

**Review Form 1.7**

Journal Name:	<b>International Journal of Environment and Climate Change</b>
Manuscript Number:	<b>Ms_IJECC_110011</b>
Title of the Manuscript:	<b>Potential Factors Affecting the Spatiotemporal Features of Sunshine Duration in Saudi Arabia Between 1983 and 2022</b>
Type of the Article	<b>Research Article</b>

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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)
<p><b>Compulsory</b> REVISION comments</p> <ol style="list-style-type: none"> <li>1. <b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li>2. <b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li>3. <b>Is the abstract of the article comprehensive?</b></li> <li>4. <b>Are subsections and structure of the manuscript appropriate?</b></li> <li>5. <b>Do you think the manuscript is scientifically correct?</b></li> <li>6. <b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> <li>1. <b>Yes! The study is important for scientific community. As researchers studied Sunshine Duration (SD) in Saudi Arabia Between 1983 and 2022.</b></li> <li>2. <b>Current study mainly engaged with the variation of SD in the selected region and potential factors affecting SD. Title of the manuscript "Potential Factors Affecting the Spatiotemporal Features of Sunshine Duration in Saudi Arabia Between 1983 and 2022" is not much suitable for this study. Although, correlation between factors affecting the variation of SD is mentioned in the subsection and conclusion, supportive figures of humidity, temperature, wind speed, precipitation, cloud cover etc. are not added in the manuscript. "Temporal Variation of Sunshine Duration and Potential Factors Affecting with Emphasis on Saudi Arabia Between 1983 and 2022" may suggested title.</b></li> <li>3. <b>Abstract is comprehensive.</b></li> <li>4,5. <b>Sections and structure of the manuscript is appropriate, and manuscript is scientifically correct.</b></li> <li>6. <b>Reference cited are appropriate.</b></li> </ol>	
<p><b>Minor</b> REVISION comments</p> <ol style="list-style-type: none"> <li>1. <b>Is language/English quality of the article suitable for scholarly communications?</b></li> </ol>	<ol style="list-style-type: none"> <li>1. <b>Quality of English is suitable for the scholarly communications.</b></li> <li>2. <b>Methodology section can summarize around two-third of current length. Most important is where method used in this study, and period of dataset applied in different method shall be vital part of paragraph.</b></li> <li>3. <b>Caption of the figure may include more details of the panels.</b> E.g. Fig. Variation of SD in Saudi Arabia during the Spring Season a) Sunshine duration (h) overlaid with five year running mean (red dotted) and linear trend (purple). b) M-K statistics UF (green), UB (blue) region between dotted red lines is 95% conf bond. c) Monthly mean SD in hour of spring d) Decadal trend in SD (h/10y).</li> <li>4. <b>Formatting of the font size, style is not done properly since some part have different size of font.</b></li> <li>5. <b>Check explanation of Table-1. In the table mentioned variance of PC-1 is 58% while in next paragraph it is written as 57%.</b></li> <li>6. <b>Typing errors should correct. E.g. power factor in the units.</b> E.g. <math>Wm^{-2}</math> should be <math>Wm^2</math> with proper superscript for power factor.</li> <li>7. <b>Section 2.4.8, line "However, the trend of SD in Saudia (Also check typing error here) Arabia during the last 18 years of the 20th century and the 2nd decade of the 21st century was not significant from the statistical point of view in the summer." &gt;&gt; What is reference data or literature for above statement?</b></li> <li>8. <b>Researcher may include figures showing correlation between potential factors with SD in the addition of table. This is suggestion and not compulsion as results are clear with values in table but may enhance with figures for the readers.</b></li> </ol>	

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	9. Additionally, researchers may want to see recent study by other authors E.g. Anwar et al., "TREND AND VARIABILITY OF SUNSHINE DURATION OVER SAUDI ARABIA USING THE EUMETSAT SATELLITE APPLICATION."	
<u>Optional/General</u> comments		

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

Name:	<b>Tejas Dattaram More</b>
Department, University & Country	<b>Dr. Vishwanath Karad MIT World Peace University, India</b>