



Morphology of Radio Trapping over West African Atlantic Ocean using ERA5 Data

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Abstract:

Occurrence of radio trapping over West African Atlantic Ocean (WAAO) was carried out using ERA 5 hourly data covered the period of ten years (2001 -2010). Obtained meteorological data were used to calculate refractivity, refractivity gradient and modified refractivity gradient. Characteristics of radio trapping were obtained from the refractivity and modified refractivity gradient. Altitudinal distribution of anomalous radio propagation and percentage occurrence of radio trapping were obtained for ten different points on Atlantic Ocean. Diurnal and spatial distributions of different anomalous conditions were also obtained for West African and Atlantic Ocean. Values of obtained gradient were compared with ITU values. The result established the occurrence of ducting which vary seasonally and geographically across the West Africa Atlantic Ocean. The Influence of sea surface temperature on radio trapping were also examined.

Biography:

Emmanuel Israel has completed his PhD at the age of 41 years from Federal University of Technology, Akure, Nigeria. He is a Lecturer and researcher in the same institution. He has published more than 10 papers in reputed journals and has been serving a reviewer

Publication of speakers:

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- ftenberg and their role in survival on basil. Environmental microbiology. 18. 10.1111/1462-2920.13268.
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