Ionospheric Prediction and Forecasting Services in Mediterranean Area

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This paper will present the basic approach on ionospheric prediction and forecasting used to provide services in Mediterranean area. Both services based on two ionospheric stations (Geomagnetic Indices Forecasting and Ionospheric Nowcasting Tools – GIFINT project) and one ionospheric station (Cyprus Ionospheric Forecasting Service – CIFS project) rely on background ionosphere described by the Simplified Ionospheric Regional Model (SIRM). In case of GIFINT the update of SIRM model is performed by the critical frequency of the F2 layer (foF2) and the propagation factor (M(3000)F2) values coming from the Rome and Gibilmanna ionospheric stations, while in case of CIFS the update of SIRM model is performed by the foF2 and M(3000)F2 values coming from the Nicosia ionospheric station. Some examples of nowcasting and long term maps for foF2 and M(3000)F2 will be shown. Discussion will be focused on the role of real time updating of the SIRM model.