Abstract:

In this paper, we use the so-called the Wavelet Transform Modulus Maxima lines (WTMM) technique for estimation of the capacity, the information and the correlation fractal dimensions of the Intermagnet Observatories time series. Analysis of Hermanus, Baker-Lake, Kakioka, Albibag and Wingst observatories data shows that the correlation and the information dimensions can be used a supplementary indexes for geomagnetic disturbances identification.