



Geological Hazards in urban area: the case of Rome (Italy)

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The assessment and the forecasting of geological hazards in the city of Rome is a challenge for geologists studying in urban environment.

Different geologic hazards insist on multiple sectors of the city with specific degree of impact. Subsidence, cavities, landslides related to man-made deposits and seismic hazards represent the principal geologic hazards to investigate. The complexity of recent alluvial deposits (Holocene), the thickness of man-made filling, the fast increasing of urban development and the long history of the Rome area are the main characteristic feature. A methodological scheme has been performed, based on a quantitative approach, fundamental for evaluating and processing hazard's map. Geological, geotechnical, stratigraphic and hydrogeological data have been collected in a geodatabase and historical topographic data have been acquired and digitized. The preliminary results point out a 3D geological model of the central-south eastern part of Rome and a space-time evolution of anthropic filling.