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| Book Name: | [**Current Research on Geography, Earth Science and Environment**](https://bookstore.bookpi.org/product/current-research-on-geography-earth-science-and-environment-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_6058** |
| Title of the Manuscript:  | **Sea-Surface Characteristics of the Newfoundland Basin of the Northwest Atlantic Ocean during the Last 145,000 Years: A Study Based on the Sedimentological and Paleontological Proxies** |
| Type of the Article | **Book Chapter** |

**Special note:**

**A research paper already published in a journal can be published as a Book Chapter in an expanded form with proper copyright approval.**

**Source Article:**

**This chapter is an extended version of the article published by the same author(s) in the following journal.**

**Applied Sciences, 11(8), 3343, 2021.**

**Available:** [**https://doi.org/10.3390/app11083343**](https://doi.org/10.3390/app11083343)

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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.** | **This manuscript provides valuable insights into the paleoceanographic conditions of the Newfoundland Basin in the Northwest Atlantic over the last 145000 years, a key area influenced by the interaction of the cold Labrador Current and the warm NAC. By using sedimentological and paleontological proxies, including foraminiferal assemblages and oxygenisotopes, the study has wonderfully highlighted past changes in sea-surface temperature, salinity, and freshwater input, which are crucial for understanding glacial-interglacial climate variability and ocean circulation patterns. The identification of Heinrich events and cooling episodes offers an enhanced understanding of abrupt climatic shifts and their regional expressions, which enriches the broaderknowledge of North Atlantic climate dynamics.** |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | **Yes, absolutely** |  |
| 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. | **The abstract effectively summarizes the main objectives, methods and key findings. However, it is somewhat dense and could benefit from clearer structure and less technical jargon to improve accessibility. It would help to explicitly state the core’s unique placement and why it is ideal for the study early on, as well as clarify the broader implications of the findings.*** **Briefly mention the core location earlier to set context.**
* **Include a concise statement on how the findings improve understanding of climate variability in the North Atlantic.**
* **Possibly remove overly detailed proxy names that can be covered in the main text.**
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| **Is the manuscript scientifically, correct? Please write here.**  | **The manuscript appears scientifically sound. The discussion of spatial differences between western and eastern subpolar gyre conditions and their possible causes is logical and well supported. No obvious scientific flaws are detected.** |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** | **The manuscript cites a comprehensive and relevant range of studies including recent and classical works** |  |
| Is the language/English quality of the article suitable for scholarly communications? | **Yes, absolutely.** |  |
| Optional/General comments | **The manuscript successfully integrates multi-proxy data, which is a strength. Ensuring the abstract and conclusions clearly highlight the broader climate implications will enhance impact.** |  |

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| **PART 2:**  |
|  | **Reviewer’s comment** | **Author’s Feedback** (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)* |  |

**Reviewer details:**

**Ashutosh Sharma, United States**