



## **Cities in the Anthropocene: humans as eco-geomorphological agents**

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Whilst the idea that we have entered the Anthropocene is still heavily contested within geology, the term and the idea have found their way into numerous scientific disciplines and even the wider public, so that human-nature or society-nature interactions can now be found on the broader scientific as well as public agenda. Hence, it is irrelevant for other disciplines than geology whether it is formally acknowledged as geological era or not, since it offers the opportunity to successfully frame research on how societies transform and influence nature. In fact, the idea of the Anthropocene suggests that the long-held concept of the dichotomy between nature and society should be rethought. This is especially obvious in cities, where mankind effectively moulds the earth surface, and thereby changes environmental factors, species assemblages as well as species behaviour. Hence, humans are not only agents in ecosystems, but also geomorphological agents; in fact, they are the main geomorphic force, as mankind nowadays moves more sediments than natural processes. Whilst the – sometimes surprisingly – positive effects of European cities on biodiversity due to the creation of new habitats and ecological niches of cities are comparatively well-known and well-studied, the knowledge of the ‘natural’ versus ‘anthropogenic’ geomorphology of a given city and how this indirectly influences the urban species assemblage and biodiversity on the one hand and the geosystem services for society on the other hand remains vague.

Within our presentation we will combine the idea of the Anthropocene with the idea of humans as eco-geomorphological agents. This also changes how we study and understand how geosystem services drive key ecosystem functions, because we can no longer distinguish between artificial and natural environments – this is especially the case and easy to see in cities, but by no means limited to urban areas.