US ING STORM TO SUPPORT SHORT TERM IONOSPHERIC FORECASTS

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Abstract:

The International Reference Ionosphere, IRI2001, now contains a parameterised ionospheric storm model, called STORM. Using Ap indices, this predicts the nature of the global ionosphere by producing a latitudinal correction for peak electron-density F2-region maps. This paper explores the use of STORM to support ionospheric forecasts. To do this, a corrected global index of ionospheric activity is constructed using STORM and the results of using this index are compared with manual forecasts made locally. The utility of STORM is also explored for the Australian region to estimate whether it can be used to extend local regional ionospheric models.