

Review Form 1.7

Journal Name:	International Astronomy and Astrophysics Research Journal
Manuscript Number:	Ms_IAARJ_106874
Title of the Manuscript:	REFRACTIVITY GRADIENT VARIATIONS AND INTERTROPICAL DISCONTINUITIES ACROSS NIGERIA.
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.journaliaarj.com/index.php/IAARJ/editorial-policy>)

Review Form 1.7

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> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>1.- Yes, as the research focuses on the study of the interrelationships between the Refractivity Gradient and the Intertropical Discontinuity (ITD). The ITD is an important climate-determining phenomenon in West Africa. The authors calculated the refractivity gradient using hourly temperature and relative humidity data for the years 2017 and 2018 taken at two levels (surface and 1000hpa) collected from the European Centre for Medium-Range Weather Forecasts (ECMWF) archives for twenty weather stations in Nigeria. The refractivity gradient values obtained were used to characterise the atmospheric conditions at the stations diurnally and seasonally. The results showed that, during the dry season, the atmosphere is sub-refractive in the coastal and savanna-derived regions, while super-refractive conditions prevail during the rainy season.</p> <p>2.- The title corresponds to the content of the article.</p> <p>3.- The abstract reflects the subject of the article and its conclusions.</p> <p>4.- The article is structured correctly.</p> <p>5.- Yes.</p> <p>6.- The references are correct and current.</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	Yes.	
<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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

Name:	Francisco Ureña Prieto
Department, University & Country	Universidad Nacional de Educación a Distancia, España