

Unified Scaling Law for Earthquakes in the Friuli Venezia Giulia Region: time dependent assessment

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The parameters of the Unified Scaling Law for Earthquakes (USLE) in the North Eastern part of Italy, namely in the Friuli Venezia Giulia Region (FVG) and its surroundings, have been studied based on the updated and revised bulletins compiled at the National Institute of Oceanography and Experimental Geophysics, Centre of Seismological Research (OGS catalogue). In particular, we considered all magnitude 1.5 or larger earthquakes, which occurred in 1995-2015 and within the territory of homogeneous completeness identified for the OGS data. Two versions of the catalogue magnitude values were use – ML(ogsG) and ML(ogsB), which are recomputed from original magnitude Md, using two different relaations.

The USLE parameters A, B and C have been evaluated at each of about 80 seismically active cells of $1/8^{\circ} \times 1/8^{\circ}$ size, for moving time windows of 6-year. The obtained dynamical change of USLE attractor does not depend on the catalogue's version, but evidences the significant transformations at the intermediate-term scale of years.