

Review Form 1.7

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_111217
Title of the Manuscript:	Stochastic Time Series Analysis, Modeling, and Forecasting of Weekly Rainfall Using SARIMA Model
Type of the Article	Original Research Article

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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)
Compulsory REVISION comments 1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) 2. Is the title of the article suitable? (If not please suggest an alternative title) 3. Is the abstract of the article comprehensive? 4. Are subsections and structure of the manuscript appropriate? 5. Do you think the manuscript is scientifically correct? 6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u>	The use of ARIMA and SARIMA models is an excellent tool for analyzing time series, their implementation and knowledge allow us to advance the understanding of processes with trends or seasonal variations The title Stochastic Time Series Analysis, Modeling, and Forecasting of Weekly Rainfall Using SARIMA Model is suitable. The abstract is adequate and describes the problem The structure is appropriate. The paper is correct. The references is adequate	Thank you for highlighting the significance of ARIMA and SARIMA models in time series analysis. These models indeed serve as powerful tools for understanding and forecasting data with trends and seasonal variations. OK OK OK OK OK
Minor REVISION comments 1. Is language/English quality of the article suitable for scholarly communications?	The article is written in English suitable for the topic developed.	Agreed, Thank you
Optional/General comments	1- It is recommended to improve the figures eliminated smaller negative values to be able to better value the results 2- Add figures from the accumulated periodograms of the original series and the residue series 3- Indicate some characteristics of the data series, for example make some comment about the extreme value observed in week 985 4- Add figure with ACF and PACF of the residue series to improve the observation of the adjustments obtained 5- Improve the conclusions, add comments on the importance of the SARIMA and ARIMA models Incorporate a comment the importance the SARIMA model in the study of precipitation series and the advantage over the other models. 6- Incorporate a comment on why a weekly series of precipitation is used, which is the best representation regarding a monthly series.	1. Rightly pointed out, Suggestion incorporated and figures modified in revised version of the manuscript. 2. We have carefully considered your input, and while we understand the potential value of such figures, we have decided to maintain the current level of graphical representation to ensure conciseness and focus in our presentation. 3. It is already described. 4. Due to limited space and maintain and ensure conciseness we decided not to include such figure. 5. Already described in the conclusion. 6. The decision to use a weekly series for precipitation was driven by the inherent variability and dynamic nature of precipitation patterns. Weekly data allows for a more granular analysis, capturing short-term fluctuations and providing a detailed understanding of precipitation events within each month. This approach enhances our ability to discern patterns, identify trends, and investigate potential anomalies that might be

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		obscured in a monthly aggregation.
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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>	