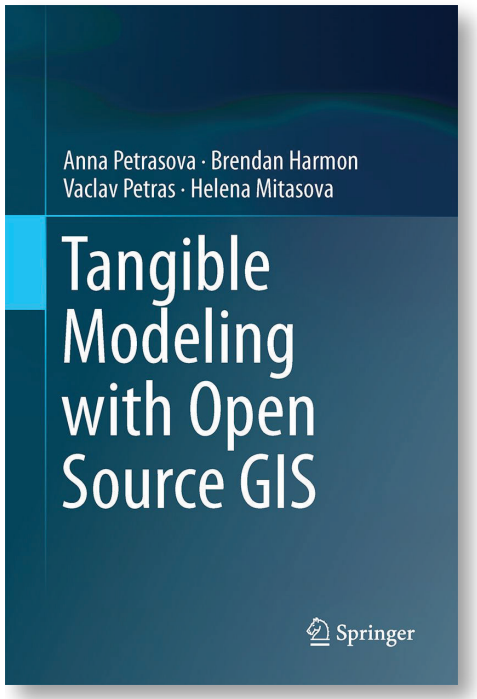

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TANGIBLE LANDSCAPE

powered by

GRASS GIS

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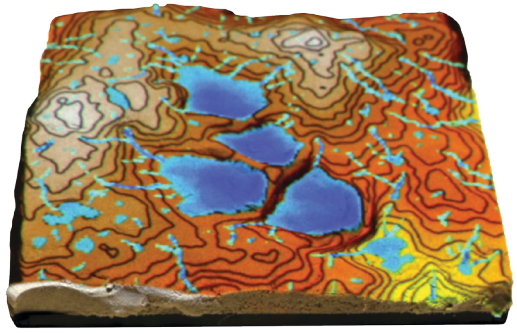
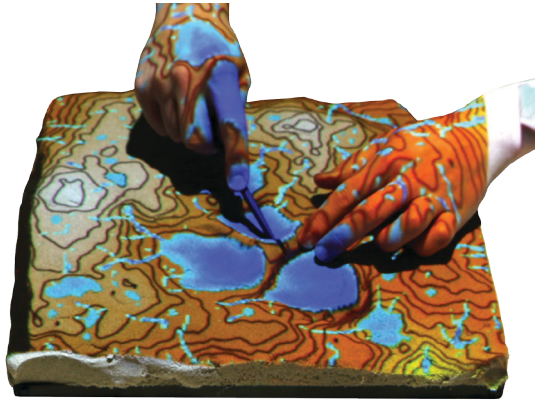
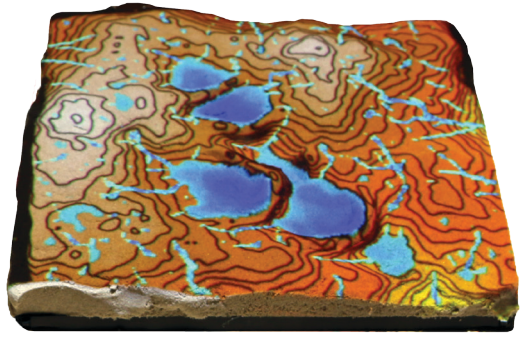


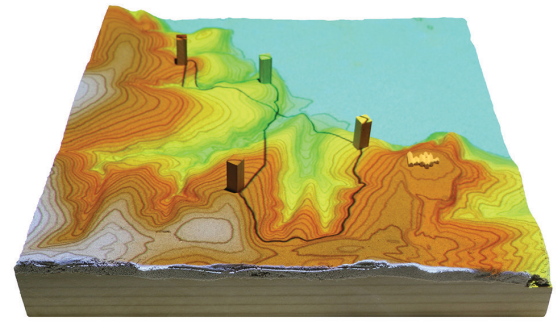


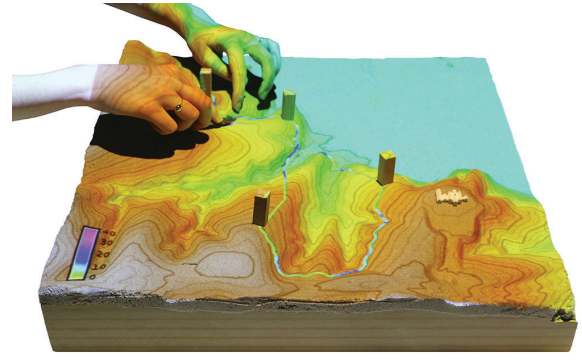


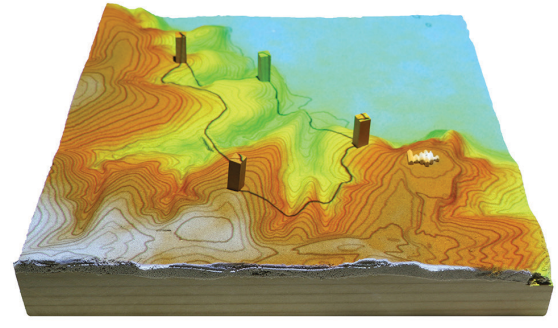
3D sketching by sculpting: by sculpting the terrain you can control the simulated flow of water and other environmental processes.

Tangible Landscape

We present Tangible Landscape, an open source tangible interface for 3D sketching powered by GRASS GIS. Tangible Landscape physically, interactively manifests geospatial data so that you can naturally feel it, see it, and shape it.







3D sketching with object recognition: you can place markers to digitize waypoints and Tangible Landscape will compute the optimal route.

Applications

With this novel technology you can intuitively interact with processes like water flow, erosion, solar radiation, flooding, fire spread, disease spread, and urban growth in order to experimentally test interventions.

research by

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Education and Research Lab
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Team

Anna Petrasova, Brendan Harmon, Vaclav Petras, and Helena Mitasova

How it works

Conceptually Tangible Landscape couples a physical model of a landscape with a digital model of the landscape in a geographic information system through a continuous cycle of 3D scanning, geospatial computation, and projection in near real-time.