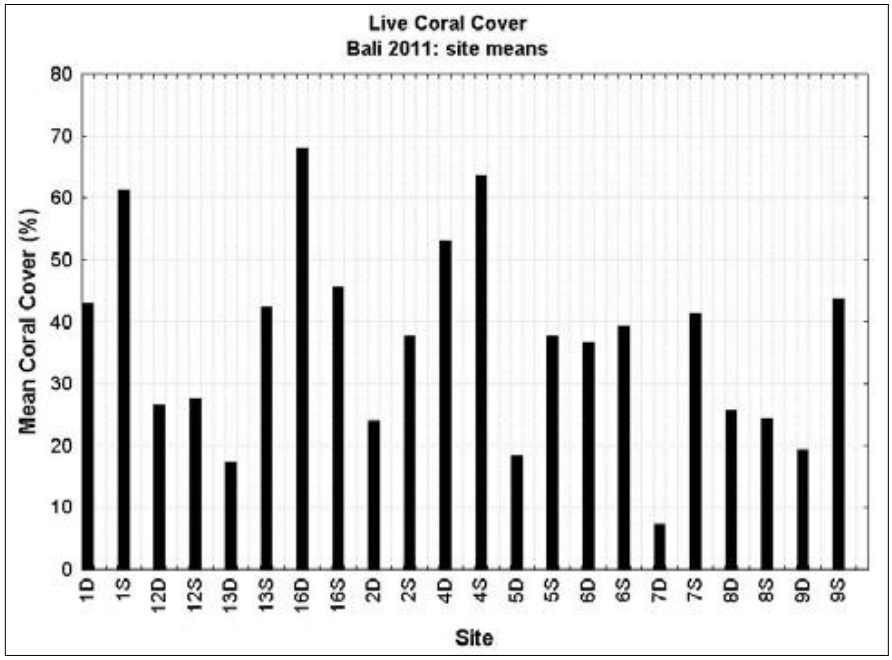
Use the 'How to Analyse' Instructions above to write an analysis of both the graphs below and those that you have just drawn. Remember, you don't have to cover every value, but should be including data from the graph regularly, where it is relevant.

Tip: *Explaining the data is often more of a challenge than describing it. Read through your previous lessons work, particularly sections on what Philip and his team are trying to find out. Doing this should help give you ideas on what might explain your results.*

Graph 1


Fish Diversity vs Coral Diversity
Bali 2011: all sites
Fish Species Diversity (H' abundance)
Coral Generic Diversity (H' genus)
r = 0.3370, p = 0.0057**
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.0
0.2
0.4
0.6
0.8
1.0
1.2

Graph 2



Key
D = Deep
S = Shallow

Note: See Data collection methods for Google Earth image of location of sites.