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| Journal Name: | [**Physical Science International Journal**](https://journalpsij.com/index.php/PSIJ) |
| Manuscript Number: | **Ms\_PSIJ\_131629** |
| Title of the Manuscript: | **Fractal dimension of solar wind speed at different time scales using box counting method** |
| Type of the Article | **Research Article** |

PART 1: Comments

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|  | **Reviewer’s comment** | **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 study of the fractal dimension of solar wind speed at different time scales using the box counting method is crucial in the scientific community as it provides insights into the complex, chaotic behavior of solar wind. This method helps in understanding the underlying self-similarity and scaling properties of the solar wind, which are important for modeling space weather phenomena. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | Yes |  |
| **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.** | Abstract and conclusion seems repetitive. Please redefine the abstract. | This observation was taken into account in the revised version of the paper. We have therefore rewritten the abstract. |
| **Is the manuscript scientifically, correct? Please write here.** | Yes, It is correct as per the scientific aspects. | - |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | No, last five years are very limited in the paper | This observation was also taken into account. Thus, we identified the oldest references and replaced them all with more recent works. These are references number 1, 2, 6, 8, 14, 16, 19, 20 and 28 |
| **Is the language/English quality of the article suitable for scholarly communications?** | No, few grammar and spelling mistake are available. | We have read the entire paper and corrected the grammar and spelling errors identified. |
| **Optional/General** comments | Need to rewrite the abstract, keywords, and references. Peer review Comments  1. The content of the abstract and conclusion seems repetitive ! 2. Why is the speed of solar wind typically measured in kilometers per second (km/s) ? 3. The nonlinear dynamics of solar wind speed are not explained in the introduction section. 4. Various methods for determining the fractal dimension are missing. 5. All mathematical equations should be numbered. 6. Figure 4 is not justified. 7. The references from the last five years are very limited in the paper. | Responses to Peer Review Comments   1. We have rewritten the abstract to be completely different from the conclusion as the reviewer suggested. 2. All the speed data of the sent available in the omniweb server are provided in km/s. This is therefore not specific to our study 3. The objective of our study is only to analyze the fluctuations of the solar wind from the determination of the fractal dimension. The evaluation of the nonlinear or chaotic dynamics of the behavior of the solar wind is the step that follows this preliminary study. It will be done with other tools that we have mentioned in our perspectives 4. The methods for determining the fractal dimension are widely documented in the literature. More details on these methods can be found in particular in the works of Ali, Jean, etc... We did not consider it useful to make an exhaustive list of these works. 5. All mathematical equations used in our work were well noted in the initial version we submitted. 6. This figure has been justified in the revised version. 7. We have taken this observation into account in the revised version. Thus references number 1, 2, 6, 8, 14, 16, 19, 20 and 28 have been replaced by other more recent works. |

PART 2:

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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)* | We agree with the reviewers on most of their observations and suggestions. Appropriate corrections have been made in the revised version. |

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| **Reviewer Details:** | |
| Name: |  |
| Department, University & Country |  |