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Journal Name:	Journal of Energy Research and Reviews
Manuscript Number:	Ms_JENRR_91325
Title of the Manuscript:	VALIDATION OF GLOBAL SOLAR RADIATION MODELS ON A HORIZONTAL SURFACE IN THE CLIMATIC ZONES OF BURKINA
Type of the Article	Original Research Article

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

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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	<p>Major Revision The manuscript presents the Validation of Global Solar Radiation models on a horizontal Surface in the Climatic Zones of Burkina. The authors carried out their analysis with one year of data obtained from the meteorological agency to assess the three different locations with different geographical information using the existing Models provided in the literature. Firstly, based on the Abstract, introduction of the manuscript and Materials and methods section, in my opinion, the focus of the manuscript is limited. Moreover, the manuscript's quality should be improved in several ways for consideration for publication in Journal of Energy Research and Reviews.</p> <ol style="list-style-type: none"> 1. The Abstract is not well written. A good Abstract should begin with a brief but precise statement of the problem, then, followed by a description of the research method and design, the major findings and conclusion reached. Authors need to recast it for better presentation. 2. The introduction needs a thorough revision both in style and content. The introduction must consist of the following (general background of the study, related literature, problem statements, and precise definition of the research gap). 3. The research gap is not clearly defined. There is abundant research work on solar radiation estimation models, including using meteorological data to predict a particular location's solar radiation. The authors need to presents what makes their work different from other research work in this research area? Why is the work important in the region of study? 4. In table 1, Geographical coordinates of the cities studied, the Authors gave a wrong information. Authors should ensure they use the current information of the cities studied. However, the unit of latitude and longitude are missing. 5. The authors made a claim of using data delivered by Matlab and collected the meteorological data for one year, 2017. But, nowhere in the manuscript the data displayed. I recommend Authors should include the data in the method section or in supplementary section. Though, the data is just for a year, but there might be a tendency for the missing value arise due to many factors, and sometimes due to the ways, the data was captured. Based on this, some values are not available at all for observation. Nevertheless, authors need to handle those missing values before modeling and analysis of the data. How do Authors handle the missing data? Authors should explain the way they handle and clean the data to avoid necessary errors in their work. This should be reported in the methodology section. 6. Authors should include a section for the “statistical tools for validation” under material and methods section, with clear definition, mathematical equations of each. The one gave may lead to confusion. 7. The quality of almost all the figures needs to be improved. Authors should change axes title, legends, and units for better reading and presentation. The fonts size of the axes in all figures must be adjusted. 8. In the results section, the authors provide a graph for all the cities considered in their studies. The graphs were plotted based on the data collected. The graph for the months of April, July, September and December were reported for all the cities. Six months were left and no any explanation on that. I recommend the authors to display all the graphs for better interpretation of the results. 9. In the section of statistical indicators results, authors displayed the results of the four models and for the different chosen days of the year 2017 for all the three cities. However, the graphs were limited to just four different months. As presented in this section, Authors must include the graphs for 	

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	<p>all the data, otherwise, the data should be for the months their graphs were displayed.</p> <p>10. Authors should cross-check the references used. The authors adopt IEEE referencing style, but references [3], [4], [5], [6], [7], [8], [13], [14], [15], [16], [18], [19], and [20] were not correctly written. There is one or more missing information like Journal name, volume, issue no., pages...Authors should check the order of writing references.</p> <p>11. It seems like authors did not model or predicts anything with the data collected. The authors used the collected data and substitute in the four existing models and plotted series of graphs. Is there any novelty at this work?</p> <p>Minor Revision</p> <p>1. The authors need to check the manuscript to improve grammatical aspects of it. There is a lot of redundancy, tautology, and typographical errors.</p> <p>2. Citation needs to be improved. Authors should follow the Journal reference style format. The authors must use the Journal of Energy Research and Reviews guidelines for preparing their manuscripts.</p> <p>3. In acronyms section, kWh means kilo watt hour</p> <p>Overall, I cannot see the critical aspect of the work that the authors have developed. I will recommend them to highlight this aspect in the revision.</p>	
Minor REVISION comments		
Optional/General 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?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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