



SDI Review Form 1.6

Journal Name:	Asian Journal of Physical Sciences
Manuscript Number:	Ms_AJOPS_32302
Title of the Manuscript:	Estimation of Sedimentary thickness Using Spectral Analysis of Aeromagnetic Data over part of Bornu Basin, Northeast, Nigeria
Type of the Article	Original Research 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)
<u>Compulsory</u> REVISION comments	<p>The method and software used for estimation of the sedimentary thickness of the study area is technically acceptable and reliable.</p> <p>However, I am not sure the author used the correct method of referencing being adopted by this journal. If my fear is correct, then he has to do a major revision in the manuscript. Out of the 9 blocks or sections only one plot of log energy spectrum versus frequency was shown. At least three would have sufficed.</p> <p>Revision comments suggested are as shown by bringing the cursor on the sticky note on the main manuscript or in the attached comments for the author.</p>	
<u>Minor</u> REVISION comments	<p>Highest sedimentary thickness of 3.5km revealed in the present study is not a sufficient indicator for hydrocarbon accumulation for the swooping conclusion on the hydrocarbon potential of the study area. This result has to be supported by other indicators such as temperature of maturation and other geological structures, such as traps, migration pathways, etc.</p> <p>Line 57: a dark grey to black in colour.....?</p> <p style="padding-left: 40px;">Something is missing here</p> <p>Line 68: The study area covers four aeromagnetic sheets</p> <p style="padding-left: 40px;">The study area is covered by four aeromagnetic sheets</p> <p>Line 72: aeromagnetic survey carried out by who or what company for NGSA</p> <p>Line 86: How did you know that the mineral present in the area is gypsum</p> <p style="padding-left: 40px;">when you did not model the anomaly for magnetic susceptibility?</p>	



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	<p>Neither did the geology of the area indicate that.</p> <p>Line 89: Spector and Grant in this line is not referred.</p> <p>Line 97, 100 and 103: Equations 1, 2, and 3 in these lines where quoted without</p> <p>proof or references. Are they author's formulations/relations?</p> <p>Line 137 and 138: Oasis montaj used should be properly referenced.</p> <p>Line 141: Total number of nine</p> <p>————— Total numbers of nine</p> <p>Line 159: The shallowest depth is 0.29km from SPTE section and not 0.39km.</p>	
<u>Optional/General</u> comments	<p>Highest sedimentary thickness of 3.5km revealed in the present study is not a sufficient indicator for hydrocarbon accumulation for the swooping conclusion on the hydrocarbon potential of the study area. This result has to be supported by other indicators such as temperature of maturation and other geological structures, such as traps, migration pathways, etc.</p>	

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