



A procedure for the automatic detection of the spread F in vertical ionograms

Carlo Scotto and Alessandro Ippolito

Istituto Nazionale di Geofisica e Vulcanologia, Rome, Italy (carlo.scotto@ingv.it)

A procedure for detecting vertical ionograms affected by spread-F is presented. This routine has been implemented in Autoscala program, and applied to the ionograms of 9 polar ionospheric stations involved in AUSPICIO project. For each ionospheric station many runs of the detection routine have been made, changing the parameters of the routine in order to find the set up providing the best results. For each ionospheric station, the method of the Receiver Operating Characteristic (ROC) curve has been applied studying the performance thorough the false positive, true positive, false negative, and true negative analysis. The performance achieved are presented showing the results in terms of detecting spread-F cases.