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| Journal Name: | [**Journal of Geography, Environment and Earth Science International**](https://journaljgeesi.com/index.php/JGEESI) |
| Manuscript Number: | **Ms\_JGEESI\_131491** |
| Title of the Manuscript: | **Anatomy and Facies Analysis of Fluvial Body, Western Flank of Anambra Basin, Southern Nigeria: An Outcrop Study** |
| Type of the Article | **Original Research Article** |

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| **PART 1: Comments** | | |
|  | **Reviewer’s comment**  **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | **Author’s Feedback** *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | **The paper provides a detailed analysis of a rocky outcrop and describes its structure and geometry, seeking to link it to different sedimentary environments linked to river systems. The data presented are detailed and consistent, and clearly described. The discussions are also coherent, and the figures are of good quality. Some adjustments are suggested in some information from the bibliographic review that seems excessive, and others that could be included.** | The bibliographic review was intended to provide a background to the regional geology of the Anambra Basin and its influence on the sedimentary succession |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | **Yes** | Ok |
| **Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.** | **Yes. I would suggest, however, just one minor adjustment – the way the abstract is written seems to suggest that the paper investigated a current, active river system and sought to use that information to better understand the rock record of past analogues. I suggest revising it to avoid giving the reader that impression.** | We revised first paragraph of the abstract to remove any ambiguity. Please see Line 3 of the first paragraph in the abstract. |
| **Is the manuscript scientifically, correct? Please write here.** | The article is correct. I only suggest better defining the concept of some terms, as detailed in “general comments” below. | Ok |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | **The references are adequate. I only suggest considering the possibility of including in the discussions works that investigate the characterization of current meandering river systems, to show the coherence of the rock record with today's environments. One material that can help in this direction is “Landscape evolution and unusual geomorphological-pedological-chronological relations in an alluvial plain associated with early Amerindian settlement in southeastern Brazil” -** [**https://www.sciencedirect.com/science/article/pii/S1040618221003657**](http://www.sciencedirect.com/science/article/pii/S1040618221003657) **.** | I added a sentence to reveal that meandering channels decrease in width in modern systems (Cheliz et al., 2021). This sentence is under sub-section 4.2 (Lines 8-9) on page 26 of the manuscript. |

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| **Is the language/English quality of the article suitable for scholarly communications?** | The writing is clear and adequate. | Okay |
| **Optional/General** comments | **In addition to the names of the formations and their ages, the geological map could also mention the lithological type associated with them – for a reader unfamiliar with the regional context, such information allows for the quicker identification of the essential local characteristics. The detailed description of the characteristics of each geological unit on pages 6 and 7 seemed unnecessary to me – I believe that the figures already provide the information necessary for the purpose of the article. The description of the types on page 12 also seemed to me to be largely repeated from Table 1. I believe that the little information not present in the table could be added, perhaps with an additional column called “Other observations”. The author could present a definition of the concept that he attributes to the facies and architectural element, presenting the authors whose definitions he most identifies with.** | • We feel the text adequately captures the lithological type associated with the formations.  • The detailed description of the characteristics of each geological unit on pages and 7 is included to provide sufficient background information arising from literature review.  • The description of morphology, geometry, dimensions and stacking provide an expanded discussion not covered in Table 1. The table provides a summary of this description for a quick glance. Adding another column will occlude the fine details presented in the description.  • The use of facies (implies lithofacies) in the manuscript is as a subdivision of facies associations recognised based on dominant lithology. In this sense, facies classification in the manuscript does not follow any strict definition other than to refer to classification based on grain size, sedimentary structures, and nature of bedding. On the other hand, the definition of architectural elements was based on the conceptual definition of Miall (1985), North and Taylor (1996), and Allen and Fielding (2007). The first line in sub-section 4.1 (page 21) has now addressed the conceptual definitions that the authors align with. |

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| **PART 2:** | | |
|  | **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)* |
| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in details)* |  |