

**Review Form 3**

Journal Name:	<a href="#">International Journal of Environment and Climate Change</a>
Manuscript Number:	Ms_IJECC_126513
Title of the Manuscript:	Influence of Climatic and Oceanographic Parameters on CO2 Exchanges at the Air-Sea Interface in the Gulf of Guinea
Type of the Article	Original Research Article

**General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	By offering a thorough examination of the climate and ocean conditions affecting CO2 transitions between the air and sea in the Gulf of Guinea from 2010 to 2018. Through the use of satellite information and advanced data analysis methods, the research uncovers important details about the seasonal and spatial differences in crucial elements like sea surface temperature, salinity, chlorophyll-a, and wind speed, all of which are crucial in the carbon cycle. Moreover, the results highlight the intricate connections among these variables and their potential impacts on forecasting climate change, thus adding important insights to the fields of oceanography and climate science.	OK, The data have a spatial resolution of 0.25° x 0.25° in longitude and latitude and a temporal resolution of 6 hours, except for salinity and chlorophyll-a (4 and 8 days, respectively) and are provided in netCDF-4 format.
Is the title of the article suitable? (If not please suggest an alternative title)	The title is good but my suggestion is "Impact of Climatic and Oceanographic Factors on CO2 Exchange Dynamics in the Gulf of Guinea (2010-2018)."	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, enough	OK
Are subsections and structure of the manuscript appropriate?	Yes Appropriate	OK
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	The manuscript provides a strong scientific analysis of the climatic and oceanographic factors that impact CO2 exchanges at the air-sea interface in the Gulf of Guinea. Utilizing satellite data and advanced numerical processing techniques through Python, it utilizes a thorough methodology to improve the accuracy and reliability of the findings. The study adeptly examines how different factors like sea surface temperature, salinity, chlorophyll-a, wind speed, and partial pressure of CO2 are interconnected and influence CO2 fluxes. The citations in the existing literature support the claims made, showing that the research is in line with current scientific knowledge. In general, the manuscript seems scientifically valid and offers important contributions to the fields of oceanography and climate change.	OK
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	yes	OK
Minor REVISION comments		OK
Is the language/English quality of the article suitable for scholarly communications?	No need	
Optional/General comments	Accept the article	

PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	NO