

Ionospheric critical frequency prediction service based on digisonde measurements at Dourbes

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Presented is an operational service for high-resolution monitoring and prediction of the ionospheric F-layer critical frequency, foF2. The service is based on the recently developed monthly median model of foF2 using the extensive database of the RMI Geophysical Centre in Dourbes (50.1°N, 4.6°E). The model utilizes data from several solar cycles and uses the solar radio flux index (F10.7) as a solar activity measure. Provided is a preliminary evaluation of the service, including the advantages, uncertainties and shortcomings. Future applications and possible model improvements are also discussed.