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## Storm-time TEC mapping over Africa and surrounding areas

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Based on storm-time ionospheric total electron content (TEC) derived from Global Positioning Systems (GPS) measurements over the African sector and surrounding areas, TEC maps will be developed based on data assimilation technique. The region of interest extends from -40 to 40 and -20 to 60 latitude and longitude degrees, respectively, and the Kalman filtering technique with the International Reference Ionosphere (IRI) as a background model will be used during data assimilation process. A statistical analysis of the results will also be presented.

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