



Ionospheric precursors for the crustal earthquakes in Italy

L. Perrone (1), B. Zolesi (1), and L. Korsunova (2)

(1) Istituto Nazionale di Geofisica e Vulcanologia, Geomagnetism, Aeronomy and Environmental Geophysic, Rome, Italy (perrone@ingv.it), (2) Pushkov Institute of Terrestrial Magnetism, Ionosphere and Radio Wave Propagation (IZMIRAN), Moscow, Russia

Crustal earthquakes with moderate magnitude $M=5.0-6.0$ observed in Italy for the period 1995-2002 were used to check if the earlier obtained relationships for middle-term ionospheric precursors are valid for these type of earthquakes. The ionospheric precursors are based on the observed variations of the sporadic E-layer parameters ($h'Es$, $fbEs$, $foEs$) and $foF2$ at the ionospheric station Rome. Empirical dependencies for the seismo-ionospheric disturbances relating the earthquake magnitude and the epicentric distance are obtained and they have been shown to be similar to those obtained earlier in other seismic regions of the world.