



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_31581
Title of the Manuscript:	SPATIAL VARIATION MODELING OF GEOTHERMAL GRADIENT AND HEAT FLOW IN EASTERN PARTS OF NIGER DELTA SEDIMENTARY BASIN, NIGERIA.
Type of Article:	Review paper

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
(Your data have absolutely the same distribution. Is it Normal? You need to double check first your 2 sets of Data; the graphs (points) Fig 3 and Fig 4 have exactly the same distribution? If yes please write the relationship between the geothermal gradient and heat flow... (It should be Linear...) If what you said is correct.... Before doing anything else you have to double check your data...please plot (geothermal gradient Vs Heat Flow) to confirm what you observe in Fig 3and Fig 4 Something is wrong in your data...If Fig 3and Fig 4 look the same...then their corresponding histogram Fig 5 and Fig 6 should be the same....either the variogram...(everything depend on this result. Please check) Also I ask you justify the choice of the variogram Model...Don't just affirm: I use this model [Show the result, the justification] you can put it in an annexes page if you want but I want to see. please...why do you choose the Gaussian model.	The locations of the data in Figs. 3 and 4 are the sites of the boreholes from which the geothermal gradient and heat flows were computed. The average of the parameters at each borehole are plotted in the map. The histogram and variogram of the two data sets are not the same because the values of the heat flow and geothermal gradient are not the same at corresponding location. I used this model because in the initial manuscript, I used a linear model and based on one of the reviewer's comment, I tried other models and discovered that the Gaussian model and a nugget effect fit the variogram most. The Gaussian model and the nugget effect are now included in the revised manuscript.