

Review Form 1.6

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| Journal Name: | Physical Science International Journal |
| Manuscript Number: | Ms_PSIJ_85827 |
| Title of the Manuscript: | Seasonal variability of foE and nocturnal winter anomaly in E-layer during solar cycles 21 and 22 at the Ouagadougou station |
| 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:

(<https://www.journalpsij.com/index.php/PSIJ/editorial-policy>)

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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) |
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| Compulsory REVISION comments | <p>The paper entitled "Seasonal variability of foE and nocturnal winter anomaly in E-layer during solar cycles 21 and 22 at the Ouagadougou station" presents results pertaining to the variability of foE for the solar cycles 21 and 22. The results of the paper will be helpful in understanding the complexities of ionosphere in the E region. The paper can be recommended if the authors address the following issues:</p> <ol style="list-style-type: none"> 1) In Introduction , review of literature authors should cite specific studies of the E region of the ionosphere and their contribution to ionospheric physics. 2) The geomagnetic latitude of Ouagadougou station should be given in introduction section. 3) In methodology section it is not clear whether authors have used the IRI model only for foE data or some other method eg an ionosonde. "These data are collected in measuring stations as well as satellite observations." This line in methodology section is misleading. Therefore methodology should be written very clearly indicating the source of data for the study. If IRI model is used for the study then the model and year of IRI should be described briefly and source from where it has been downloaded. Equations are not written in the proper format and their subscripts are also not described correctly. 4) Solar Cycle 22 should be shown with the help of graph indicating maxima and minima. In Table 1 it is not clear when did the maximum phase of solar cycle 22 occur? This should be indicated. 5) Figure 1 caption should be corrected. 6) Figures 5 and 6 captions should indicate the year of the study. 7) Authors have not explained the purpose of using NmF2 since this paper they study the variability of E layer only. Proper reasons for giving the graphs of NmF2 should be given. Also NmE should be described in section 3.2. 8) Variability of NmE for minimum phase of SC22 is also not given. | |
| Minor REVISION comments | Discussion and conclusion may be modified on the basis of previous findings. | |
| 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) |
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| Are there ethical issues in this manuscript? | <i>(If yes, Kindly please write down the ethical issues here in details)</i> | |

Reviewer Details:

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| Name: | Shivalika Sarkar |
| Department, University & Country | Regional Institute of Education, India |