River Lempa Investigation- CAL 2

This is a Geography investigation. The investigation is on the River Lempa’s channel size in connection with where the source and mouth are.

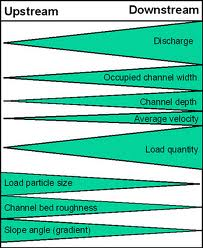
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**INTRODUCTION**

The River Lempa is 262.2 miles long (422 kilometers). It is the longest to travel through El Salvador. The river goes through Guatemala and a small piece of Honduras before coming into El Salvador. The source is in Guatemala and the mouth is in the Pacific Ocean. The source is Sierra Madre. The elevation is 1,200 m (3,937 Ft.). Here is the Bradshaw Model and a map of the Lempa River:

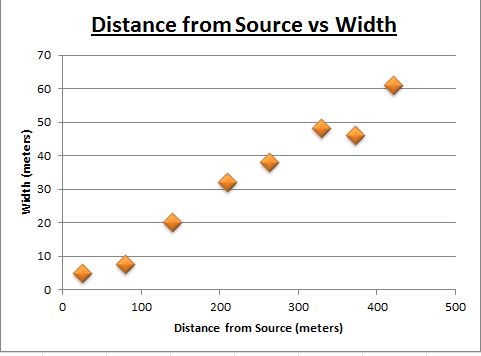
 

My hypotheses are: The width of the river will increase as you move from the source to the mouth, and: The cross-section of the river will increase as you move from the source to the mouth. In the Bradshaw Model for the River Lempa it shows that the occupied channel width increases as it goes downstream (from source to mouth). The model also shows that the cross-section (width x depth) increases as it goes downstream (from source to mouth).

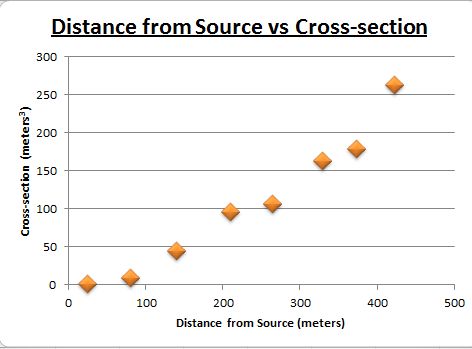
**DATA PRESENTATION**

I am going to graph my results on scatter graphs. There will be one graph for each hypothesis.

-The width of the river will increase as you move from the source to the mouth.



The cross-section of the river will increase as you move from the source to the mouth.



**DATA ANALYSIS**

Iam going to describe my two graphs.

On the first graph “Distance from Source vs. Width” there is a positive correlation. There are no anomalies. The farther away you get from the source the bigger the cross-section of the River Lempa is. The first point on the graph is 5 meters wide and 25 meters from the source. The last point on the graph is 61 meters wide and 422 meters from the source. This tells me that the river widens as it nears the mouth. My hypothesis was: The width of the river will increase as you move from the source to the mouth. The graph supports my hypothesis.

On the second graph “Distance from Source vs. Cross-section” there is a positive correlation. There are no anomalies. The farther away you get from the source the bigger the cross-section of the River Lempa is. The first point on the graph is 2 meters2 and 25 meters from the source. The last point on the graph is 262.3 meters2 and 422 meters from the source. This tells me that the river’s area enlarges as it nears the mouth. My hypothesis was: The cross-section of the river will increase as you move from the source to the mouth. The graph supports my hypothesis.

**CONCLUSION AND EVALUATION**

The conclusion is a summary of my findings.

My hypotheses have proved correct. My graphs’ correlation and points prove this. The correlation is positive and the points go up. I have learnt from this investigation that the closer the river gets to the mouth me bigger and wider it gets.

The evaluation is how well my investigation went.

I think that the investigation went well and I learned a lot. The amount of data was perfect and the data seemed correct. We had a good amount of time working on this and I think I did good.