

## Review Form 1.6

Journal Name:	<a href="#">Asian Journal of Research and Reviews in Physics</a>
Manuscript Number:	Ms_AJR2P_87931
Title of the Manuscript:	Impacts of the Variations of Aerosols Components and Relative Humidity on the Visibility and Particles Size Distribution of the Desert Atmosphere: Validating Results Obtained from OPAC 4.0 Using MERRA-2 Model (Aangstrom Exponent and Extinction Coefficient) Data
Type of the Article	Original Research Article

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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 guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journalajr2p.com/index.php/AJR2P/editorial-policy> )

## Review Form 1.6

### 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)
<b>Compulsory</b> REVISION comments	<p>The paper should be interesting, but it is very confused. Some information are missing, others are difficult to understand, and the aim of the paper is not clearly presented. The paper must be improved considering these comments:</p> <ul style="list-style-type: none"><li>- The size of the letters is not constant in the text. Also, the absence of line numbers do not facilitate the reviewer work.</li><li>- There are too many "except" in the text. I suggest to the authors to separate the deserts in (at least) to different populations than giving a global result following by "except for ...".</li><li>- Introduction, first line : Dust particle can be smaller 1 <math>\mu\text{m}</math> (see the various publications on the detection of submicronic desertic dust particles from aerosol counters).</li><li>- Introduction, line 5-6 : The sentence is unclear.</li><li>- Page 2, second paragraph: I am not sure that dust is the main source of the particular matter. In particular, PMs originated from pollution (primary and secondary particles) are the main source in most of the countries. Also, is it in number concentration or mass concentrations ?</li><li>- Part 2.3 line 11: Replace "eachof" by "each of".</li><li>- Part 3.0: The sentence "The results of the analyzed data sets extracted from MEERA-2 model and OPAC 4.0" is given twice.</li><li>- Part 3.0, 2 last line of the page 3: This sentence is unclear and need more explanation.</li><li>- Page 4 line3:"level (<math>\beta</math>) and season (<math>\alpha</math>)" must be defined.</li><li>- Page 4 lines 5-7: The sentence is unclear and some words seem to be missing,</li><li>- Page 4 line 9 : "the seasonality (<math>\delta</math>)" must be defined.</li><li>- Page 4, middle of the first paragraph: I don't understand why "It can also be said that the data fitted the models well".</li><li>- Page 4 end of the first paragraph: The authors must explain why they obtained different parameter significances from the different deserts.</li><li>- Table 1 and Table 2: I am not sure it is necessary to provide 5 digits, only 2 or 3 are enough.</li><li>- Figure 1a-h: What is the unit for the Y-axis ? It is impossible to understand the figures (and why most of the deserts has low values) without the units.</li><li>- Figure 1a-h: The humidity value must be given in the legend.</li><li>- Figure 1a-h: Why the name of the model changes for one figure to another?</li><li>- Figure 2a-B: What means "<math>\alpha</math> plot"?</li><li>- Figure 2a-h: Why the name of the model changes for one figure to another?</li><li>- Conclusion, line 4: Also, can you give only 2 or 3 digits for the numbers?</li><li>- Conclusion, line 7: Replace "that, it" by "that it".</li><li>- Conclusion, line 8: Thus sentence is strange : "which is contrary to the results reported in our previous work". It means that your previous analysis was wrong; why are you sure that the present one is correct?</li><li>- Conclusion line 13: Thus, was can be the origin of the angstrom coefficient fluctuations?</li><li>- End of the conclusion: Can you provide some perspective for future works on this subject?</li></ul>	<p>We obtained significance for different parameters because of the tool we used in analysing the data (time series analysis using SPSS) Sometimes approximation has a way of hindering results presentation. It is possible if you approximate figures it might not give a good representation of the results.</p> <p>But the humidity value is represented in the X axis as (OPAC0MOD1) meaning OPAC model1 at 00%RH Meaning the plot of angstrom exponent (<math>\alpha</math>)</p>
<b>Minor</b> REVISION comments		
<b>Optional/General</b> comments		

### 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?	<u>(If yes, Kindly please write down the ethical issues here in details)</u>	