



## **The International Reference Ionosphere: A review of current activities and plans for the future**

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The International Reference Ionosphere (IRI) is at the core of many assimilative models of the global ionosphere that aspire to provide a more accurate representation of the 4-D ionosphere by combining a core ionosphere model with GNSS and other data sets. This presentation will review the status of the International Reference Ionosphere (IRI) project and model with special emphasis on activities during the last two years. We will discuss the most important IRI improvements and parameter additions that were accomplished during this time period. The scorecard includes significant improvements in the bottomside electron density and ion composition, the inclusion of solar activity variations for the topside electron temperature, and for the first time a model for auroral oval boundaries. In addition we will also review the status of several ongoing collaborative projects that promise significant future improvements for the IRI model including a better representation of the F2-peak height (hmF2), the coupling of IRI to plasmaspheric models, and the development of a real-time IRI (IRI-RT). Work also continues on the accurate IRI representation of ionosphere conditions during the recent highly unusually low and extended solar minimum. Time permitting, we will briefly discuss recent IRI-related meetings and workshops and their outcomes, and present some recent IRI usage statistics.