Wavelet Based Detection and Fitting of Backscatter Ionogram Leading Edges

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Abstract

Backscatter ionograms are often used in HF communication and over-the-horizon radar systems as a means of assessing the available propagation. In such situations, the main feature of interest is the leading edge. An algorithm is outlined for the real time extraction of leading edges from backscatter ionograms via the two-dimensional discrete wavelet transform.