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Development of an ionospheric map for Africa

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Abstract content \
 \ (Max 300 words)

An ionospheric map is a computer programme that shows spatial and temporal representations of ionospheric parameters like the electron density, critical plasma frequencies, etc., for every geographical location on the map. To obtain the parameters, data from ionospheric models and instruments such as ionosondes and GPS receivers has to be used. This presentation describes how the International Reference Ionospheric (IRI) model will be incorporated into the developement of an ionospheric map for Africa. The IRI has been in use since 1978 with the latest upgrade done in 2011 and is known as IRI-2011. This model has been one of the most consistent in predicting ionospheric parameters over most of the geographical locations. However, the model fails to predict accurately in regions where data was not available during its development, hence the use of data from GPS receivers and other models.

References
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PhD

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