



Frequency-dependent attenuation of seismic waves in the Pannonian basin

Bálint Süle

Kövesligethy Radó Seismological Observatory, MTA CSFK GGI, Budapest, Hungary (suba@seismology.hu)

The attenuation of S waves have been estimated for the territory of Hungary (central Pannonian basin). Waveforms of 310 local earthquakes ($0.8 < M_L < 4.8$) were analyzed. The events were recorded at hypocentral distances between 20 and 100 km. For estimating the frequency-dependent attenuation of S waves (O_S) the coda normalization method was applied in the frequency range from 1.5 to 24 Hz. The results show strong attenuation of S waves along the ray paths. By fitting a power-law frequency dependence model the relation $Q_S = 92 \cdot f^{0.93}$ is obtained.