Inductive effects related to tectonic activity in the Schumann resonance band

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Among the objectives of the MEM Project (Magnetic and Electric field Monitoring) there is the study of the relation between the Earth conductivity structure and the magnetic transfer function related to geodynamical processes. The frequency band from 0.1 Hz to 40 Hz allow us to investigate the upper part of earth crust. The resistivity of this region, in the area of Duronia observatory, is high so the range of investigated depth is about 15 km. In the present study we have analyzed some statistical features of earth transfer functions not correlated to local tectonic processes. This normal feature is characterized by a good time coherence of the magnetic transfer functions. This high time coherence is the starting point in order to discriminate the anomalous behaviour related to local seismicity.