

Title: A software tool for generating synthetic spatial data for GIS-classroom usage

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Abstract: We describe a software tool for generating synthetic spatial data for use in GIS-related teaching and learning activities. Example deployments include the ability to provide every student with a different dataset(s) for a given spatial region or to quickly generate previously unseen datasets for a given spatial region. However, ensuring the datasets exhibit real-world characteristics is a much more difficult task. In this paper we report on ongoing work and our subsequent progress towards development of a reusable and reproducible software tool (written in Python) for the production of synthetic spatial data (vector polygons and points) for these purposes.