



**SDI Review Form 1.6**

Journal Name:	<a href="#">Physical Science International Journal</a>
Manuscript Number:	2014_PSIJ_13821
Title of the Manuscript:	GEOPHYSICAL DETERMINATION OF THE CAUSES OF EROSION IN SOME PARTS OF ABIA STATE, SOUTHEASTERN NIGERIA
Type of the Article	

**General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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**PART 1: Review comments**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Compulsory</b> REVISION comments	<ol style="list-style-type: none"> <li>The title of this manuscript must be changed for the following reasons: <ul style="list-style-type: none"> <li>The author employed one geophysical method ( resistivity electrical method).</li> <li>The author used resistivity method to determine one of the geological factors controlling the erosion( sediment or soil type) and ignore other factors such as porosity, permeability,..... etc.</li> <li>I suggest the following title: (( Determination of lithology of some parts of Abia state, Southeastern Nigeria, using Vertical Electrical Sounding (VES).</li> </ul> </li> <li>The introduction is very long. The author must summarize it as possible. The introduction lacks the references that employed the geophysical methods including VES in erosion studies.</li> <li>The work lacks a map of the study area illustrates the locations of VES points. It is very important to know a degree in lateral variation.</li> <li>The following references did not list in the reference list: (Mc-Neill,2003); (Zohdy , 1976).</li> <li>The following references are listed in the references list, but did not cite in the text: References in lines: 344,359,439, 444,491, 505, and 510.</li> </ol>	<ol style="list-style-type: none"> <li>Based on your suggestions and remarks, the title is hereby changed to “<i>Geophysical evaluation of erosion sites and the estimation of erosion-prone sediments in some parts of Abia State, Southeastern Nigeria</i>”</li> <li>The introduction tried to encompass all the authors know about erosion studies. It is true that the introduction lacks the references that employed the geophysical methods including VES in erosion studies. But, this is well highlighted in the materials and methods section. The introduction as long as it is, is a summary. This led to the justification and choice of geophysical methods in particular VES appearing first in materials and methods section.</li> <li>The map of the study area has been inserted</li> <li>Corrected</li> <li>Corrected see lines 127, 111, 112, 127, 252, 315, and 286.</li> </ol>



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	<p>6. Line 293: Why does the basement complex expose in the base of VES7 and not in other VESs? What is the distance between VES7 and VES8 and between VES7 and VES6?</p> <p>7. Line 304: The author said "..... that about 16.6m of sediment have been eroded to give the first layer of VES 4" How do you determine that? Can we rely on your method?</p> <p>8. Lines 329 and 330: The author found that " geophysical methods are effective tools in the evaluation of erosion menace". This conclusion is inaccurate because the author used only one geophysical method and did not test the other geophysical methods.</p> <p>9. The author relied on sediment rock type to determine the areas subjected to erosion menace and ignored the effect of other geological factors. Can the researchers depend on one geological factor to determine the areas subjected to erosion menace?</p>	<p>6. The vicinity of VES 5, 6,7 are within two kilometre radius while VES 8 is about 10km away from VES7. The sediments of the area are sitting on an igneous intrusive. The geology of the area has now been addressed as requested in lines 146 to 217. Less than 2km north of VES 7, is presently a basement quarry site.</p> <p>7. Elevation differences were measured during the survey. A picture of the massive gully at Ebem has also been inserted in lines 394 to 402. This method can be relied on.</p> <p>8. The conclusion has been rephrased</p> <p>9. All other factors were highlighted in the introduction and we arrived at a conclusion that the main factor causing the selective erosion menace is geomorphological. Since geomorphology is the study of the physical features (landscape) of the surface of the earth and their relation to its geological structures; therefore geoelectrical survey can be used in determining areas subjected to erosion menace.</p>
<b><u>Minor</u></b> REVISION comments		
<b><u>Optional/General</u></b> comments		