

Review Form 1.7

Journal Name:	Asian Journal of Research and Reviews in Physics
Manuscript Number:	Ms_AJR2P_116227
Title of the Manuscript:	TEMPORAL AND SPATIAL VARIATION OF THE VIRTUAL HEIGHT OF IONOSPHERIC F2-LAYER OVER TWO EQUATORIAL STATIONS DURING MINIMUM TO ASCENDING PHASE OF SOLAR CYCLE 25
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)
<p>Compulsory REVISION comments</p> <ol style="list-style-type: none"> 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. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>The manuscript provides unique results about ionosphere using ionosondes data. I believe with minor suggestion it can be accepted for the publication.</p> <p>In Abstract Section:</p> <ol style="list-style-type: none"> 1. Change the title to TEMPORAL AND SPATIAL VARIATION OF THE VIRTUAL HEIGHT OF IONOSPHERIC F2-LAYER OVER TWO EQUATORIAL STATIONS DURING THE MINIMUM TO ASCENDING PHASE OF SOLAR CYCLE 25 2. Remove Variability from the keywords. 3. Add Ionosphere in the keywords. <p>In Introduction Section:</p> <ol style="list-style-type: none"> 1. Citations missing. " However, the F2-layer's characteristics, including electron density and altitude, exhibit variability influenced by factors like solar activity, time of day, and geographical location" 2. Change behaviour to behavior in " Ionospheric parameters used in studying the ionosphere F2-layer behaviour include the critical frequency of the F2 –layer (foF2)" 3. Add transition lines at the end of each paragraph to connect with the next paragraph. Like in 2nd paragraph you are talking about the height of the ionosphere. Then shifted to the equatorial region. There must be a line at the end of the previous paragraph like F2 altitude varies depending upon the multiple factors including solar conditions, geographic/geomagnetic location etc.. then move onto the equator. Like you did at the end of the third paragraph where you mentioned the impact of solar variations affecting the equatorial region then continued to solar cycle. <p>In Materials and Methods Section:</p> <ol style="list-style-type: none"> 1. Change the word download to retrieve everywhere in the manuscript 2. Add the accessed time of the links to retrieve the data. Like accessed on 23rd March etc. 3. Remove extra spaces from everywhere "if UTC is ahead of the station, where HD is hour difference." " where n is the number of hourly data present in a month" " minimum and ascending phases of solar cycle 25 to investigate their variations" 4. Add references for the equations. <p>In Results and Discussion Section:</p> <ol style="list-style-type: none"> 1. Change the line "Depicted in Figs.1 and 2 below are the plots of the diurnal and seasonal variation of h'F2 at Ilorin and Boa Vista during minimum phase year 2020 of solar cycle 25 for the different seasons"... to The figure 1 and 2 display/illustrate.... 2. There should be a full stop at the end of the line. Correct it everywhere. Further observation from the plots revealed two typical night peaks; post-midnight peak (05:00 LT) and pre - midnight peak (20.00 LT) 	

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	<p>3. Use the same font and size in every figure as fig 2 and fig3 both look very different</p> <p>4. Why are their two headings for the discussion?</p> <p>5. You have explained the overall process in the discussion section. Its better to connect it with your results add 3-6 lines about your results in discussion section and connect them with other authors.</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>		
<p>Optional/General comments</p>		

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)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

Reviewer Details:

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